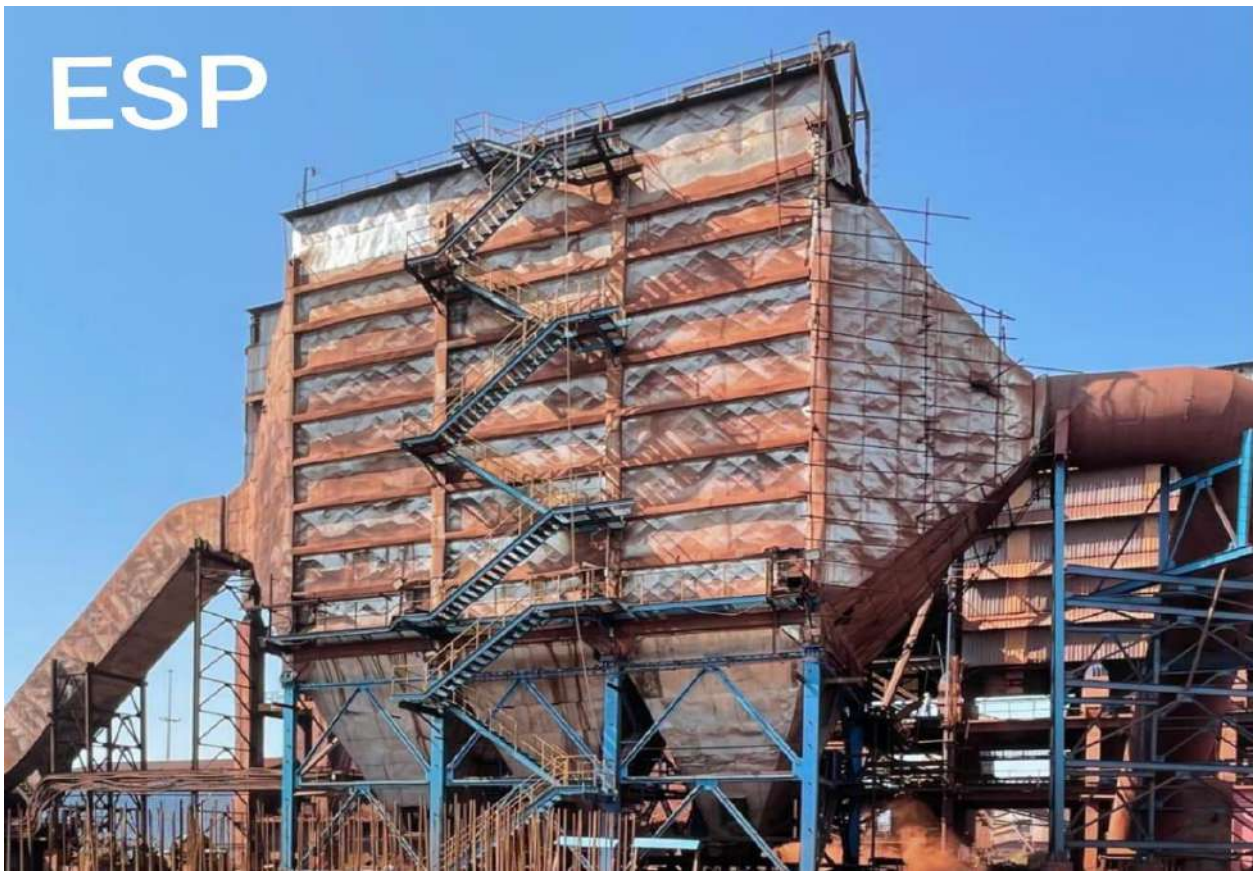
ANNEXURES

Annexure-1

AIR POLLUTION CONTROL EQUIPMENT AT VARIOUS SOURCES FOR 0.6 MTPA PELLET PLANT (EXPANSION PROJECT)							
		Pellet-1 (0.6 MTPA)		Pellet-2 (expansion 0.6 MTPA)			
Stack No	**Dust generating Source with Pollution control devices**	**Stack height from ground level in Mtr**	**Quantity of emission (m3/hr)**	**Stack height from ground level in Mtr**	**Quantity of emission (m3/hr)**	**Remarks**	**Installation status**
1	Bag filter of Proportionate System	18.00	8000			Common for both	Installed during 1st Phase
2	Bag filter of Bentonite hopper	23.00	5000			Common for both	Installed during 1st Phase
3	Bag filter of Ash hopper	15.00	3000			Common for both	Installed during 1st Phase
4	Bag filter of Coal Injection System	25.00	3300	25.00	3300		Installed for expansion project
5	Bag filter at Mixer	15.00	3000	15.00	3000		Installed for expansion project
6	ESP Connected to TG	50.00	500000	50.00	500000		Installed for expansion project
7	Multi cyclone connected to TG before ESP	Flue gas passes to ESP	200000	Flue gas passes to ESP	200000	1 no for existing and 2 no's for expansion	Installed for expansion project
8	Water sprinkling system at transfer point of rotary Kiln and pellet conveyor lines starting from annual cooler to finished product bin	-	-	-	-	Both for existing and expansion	Installed for expansion project

For Sree Metaliks Limited

Sr. Vice President (Admin. & Commercial)



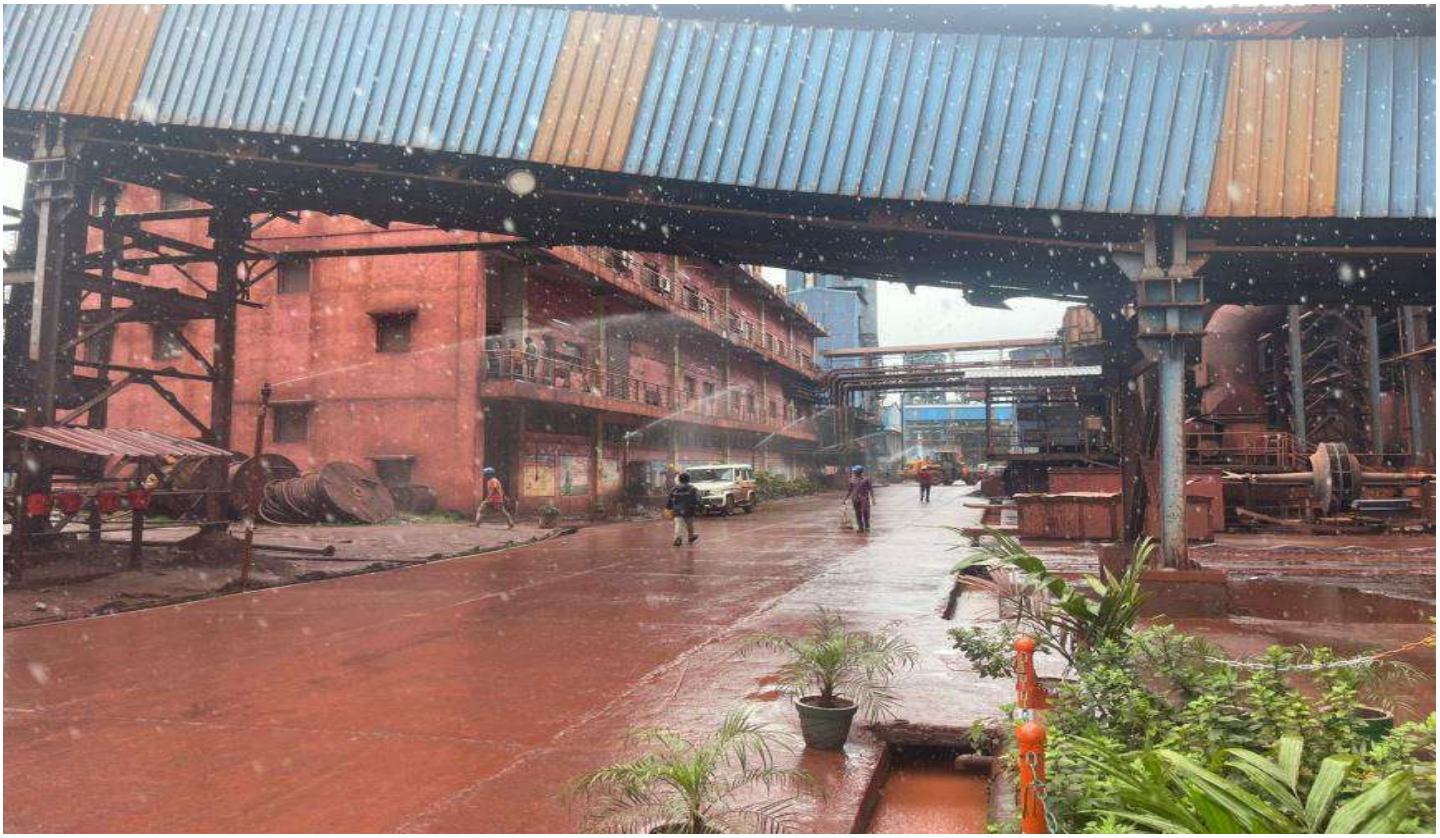
BAG FILTER-PCI


Bentonite
Bag filter


Bentonite Bin
Bag Filter


COAL BIN
BAG FILTER


BAG FILTER
ESP DUST BIN




I ❤ SML

Annexure-1(A)

ENVIRONMENT RELATED EXPENDITURE				
SL. NO.	DESCRIPTION	CAPITAL EXPENDITURE	OPERATIONAL EXPENDITURE	
		INSTALLED EXPENSES	MONTHLY EXP.	YEARLY EXP.
1	EXPENDITURE TOWARDS 05 NOS VEHICLES ENGAGED FOR WATER SPRINKLING	NA	2,92,800.00	35,13,600.00
2	EXPENDITURE TOWARDS INSTALLATION&MAINTENANCE OF WATER SPRINKLER	₹ 60,00,000.00	10,000.00	1,20,000.00
3	EXPENDITURE TOWARDS INSTALLATION & MAINTENANCE OF ESP	₹ 8,50,00,000.00	9,45,000.00	1,13,40,000.00
4	EXPENDITURE TOWARDS INSTALLATION & MAINTENANCE OF BAG FILTER	₹ 72,00,000.00	25,000.00	3,00,000.00
5	EXPENDITURE TOWARDS INSTALLATION & MAINTENANCE ASH HANDLING SYSTEM	₹ 65,00,000.00	20,000.00	2,40,000.00
6	ONLINE STACK & AAQ MONITORING SYSTEM	₹ 2,00,00,000.00	18,000.00	2,16,000.00
A	**SUB TOTAL**	**₹ 12,47,00,000.00**	**13,10,800.00**	**1,57,29,600.00**
B	CONCRETE PAVING OF ROADS	₹ 3,00,61,000.00		
C	NETWORK OF DRAINS FOR COLLECTION OF RUN OFF WATER AND SETTLING POND	₹ 2,10,08,000.00		6,00,000.00
D	PERIODIC ENVIRONMENTAL DATA MONITORING		40,000.00	4,80,000.00
E	GREEN BELT AND PLANTATION	₹ 18,00,000.00	1,25,000.00	15,00,000.00
F	EIA / EMF REPORT	₹ 15,00,000.00		
G	STP INSTALLATION AND MAINTENANCE	₹ 15,30,000.00		
H	ROOF WATER HARVESTING	₹ 18,88,000.00		
I	RAIN WATER HARVESTING	₹ 30,00,000.00		
TOTAL		**₹ 18,54,87,000.00**	**14,75,800.00**	**1,83,09,600.00**

Annexur-2

SREE METALIKS

Ref: SML/WO/M.N. DASTUR/GHG/2023/
Date: 2nd September 2023

To,
M.N. DASTUR & COMPANY (Pvt.) LTD
Consulting Engineers
P – 17, Mission Row Extension
Kolkata-7000013

Kind Attn.: Sri Sandip Kumar Mukhopadhyay,
Technical Director & HOD -Environment and Carbon
Email ID: sandip.m@dastur.com

Sub: **Work order for preparation of GHG emission inventory of four units of M/s Sree Metaliks Limited and Submission of plan for GHG emission reduction including carbon sequestration by trees and Technology.**

Dear Sir,

We are pleased to convey our acceptance of your offer dated 18th July 2023 and revised offer dated 1st September 2023. Salient features of requirement are available in scope of work. You will prepare the report of GHG emission Inventory as per WSA format and comprehensive plan (with year wise implementation plans for emission reduction projects) for reduction of GHG emission including preparation of program for reduction of GHG emission through carbon sequestration by trees and technologies etc. You are advised to start the execution of work in four units of Sree Metaliks Limited namely

A) Loidapada Plant, at: Rugudidihi, PO: Guali Dist.: - Keonjhar-758035
B) Anra Plant, at: Anra,PO: Upper Raigoda Dist. :- Keonjhar-758018
C) Mukundpur plant, at: Mukundpur PO:Parang Dist. : Angul -759143
D) Khandbandh Iron Ores Mines, Khandbandh, Joda Dist.: -Keonjhar-758034

Scope of Work:

Ref: EC issued to Anra plant, Sree Metaliks Limited (SML)
vide EC Order No.-J-11011/192/2008-IA II (I) dated: 23/02/2023

"Quote"

A. Specific Condition:

(ii) The project proponent shall utilize modern technology for capturing of carbon emitted and shall also develop carbon sink /Carbon sequestration resources capable of capturing more than emitted. The implementation report shall be submitted to the IRO,MoEF&CC in this regard .

B. General Condition:

vii. Green Belt

I. The project proponent shall prepare GHG emission inventory for the plant and shall submit the program for reduction of the same including carbon sequestration by trees

II. Project Proponent shall submit a study report on De-carbonization program which would essentially consist of company's carbon emissions, carbon budgeting/balancing, carbon sequestration activities and carbon capture, use and storage after offsetting strategies. Further, the report shall also contain time bound action plan to reduce its carbon intensity of its operations and supply chains, energy transition path way from fossil fuel to renewable energy etc. All these activities/assessments should be measurable and monitorable with defined time frame.

"Unquote"

For compliance of above-mentioned EC condition, it is proposed to out source the activity "preparation of GHG emission inventory of four units of Sree Metaliks Limited and submission of plan for GHG emission reduction, including carbon sequestration by trees and Technologies" to an expert agency.

Preamble to Schedule of Work:

1. Name of work: Preparation of GHG emission inventory of four units of SML and submission of plan for GHG emission reduction including carbon sequestration by trees.

2. Duration of work: 2-3 months.

Compliance of above EC conditions is a statutory obligation of SML. Status of compliance needs to be submitted by SML to MoEF & CC on six monthly basis and as and when required. Copy of EC issued along with above mentioned EC conditions is enclosed.

Scope of Work:

1.0 Preparation of GHG Emission Inventory

1.1 Site visit to SML plants and meeting with relevant departments and personnel of SML to collect operational and emissions data of SML.

1.2 Defining the boundaries for determining the GHG inventory for SML, in terms of Scope 1, Scope 2 and Scope 3 emissions based on standard definitions and discussion with SML.

1.3 Based on globally followed benchmarks, especially as per WSA (World Steel Association), define the approach for accounting different categories of CO2 emissions (viz. energy related emissions, process emissions and indirect emissions) that shall be adopted.

1.4 Assessment of various relevant regulations and policies.

1.5 Identify the material sources of Scope 1, Scope 2 and Scope 3 emissions from the SML plants. Based on the same, preparation of a standard template for capturing the GHG emissions across the various plant units.

1.6 Mapping of GHG emissions across various facilities/units of SML and comparison with available benchmarks. Determination of SML's total GHG footprint.

1.7 Identification and analysis of hotspots and large deviations vis-à-vis benchmarks.

1.8 Create an excel based dashboard which can be used by SML to track GHG emission in the future on an ongoing basis.

2.0 Comprehensive plan for reduction of GHG Emission.

2.1 Based on the mapping of the current GHG emissions of SML and likely expansion plans of SML in the next 5 years, calculation of the present and future GHG footprint in the business-as-usual scenario.

2.2 Based on primary and secondary sources, a review of decarbonization pathways adopted by major steel players across the world, along with the progress and successes achieved so far. The review shall include both domestic and international case studies and impact in terms of GHG abatement achieved.

2.3 Identification of the list of decarbonization initiatives that can be taken up by SML to achieve meaningful decarbonization across Scope 1, Scope 2 and Scope 3 emissions. These initiatives would include inter alia, fuel substitution, energy efficiency systems, carbon capture & utilization/ sequestration and sequestration by trees.

2.4 Review the scope and feasibility of generating renewable sources of energy for meeting part of the energy demand.

2.5 Suggest a framework to monitor the implementation of the selected/ prioritized initiatives and impact on GHG emissions at SML.

2.6 Detailing of initiative in terms of:

2.6.1. Technical suitability of initiative considering the process and production requirements

2.6.2. GHG abatement potential of each initiative and overall emissions avoided.

2.6.3. Revenue generation opportunities, if any, such as participations in carbon trading markets.

2.6.4. Order of magnitude of capital cost and per ton cost of abatement.

2.6.5. Reference projects where such initiatives have been implemented.

2.6.6. Sequestration options.

2.6.7. Risk of implementation at SML and impact on plant operations (if any)

2.6.8. Effect on cost of production of Beneficiation/Pellet/Sponge/Steel.

2.6.9. Review the scope and feasibility of generating renewable sources of energy for meeting part of the energy demand.

2.6.10. Stack rack and prioritize the above initiatives and develop a comprehensive and time bound road map and implementation plan for the abatement of GHG emissions at SML considering both the current facilities and future expansion plans of the plant.

2.6.11. Calculate the future GHG foot print based on implementation of the initiatives and forecast the GHG foot print of SML in different time lines (Such as 2030,2040 etc.) along the net zero journey of SML.

3.0 **Preparation of programme for reduction of the GHG Emission through carbon sequestration by trees and technologies.**

3.1 Identification of the relevant species of trees depending upon soil characteristics, agro climatic zone and ecological condition of land as well as the CO2 sequestration potential of individual species.

3.2 Estimate the likely abatement of GHG emissions possible.

3.3 Map the existing and emerging technology trends.

3.4 Review drivers and challenges for uptake of technologies.

3.5 Development of high-level recommendations for adoption of emerging decarbonization technologies.

3.6 Assess various option for procurement of carbon offsets aligned with leading practices based on peer bench marking.

3.7 Perform sensitivity analysis on the time horizon to achieve net zero targets (2035,2040,2050)

4.0 **Survey of Green Belt inside and outside the Plant**

4.1 Create a mapping of the green belt based on data provided by SML, satellite imageries, latest plot plan, expansion plans etc.

4.2 Survey of greenery inside the plant, if required.

4.3 Identify the areas for plantations along with optimum age of identified trees species.

5.0 **Determination of implementation plan**

5.1 Identify gaps based on present green belt and target green belt, based on existing statutory norms or as set by SML management.

5.2 Develop year wise implementation plans for emission reduction projects covering emission saving, anticipated costs (Capital expenditure/ Operating expenditure) and proposed monitoring plan with KPIs.

Scope of SML:

1.0 SML shall provide Plant General Layout in AutoCAD existing green belt drawing and energy balance diagram.

2.0 SML will provide material balance of production unit and raw material quality.

3.0 SML will provide information on availability, source and quality of water, electricity, fuel etc.

4.0 SML will provide lodging and boarding as well as travelling arrangement for consulting engineers personnel to site around Barbil, Keonjhar & Angul in connection with the study including discussion/meetings with concern plant personnel as may be required in connection with the assignments.

5.0 Sri N.P. Parmanik General manager (Ph. No.: 9620876694/email id: nppermanik@sreemetaliks.com) will be the nodal officer for the assignment and following officers of respective unit will facilitate the Consulting Engineers team during their site visit and for required inputs.

1) **Loidapada Plant:**

a) Mr. Gajendra Kuanar (Mob: 9337811673, email id: gajendra@sreemetaliks.com)

b) Mr. Vinod Sharma (Mob. :7004993964, email id: vsharma@sreemetaliks.com)

2) **Anra Plant:**

a) Mr. B.N. Prasad (Mob.: 9437007969, email id: b.prasad@sreemetaliks.com)

b) Mr. Samanyu Mohanty (Mob.: 9439888708, email id: samanyu@sreemetaliks.com)

3)**Mukundpur Plant, Angul :**

a) Mr. Debendra Kumar Das (Ph. No.: 9937730047, email id: debendrakumar@sreemetaliks.com)

b) Mr. Satyanarayan Sahoo (Ph. No.: 8144271418,)

4)**Khandbandh Mines:**

Sri Rewati Raman Sharma (Ph. No.: 6371087017, email id: raman@sreemetalik.com) will facilitate issues related with captive mines and would be supported by:

a) Manoj Singh (Mob. No:9001994012)

b) Sri Debendra Mohanty (Mob. No:9439375882)

Submission of Report & Payment Terms:

A draft report to be submitted to our office for scrutiny and suggestions before the finalization of the report. The final report to be submitted within 60-90 days from the acceptance /receipt of the work order.

Terms of Payment: -

M/s M.N. DASTUR (Pvt.) LIMITED shall raise the bills addressing to Sri Rewati Raman Sharma, Director, Sree Metaliks Limited, SML House, Main Road, P.O. – Barbil, Odisha 758035. After the necessary examination based on progress of the work, Director will accept the bill and forword the same to the accounts department of SML for payment.

Total value of work order: Rs. 15,00,000 /- (In Rupees: Fifteen Lakhs only) excluding Cen vatable GST

a) 10% (Ten Percent) with applicable Cen vatable GST as mobilization fee on acceptance of this proposal.

b) 60% with applicable Cen vatable GST on submission of draft GHG emission and study report.

c) Balance 30% with applicable Cen vatable GST on submission of final GHG emission and study report.

Extension Date of Completion: -

On occurrence of any events causing a delay as stated here under the vendor shall intimate immediately in writing to the SML management.

a) Force Majeure: Natural phenomena like unprecedented floods and drought, earth quake and epidemics M/s M.N. Dastur& Company(P) Limited will be entitled to a time extension for the performance of the contract in the event of any preventive measures being taken by the Govt. The party shall perform the work after relaxation of such situation.

Political Upheaval, Civil commotion, strikes, lockouts, acts of any Govt. (Domestic/foreign) including but not limited to work, properties and quarantine embargoes for delays arising out of force majeure M/s M.N. Dastur will not claim an extension in the completion date for a period exiting the period of delay attributable to the clauses of force majeure and neither company nor M/S M.N. Dastur shall be liable to pay the extra cost (Like increase in rates ,remobilization advance, Idle charges for labor and material etc.) Provided it is mutually established that force majeure condition did exist.

b) Serious loss or damage by fire and abnormally bad weather

c) The execution of any modified or additional items of work or excess quantity of work on mutually agreed terms and condition.

d) Any other causes which, at the sole discretion of the company(SML), are beyond the control of M/s M.N. Dastur company(Pvt.)Limited.

M/s M.N. Dastur Company (Pvt.) Limited shall be required to make presentation regarding study report before statutory bodies on behalf of M/s Sree Metaliks Limited as and when required. Normally meetings are held on virtual mode. However, if physical presence is desired by a statutory body, necessary arrangements would be made by SML.

We hope, the above found in order for carrying out the job at the earliest.

You are requested to return a copy of the work order by signing on each page of it as a token of acceptance.

Thanking You,

Yours Faithfully,

For Sree Metaliks Limited

2/9/23

Authorized Signatory

(Kalyan Maity)
Director, SML

Annexure-3

ANNEXURE -III

TEXT

MODIFICATION OF REVIEW OF THE MINING PLAN,

(Submitted Under Rule 17(3) of MCR, 2016)

WITH

PROGRESSIVE MINE CLOSURE PLAN

(Submitted Under Rule 23B of MCDR, 2017)

In respect of

KHANDBANDH IRON ORE MINES
OVER 35.774 HA IN BAITARANI R.F. UNDER KEONJHAR FOREST DIVISION NEAR VILLAGE KHANDABANDH IN KEONJHAR DISTRICT, ODISHA.

MODIFICATION OF REVIEW OF THE MINING PLAN SUBMITTED FOR THE FINANCIAL YEAR (2021-22 TO 2025-26)

MINE CODE	IBM REGISTRATION NO	LAND DETAILS		FOREST CLEARANCE OBTAINED	CATEGORY OF MINE	DATE OF EXECUTION	DATE OF EXPIRY
		FOREST	NON-FOREST				
30/ORI/08113	IBM/4135/2011	35.774 HA	NIL	35.774 HA	'A' - FM	11.01.2017	10.01.2067

Prepared on behalf of

M/S SREE METALIKS LTD
(MINING LESSEE)
Post Box No-28, P.O. Barbil
Dist. Keonjhar, Odisha.
Email ID: md@sreemetaliks.com
Tel No-06767-275292,
Tele Fax-06767 275529

Prepared By

K. SHANKAR	P.AYYANAR
Old No-7, New No-11, F-2, First Floor, Sakunthala Enclave Jawaharlal Nehru Street, T.Nagar, Chennai – 600 017 Email : empres05@rediffmail.com Ph: 044-28142195, Mob: 9444119196.	At : Unchabali, Po - Bamebari, Joda, Keonjhar, District Odisha , Pin-758034 Email : ayyanar.templ@gmail.com Mob -9437251461

CONTENTS

Proposal During plan period:

During plan period an additional area of 16.155 Ha is required out of which existing road over an area of 0.95Ha, Existing mines office/WB over an area of 0.127Ha and existing sub grade dump over an area of 1.80Ha is coming under the proposed mining activity. Thus the net land utilization is 13.278Ha (16.155-(0.95+0.127+1.8)) for the purpose of mining and allied activity. However, during the financial year 2016-17 to 2020-21 the quarry-1 is partially exhausted over an area of 59690 m^2 or 5.969 Ha.

Details of Progressive reclamation plan of mined out land

Table No - 75

Year	Pits/ Quarries/ dump	Area beginning of year(ha)	Additional degraded during year(ha)	Area to be reclaimed by backfilling(ha)	Area rehabilitated by plantation (ha)	Balance area at the end of year
2021-22	Quarry 1 & 2 merged	14.022	4.68	0.92	Nil	17.782
2022-23		17.782	4.43	1.00	Nil	21.212
2023-24		21.212	2.43	0.91	Nil	22.732
2024-25		22.732	1.45	0.82	Nil	23.362
2025-26		23.362	0.591	1.12	Nil	22.833
			13.581	4.77		27.603

Back-filling of exhausted part of proposed quarry-1

As on 15.12.2020, the lessee has already utilized 1225500 m^2 or 12.255 Ha for mining and out of which 59690 m^2 or 5.969 Ha area has been exhausted. During plan period an additional area of 15.139 Ha is required for the purpose of mining.

An area of 1.40 Ha is utilized for backfilling-cum-dumping during current plan period i.e 2016-17 to 2020-21. The remaining area of 4.569 Ha or 45690 m^2 (5.969 Ha-1.40Ha) is available for backfilling-cum-dumping during the proposed plan period i.e 2021-22 to 2025-26. Further additionally exhausted area of 0.2069 Ha will also be utilised for backfilling during the plan period. Thus at the end of plan period (2021-22 to 2025-26) and area of 61759m^2 or 6.17 Ha will be utilized for backfilling.

Mining operation will be carried out in such a way that the southern part of quarry-1 will be exhausted and concurrent back-filling can be done in that area will be continued up to 2025-26. The details of back-filling will be as follows:

Yearwise protective measures for reclamation and rehabilitation works

Table No- 78

Proposal during ensuing plan period

Items	Details	2021-22	2022-23	2023-24	2024-25	2025-26
Dump management	Area to be afforested (ha)	--	--	--	--	--
	No of saplings to be planted	--	--	--	--	--
	Cumulative no of plants	--	--	--	--	--
	Cost including watch and care during the year (Rs.)	250000	250000	250000	250000	250000
Management of worked out benches	Area available for rehabilitation (ha)	0.9168ha	1.0057 Ha	0.9099 ha	0.8221 ha	1.1214 Ha
	Afforestation done (ha)	Nil	Nil	Nil	Nil	Nil
	No of saplings to be planted in the year	NA	NA	NA	NA	NA
	Cumulative no of plants	Nil	Nil	Nil	Nil	Nil
	Any other method of rehabilitation(specify)	Nil	Nil	Nil	Nil	Nil
	Cost including watch and care during the year	Nil	Nil	Nil	Nil	Nil
Reclamation and rehabilitation by backfilling	Void available for Backfilling (L x B x D) pit wise /stope wise (ha)	0.9168ha	1.0057 Ha	0.9099 ha	0.8221 ha	1.1214 Ha
	Void filled by waste / tailings (ha)	0.9168ha	1.0057 Ha	0.9099 ha	0.8221 ha	1.1214 Ha
	backfilled area to be afforested	Nil	Nil	Nil	Nil	Nil
	Rehabilitation by making water reservoir	Nil	Nil	Nil	Nil	Nill
	Any other means specify)	Nil	Nil	Nil	Nil	Nil
Rehabilitation of waste land within lease (Along the safety zone by gap filling)	Area available (ha) (Along the safety zone by gap filling)	0.19	0.19	0.19	0.19	0.19
	Area to be rehabilitated	0.19	0.19	0.19	0.19	0.19
	Method of rehabilitation	Gap Plantation	Gap Plantation	Gap Plantation	Gap Plantation	Gap Plantation
Others (specify)	Retaining wall (around dump)	250m x 1m x 1.5m	Maintenance	Maintenance	Maintenance	Maintenance
	Garland drain (around dump)	180m x 2m x1m	Maintenance	Maintenance	Maintenance	Maintenance
	Settling tank (near dump)	Maintenance	Maintenance	Maintenance	Maintenance	Maintenance
	Environment Monitoring	To be continued as per MoEF & CC guide line	To be continued as per MoEF & CC guide line	To be continued as per MoEF guide line	To be continued as per MoEF guide line	To be continued as per MoEF guide line

P.AYYANAR
QUALIFIED PERSON

K. SHANKAR
QUALIFIED PERSON

Annuxure-4

ANNEXURE : 4

SREE METALIKS

Ref No. : SML/WO-PT-ANRA/2023-24 **Date: 21.06.2023**

To

M/s. Sun Consultancy and Services
16/C, Engineers Colony, Budheswari,
Bhubaneswar-751006, Odisha

Sub: **Work Order for Performance Test of Air Pollution Control Equipments in Pellet Plant unit.**

Ref: Your offer no. SCS/SML/Off-APCE/1501, dated 07.09.2023.

Dear Sir,

We are pleased to place the work order on Sun Consultancy and Services (SCS), Bhubaneswar for conducting the "Performance Test of Air Pollution Control Equipments" in Pellet Plant unit as per the details given in the below table;

AIR POLLUTION CONTROL EQUIPMENT AT VARIOUS SOURCES FOR 0.6 MTPA PELLET PLANT (EXPANSION PROJECT)

		Pellet-1 (0.6 MTPA)		Pellet-2 (expansion 0.6 MTPA)			
Stack No	Dust generating Source with Pollution control devices	Stack height from ground level in Mtr	Quantity of emission (m3/hr)	Stack height from ground level in Mtr	Quantity of emission (m3/hr)	Remarks	Installation status
1	Bag filter of Proportionate System	18.00	8000			Common for both	Installed during 1st Phase
2	Bag filter of Bentonite hopper	23.00	5000			Common for both	Installed during 1st Phase
3	Bag filter of Ash hopper	15.00	3000			Common for both	Installed during 1st Phase
4	Bag filter of Coal Injection System	25.00	3300	25.00	3300		Installed for expansion project
5	Bag filter at Mixer	15.00	3000	15.00	3000		Installed for expansion project
6	ESP Connected to TG	50.00	500000	50.00	500000		Installed for expansion project
7	Multi cyclone connected to TG before ESP	Flue gas passes to ESP	200000	Flue gas passes to ESP	200000	1 no for existing and 2 no's for expansion	Installed for expansion project
8	Water sprinkling system at transfer point of rotary Kiln and pellet conveyor lines starting from annual cooler to finished product bin	-	-	-	-	Both for existing and expansion	Installed for expansion project

SREE METALIKS LIMITED

SREE METALIKS

TERMS & CONDITIONS-TECHNICAL

A) Scope of SCS:

1. To study all the input documents related to the Air Pollution Control Equipments
2. To carry physical site visit in order to assess the existing scenario.
3. To formulate the plan of action for conducting the for Performance Test.
4. To carry out the testing of equipments in order to assess the performance.
5. To submit the performance test report.

B) Scope of SML:

1. To provide necessary information and relevant documents as required for the job.
2. To extend co-operation for carrying out the job smoothly.
3. To provide to and fro conveyance (Flight/1st AC Train/Taxi) from Bhubaneswar to your site, local conveyance, Lodging and Boarding facilities for the team.

TERMS & CONDITIONS-COMMERCIAL

C) Price:

Quoted price is Rs.3.0 Lacs only (Rupees Three Lacs Only).

D) Taxes:

Goods Service Tax (GST) as applicable shall be charged extra.

E) Payment Terms:

1. 50% mobilization advance along with work order.
2. 25% after conducting the field visit.
3. 25% after submission of report.

Thanking you.

Yours truly,
For Sree Metaliks Limited

Authorized Signatory

CIN U26939WB1995PLC075633
Head Office: SML House, Main Road, P.O. Barbil, Distt. Keonjhar-758035, Odisha
W www.sreemetaliks.com E info@sreemetaliks.com
Registered Office: 8/1 New Tangea Road, China Town, Kolkata - 700046

Annexure-5

EHS 360 LABS PRIVATE LIMITED

TC-9583

TEST REPORT

Report No	EHS360/TR/2022-23/015	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 5182	**Sample Drawn by**	Laboratory
Sample Name	Air	**Sample Code**	EHS360/015
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sampling Location & Coordinates	Near Entry Gate: 21°41'13.17"N Latitude & 85°26'17.90"E Longitude		

Date Of Sampling	PM10 (µg/m³)	PM2.5 (µg/m³)	SO2 (µg/m³)	NOx (µg/m³)	CO (mg/m³)
02.03.2023	82.5	42.4	16.4	25.8	0.71
06.03.2023	85.6	45.7	16.8	26.2	0.73
09.03.2023	83.7	43.4	15.9	24.9	0.7
13.03.2023	87.2	47.4	16.6	26.2	0.72
16.03.2023	72.6	36.8	13.6	18.2	0.55
20.03.2023	74.2	37.4	14.2	19.2	0.58
23.03.2023	78.2	40.4	15.2	25.6	0.65
27.03.2023	73.4	37.8	14.4	22.1	0.62
30.03.2023	69.8	35.2	13.6	20.2	0.6
NAAQ* Standard	**100**	**60**	**80**	**80**	**4**
Methods of Analysis	**IS:5182 (Part-23)**	**IS:5182 (Part-24)**	**IS:5182 (Part-2)**	**IS:5182 (Part-6)**	**IS: 5182 (Part- 10)**

Note: BDL –NAAQ – National Ambient Air Quality;Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS).

**********End of Report**********

Page 1 of 1

EHS360 LABS PRIVATE LIMITED CHENNAI 600 083

Verified by

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EHS 360 LABS PRIVATE LIMITED

TC-9583

TEST REPORT

Report No	EHS360/TR/2022-23/0016	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 5182	**Sample Drawn by**	Laboratory
Sample Name	Air	**Sample Code**	EHS360/016
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
Sampling Location & Coordinates	Near Security Barak:21°41'2.88"N Latitude & 85°25'56.46"E Longitude		

Date Of Sampling	PM10 (µg/m³)	PM2.5 (µg/m³)	SO2 (µg/m³)	NOx (µg/m³)	CO (mg/m³)
02.03.2023	78.5	40.2	13.8	23.8	0.65
06.03.2023	81.6	42.4	14.4	24.2	0.67
09.03.2023	80.4	41.1	13.8	22.8	0.64
13.03.2023	83.4	43.4	14.6	24.6	0.67
16.03.2023	70.1	31.2	12.4	16.6	0.51
20.03.2023	72.4	36.5	13.6	17.8	0.55
23.03.2023	77.4	39.2	13.2	22.4	0.6
27.03.2023	70.2	35.6	12.8	20.4	0.58
30.03.2023	66.7	33.7	12.2	18.3	0.56
NAAQ* Standard	**100**	**60**	**80**	**80**	**4**
Methods of Analysis	**IS:5182 (Part-23)**	**IS:5182 (Part-24)**	**IS:5182 (Part-2)**	**IS:5182 (Part-6)**	**IS:5182 (Part-10)**

Note: NAAQ – National Ambient Air Quality; Instrument Used: Respirable Dust Sampler (RDS), fine Particulate Sampler (FPS).

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/017	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 5182	**Sample Drawn by**	Laboratory
Sample Name	Air	**Sample Code**	EHS360/017
Sample Description	Ambient Air Quality Monitoring	**Sample Condition**	Good
		Sampling Date	20.02.2023

Name of Location	Location	O3 (µg/m³)	NH3 (µg/m³)	Pb (µg/m³)	Ni (ng/m³)	As (ng/m³)	C6H6 (µg/m³)	BaP (ng/m³)
AAQ-1	AQ1-Near Entry Gate	12.6	36.8	<0.06	<0.6	<0.44	<5	<1
AAQ-2	AQ2-Near Security Barak	11.8	33.6	<0.06	<0.6	<0.44	<5	<1
NAAQ* Standard		**100**	**400**	**1**	**20**	**6**	**5**	**1**
Methodsof Analysis		**IS:5182 (Part-9)**	**IS:5182 (Part-25)**	**IS:5182 (Part-22)**	**IS:5182 (Part-26)**	**As per CPCB method followed by AAS**	**IS:5182 (Part-11)**	**IS:5182 (Part-12)**

Note: BDL –NAAQ – National Ambient Air Quality;Instrument Used: Respirable Dust Sampler (RDS), Fine Particulate Sampler (FPS).

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/018	**Report Date**	06.04.2023
Issued To	***M/s.Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 9989	**Sample Drawn by**	Laboratory
Sample Name	Noise Level Monitoring	**Sample Code**	EHS360/018
Sample Description	Ambient Noise	**Sample Condition**	Good
Sample Collected Date	21.03.2023	**Sample Received On**	22.03.2023
Test Commenced On	22.03.2023	**Test Completed On**	24.03.2023

S.No.	Locations	Day Time	Night Time
		Results in dB(A)	
1	Near Entry Gate; Latitude: 21°41'13.17"N & Longitude: 85°26'17.90"E	69.4	62.6
2	Near Security Barak; Latitude: 21°41'2.88"N &Longitude: 85°25'56.46"E	65.6	52.8
Industrial Zone *permissible limits as per TNPCB Norms*		**Day Time – 75 dB(A)**	**Night Time – 70 dB(A)**

Note: Instrument Used: Sound Level Meter.

REMARKS: The above sample complies with SPCB norms with respect to the above tested Parameters.

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/019	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 9989	**Sample Drawn by**	Laboratory
Sample Name	Noise Level Monitoring	**Sample Code**	EHS360/019
Sample Description	Work Zone Noise	**Sample Condition**	Good
Sample Collected Date	21.03.2023	**Sample Received On**	22.03.2023
Test Commenced On	22.03.2023	**Test Completed On**	24.03.2023

S.No.	Locations	Day Time	Night Time
		Results in dB(A)	
1	Near W.Bridge-1; Latitude: 21°40'67.60"N & Longitude: 85°26'45.20"E	71.7	68.6
2	Near W.Bridge-2;Latitude: 21°40'55.60"N &Longitude: 85°26'16.20"E	71.1	66.9
Industrial Zone *permissible limits as per TNPCB Norms*		**Day Time – 75 dB(A)**	**Night Time – 70 dB(A)**

Note: Instrument Used: Sound Level Meter.

REMARKS: The above sample complies with SPCB norms with respect to the above tested Parameters.

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/020	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 5182	**Sample Drawn by**	Laboratory
Sample Description	**Fugitive Dust Sample**	**Sample Code**	EHS360/020
		Sample Condition	Good

Sl. No.	Name of Location	Coordinates of Location	Date of Sampling	Result
1	Near W.Bridge - 1	Lat: 21°40'67.60"N Long:21°40'55.60"N	21.03.2023	972.5
2	Near W.Bridge - 2	Lat: 85°26'45.20"E Long: 85°26'16.20"E	21.03.2023	941.6
Fugitive Standard				1200
Methods of Analysis			**IS:5182 (Part-24)**	

Instrument Used: Respirable Dust Sampler (RDS)

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2023-24/001	Report Date	24.07.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist- Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 5182	Sample Drawn by	Laboratory
Sample Name	Stack Emission Monitoring	Sample Code	EHS360/001
Sample Description	Flue Gas	Sample Condition	Good
Name of Location	Stack-1 (ESP connected to TG) Stack-2 (ESP connected to TG)		
Sample Collected Date	20.07.2023	Date of Receiving	21.07.2023
Test Commenced On	21.07.2023	Date of Complete	22.07.2023

Sl. No.	Parameters	Test Method	Result	
			ST-1	ST-2
1	Flue gas Temperature in K	IS-11255 (PART-3) 1985, (RA-2013)	365	367
2	Velocity in m/sec	IS-11255 (PART-3) 1985, (RA-2013)	15.20	16.58
3	PM (mg/Nm3)	IS-11255(PART-1) 1985, (RA-2014) Gravimetric Method	24.7	27.2
4	SO2 (mg/Nm3)	IS-11255(PART-2) 1985, (RA-2019)	20.8	21.2
5	NOx (mg/Nm3)	IS-11255(PART-2) 1985	32.4	34.1

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TEST REPORT

Report No	EHS360/TR/2023-24/001	Report Date	17.09.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist- Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 5182	Sample Drawn by	Laboratory
Sample Name	Stack Emission Monitoring	Sample Code	EHS360/001
Sample Description	Flue Gas	Sample Condition	Good
Name of Location	Stack-1 (ESP connected to TG) Stack-2 (ESP connected to TG)		
Sample Collected Date	14.09.2023	Date of Receiving	15.09.2023
Test Commenced On	15.09.2023	Date of Complete	16.09.2023

Sl. No.	Parameters	Test Method	Result	
			ST-1	ST-2
1	Flue gas Temperature in K	IS-11255 (PART-3) 1985, (RA-2013)	366	369
2	Velocity in m/sec	IS-11255 (PART-3) 1985, (RA-2013)	16.01	15.70
3	PM (mg/Nm3)	IS-11255(PART-1) 1985, (RA-2014) Gravimetric Method	26.3	23.4
4	SO2 (mg/Nm3)	IS-11255(PART-2) 1985, (RA-2019)	19.5	22.1
5	NOx (mg/Nm3)	IS-11255(PART-2) 1985	33.2	31.0

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/022	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 10500	**Sample Drawn by**	Laboratory
Sample Name	**Ground Water**	**Sample Code**	EHS360/022
Sample Description	GW	**Sample Condition**	Good
Date of Sampling	21.03.2023	**Date of Analysis**	24.03.2023
Date of Receiving	22.03.2023	**Date of Complete**	28.03.2023
Locations	GW1-Inside Plant; Latitude: 21°40'58.14"N & Longitude: 85°26'9.43"E GW2-Village Anara; Latitude: 21°41'20.01"N & Longitude: 85°26'19.10"E GW3-Village Raigad; Latitude: 21°40'58.51"N & Longitude: 85°25'26.93"E		

Sl. No	Parameters	Unit	Standard as per IS–10500 (2012)	Result		
				GW1	GW2	GW3
01	pH	---	**6.5-8.5**	7.24	7.32	7.26
02	Colour	Hazen	**5 (15)**	<5.0	<5.0	<5.0
03	Turbidity	NTU	**5(10)**	<1	<1	<1
04	Chloride (as Cl)(max)	mg/l	**250 (1000)**	28.0	22.0	25.0
05	Total Dissolved Solid	mg/l	**500 (2000)**	234.0	208.0	212.0
06	Total Hardness (as $CaCO_3$) (max)	mg/l	**200 (600)**	138.0	124.0	130.0
07	Iron (as Fe) (max)	mg/l	**0.3 (NR)**	0.28	0.26	0.26
08	Calcium (as Ca) (max)	mg/l	**75 (200)**	34.1	31.7	32.5
09	Magnesium (as Mg) (max)	mg/l	**30 (100)**	12.9	10.9	11.9
10	Sulfate (as SO_4) (max)	mg/l	**200(400)**	4.2	3.1	3.3
11	Nitrate (as NO_3) (max)	mg/l	**45 (NR)**	1.72	1.56	1.48
12	Fluoride as F	mg/l	**1.0(1.5)**	<0.05	<0.05	<0.05
13	Total Coliform	MPN/100ml	**Absent**	<1.8	<1.8	<1.8

**********End of Report**********

Page 1 of 1

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TEST REPORT

Report No	EHS360/TR/2022-23/022	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd***, Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 10500	**Sample Drawn by**	Laboratory
Sample Name	**Ground Water**	**Sample Code**	EHS360/022
Sample Description	GW	**Sample Condition**	Good
Date of Sampling	21.03.2023	**Date of Analysis**	24.03.2023
Date of Receiving	22.03.2023	**Date of Complete**	28.03.2023
Locations	GW1-Inside Plant; Latitude: 21°40'58.14"N & Longitude: 85°26'9.43"E GW2-Village Anara; Latitude: 21°41'20.01"N & Longitude: 85°26'19.10"E GW3-Village Raigad; Latitude: 21°40'58.51"N & Longitude: 85°25'26.93"E		

Sl. No	Parameters	Unit	Standard as per IS–10500 (2012)	Result		
				GW1	GW2	GW3
14	Total Chromium as Cr(max)	mg/l	**0.05(NR)**	<0.05	<0.05	<0.05
15	Sodium as Na(max)	mg/l	---	17.6	13.6	15.7
16	Potassium as K(max)	mg/l	---	1.3	1.1	1.2
17	Odour	---	**Agreeable**	U/O	U/O	U/O
18	Taste	---	**Agreeable**	AL	AL	AL
19	Residual free Chlorine	mg/l	**0.2 (1)**	<0.2	<0.2	<0.2
20	Manganese (as Mn) (max)	mg/l	**0.10 (0.3)**	0.22	0.21	0.19
21	Cadmium (as Cd) (max)	mg/l	**0.003 (NR)**	<0.001	<0.001	<0.001
22	Copper (as Cu) (max)	mg/l	**0.05 (1.5)**	<0.03	<0.03	<0.03
23	Zinc (as Zn) (max)	mg/l	**5 (15)**	0.24	0.16	0.2
24	Lead (as Pb) (max)	mg/l	**0.01 (NR)**	<0.01	<0.01	<0.01

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/022	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd***, Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 10500	**Sample Drawn by**	Laboratory
Sample Name	**Ground Water**	**Sample Code**	EHS360/022
Sample Description	GW	**Sample Condition**	Good
Date of Sampling	21.03.2023	**Date of Analysis**	24.03.2023
Date of Receiving	22.03.2023	**Date of Complete**	28.03.2023
Locations	GW1-Inside Plant; Latitude: 21°40'58.14"N & Longitude: 85°26'9.43"E GW2-Village Anara; Latitude: 21°41'20.01"N & Longitude: 85°26'19.10"E GW3-Village Raigad; Latitude: 21°40'58.51"N & Longitude: 85°25'26.93"E		

Sl. No	Parameters	Unit	Standard as per IS–10500 (2012)	Result		
				GW1	GW2	GW3
25	Selenium (as Se) (max)	mg/l	**0.01 (NR)**	<0.001	<0.001	<0.001
26	Mercury (as Hg) (max)	mg/l	**0.001 (NR)**	<0.001	<0.001	<0.001
27	Cyanide (as CN) (max)	mg/l	**0.05 (NR)**	<0.2	<0.2	<0.2
28	Boron (as B) (max)	mg/l	**0.5 (1.0)**	<0.01	<0.01	<0.01
29	Arsenic (as As) (max)	mg/l	**0.01(0.5)**	<0.001	<0.001	<0.001
30	Mineral Oil	mg/l	**0.5(NR)**	ND	ND	ND
31	Aluminum (as Al) (max)	mg/l	**0.03(0.2)**	<0.01	<0.01	<0.01
32	Anionic Detergents (as MBAS)	mg/l	**0.2(1.0)**	ND	ND	ND
33	Phenolic Compounds (as C6H5OH)	mg/l	**0.001 (0.002)**	<0.001	<0.001	<0.001
34	Selenium (as Se) (max)	mg/l	**0.01 (NR)**	<0.001	<0.001	<0.001

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/023	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 2296	**Sample Drawn by**	Laboratory
Sample Name	**Surface Water**	**Sample Code**	EHS360/023
Sample Description	SW	**Sample Condition**	Good
Date of Sampling	21.03.2023	**Date of Analysis**	24.03.2023
Date of Receiving	22.03.2023	**Date of Complete**	28.03.2023
Locations	**SW-** Brahmani nala; Latitude: 21°41'14.10"N & Longitude: 85°25'49.19"E		

Sl. No	Parameters	Unit	Standard as per IS-2296 Class-C	Result
				SW
01	pH	---	**6.0-9.0**	7.7
02	Colour	Hazen	**300**	<5.0
03	Turbidity	NTU	**--**	<1.0
04	Chloride (as Cl)	mg/l	**600**	24
05	Total Dissolved Solid	mg/l	**1500**	170
06	Chemical Oxygen Demand as COD	mg/l	**--**	10.8
07	Hexavalent Chromium (as Cr+6)	mg/l	**0.05**	<0.05
08	Fluoride (as F)	mg/l	**1.5**	0.12
09	Sulfate (as SO4)	mg/l	**400**	9.2
10	Iron (as Fe)	mg/l	**0.5**	0.46
11	Nitrate (as NO3)	mg/l	**50**	1.88
12	Dissolved oxygen (min)	mg/l	**4**	5.9

**********End of Report**********

EHS360 LABS PRIVATE LIMITED CHENNAI 600 083

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TEST REPORT

Report No	EHS360/TR/2022-23/023	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 2296	**Sample Drawn by**	Laboratory
Sample Name	**Surface Water**	**Sample Code**	EHS360/023
Sample Description	SW	**Sample Condition**	Good
Date of Sampling	21.03.2023	**Date of Analysis**	24.03.2023
Date of Receiving	22.03.2023	**Date of Complete**	28.03.2023
Locations	Brahmani nala; Latitude: 21°41'14.10"N & Longitude: 85°25'49.19"E		

Sl. No	Parameters	Unit	Standard as per IS-2296Class-C	Result
				SW
13	Oil & Grease (max)	mg/l	--	ND
14	BOD (3) days at 270C (max)	mg/l	**3.0**	<2.0
15	Arsenic as As (max)	mg/l	**0.2**	<0.001
16	Lead as Pb	mg/l	**0.1**	<0.01
17	Cadmium as Cd (max)	mg/l	**0.01**	<0.001
18	Copper as Cu (max)	mg/l	**1.5**	0.14
19	Zinc as Zn(max)	mg/l	**15**	0.19
20	Selenium as Se (max)	mg/l	**0.05**	<0.001
21	Cyanide as CN (max)	mg/l	**0.05**	<0.2
22	Phenolic Compounds as C6H5OH (max)	mg/l	**0.005**	<0.001
23	Total Coliform	MPN/ 100 ml	**5000**	210

**********End of Report**********

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TEST REPORT

Report No	EHS360/TR/2022-23/024	**Report Date**	06.04.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar, Odisha.		
Customer Name	***M/s Sree Metaliks Ltd***		
Sampling Method	IS 2720	**Sample Drawn by**	Laboratory
Sample Name	**Soil**	**Sample Code**	EHS360/024
Sample Description	Soil	**Sample Condition**	Good
Date of Sampling	21.03.2023	**Date of Analysis**	24.03.2023
Date of Receiving	22.03.2023	**Date of Complete**	26.03.2023
Locations	Inside Plant; Latitude21°40'57.85"N& Longitude: 85°26'10.16"E Village Raigad; Latitude:21°41'0.25"N& Longitude: 85°19'20.16"E Village Anra ; Latitude: 21°59'35.29"N & Longitude: 85°19'10.86"E		

Sl. No	Parameters	Unit	Result		
			S1	S2	S3
01	Colour	---	Brown	Brown	Brown
02	Moisture content	%	6.8	6.9	7.1
03	pH	---	6.28	6.4	6.47
04	Electrical Conductivity (as EC)	micro s/cm	208	194	180
05	Soil Texture	---	Sand Loamy	Clay Loamy	Clay Loamy
06	Bulk Density	gm/cc	1.3	1.3	1.28
07	Calcium as Ca	mg/kg	448	412	398
08	Magnesium as Mg	mg/kg	214	202	188
09	Organic Carbon	%	1.22	1.58	1.62
10	Nitrogen as N	kg/hec	0.86	128	148
11	Phosphorus(as p)	kg/hec	48	44	42
12	Potassium (as K)	mg/kg	188	190	182
13	Chloride (as Cl)	mg/kg	164	142	142
14	Manganese (as Mn)	mg/kg	10.8	4.2	3.8
15	Iron (as Fe)	%	2.56	1.28	1.24

**********End of Report**********

Page 1 of 1

Verified by

EHS360 LABS PRIVATE LIMITED CHENNAI 600 083

Authorised Signatory

Name: Santhosh Kumar A

Designation : Quality Manager

E: info@ehs360labs.com
W: ehs360labs.com

10/2, Ground Floor, 50th Street, 7th Avenue
Ashok Nagar, Chennai - 600083.

Annexure-6

IPICOL | ODISHA NEW OPPORTUNITIES

SJ/SML/72/(IV)/

Date: 21.02.2023

To
Additional Secretary to Government
Department of Water Resources
Rajiv Bhawan, Bhubaneswar

Sub: Revalidation of water from Baitarani River in favour of M/s. Sree Metaliks Limited for setting up 1 MTPA Beneficiation plant, 1 MTPA Pellet Plant and 0.7 MTPA Steel Plant at Anra, Dist-Keonjhar.

Sir,

In inviting reference to the above subject, I am directed to inform you that M/s Sree Metaliks Limited had requested for Revalidation of 6.62 cusec of water from Baitarani River for 1 MTPA Beneficiation plant, 1 MTPA Pellet Plant and 0.7 MTPA Steel Plant at Anra, Dist-Keonjhar. The water requirement for the project has been revalidated by State Level Facilitation Cell in its 235th meeting dated 16.02.2023 and has arrived as follows:

a) 1 MTPA Beneficiation & 1.2 MTPA Pellet Plant- 0.9 Cusec
b) 0.7 MTPA Steel Plant- 5.72 Cusec

In view of the above, it is now recommended for revalidation of **6.62 cusec** of water from Baitarani River in favour of M/s Sree Metaliks Limited at Anra, Dist-Keonjhar as per prevailing guidelines/rules of DoWR. Any additional infrastructure that may be required to allocate the stated quantity of water, a joint review will be made with Sree Metaliks Limited in consultation with DoWR and Industries Dept. The committee may look into the possibility of setting of in-stream storage facility/barrage, any other arrangement, as the need may be.

Thanking you.

Yours faithfully

Sd/-
(K.C.Mohanty)
ED
dt. 21.02.2023

Memo no._____

Office of Engineer in Chief, Water Resource, Secha Sadan Bhawan, Bhubaneswar/ Chief Engineer, Water Services, Secha Sadan Bhawan, Bhubaneswar / Superintending Engineer, Planning Section, Secha Sadan Bhawan, Bhubaneswar & Member (SLFC), IPICOL for kind information and necessary action.

Sd/-
ED
dt. 21.02.2023

Memo no. 521
Managing Director, M/s. Sree Metaliks Limited, SML House, Main Road, Barbil, Keonjhar-758035 for information and necessary action.

ED 21/02/2023

Annexure-7

SREE METALIKS LTD.

NALLA CONSERVATION& MANAGEMENT PLAN

OF

1.0 MTPA IRON ORE BENIFICATION&

1.2 MTPA PELLETIZATION COMPLEX

AT

Village- Anra, Dist- Keonjhar, Odisha

SEPT., 2022

Executive Summary

1. Sree Metaliks Limited (SML) incorporated in the year 1995, is a pioneer industrial house having interest in sponge iron, steel, power and iron ore mining having their Registered Office at Kolkata and Head Office at Barbil in Odisha State. SML has got the certification for ISO9001:2000 for Quality Management System and ISO140001:2004 for Environment Management System for its Integrated Steel Plant Operation.

2. Since inception, Sree Metaliks has grown to a multi-product manufacturing unit starting from manufacturing Sponge Iron to Steel to Rolling products.

3. SML has set up its manufacturing units in Loidapada & Anra, close to its Iron Ore Mines at Khanbandh, situated in Keonjhar District, Odisha. SML had obtained prior Environmental Clearance for setting up of an Integrated Steel Plant at Village Anra of Keonjhar district in Odisha vides F. No. J- 11011/192/2008-IA. II(I),Dated 13/07/2009.

4. The cost of the proposed Project profile (1.0 MTPA Beneficiation Plant and 1.2 Pelletization Plant) is Rs.286.00 Crore.

5. The Nala Conservation and Management Plan of proposed project complex at Anra has been prepared to meet the requirement of detailed management plan / Conservation plan to ensure that water bodies in study area have not to be disturbed (due to proposedproject).

   [Reference : EAC Minutes - 12th meeting of the EAC for Industry -I sector h*eld on 30-31st August 2022, Sl No.. 12.7.19, page No. 165 of 265; ADS* dated 12.09.2022]

6. Baitarani River, Bamuni Nallah, Jagadala Nallah, Chemda Nallah, Kadal Nallah, Patarpagi Nallah , Malda river lies within the 10 km radius buffer zone of Sree Metaliks Ltd Proposed 1 MTPA Iron ore Benification and 1.2 MTPA Pellet Plant at Anara, in Keonjhar Dist, Odisha state.

   The location of nalas and river from the proposed plant area is as follows:

   - Baitarani river - 6.14 km (NW Direction)
   - Bamuni nala – 50 m (flowing adjacent to plant boundary)
   - Jagadala nala – 5.45 km (NE Direction)
   - Chemda nala – 6.83 km (S Direction)
   - Kadal nala – 7.08 km (ENE Direction)
   - Patarpagi nala – 0.59 km (SSE Direction) joins Bamuni nala (tributary)
   - Malda river – 9.14 km (NW)

7. Since all the following streams, except Bamuni nala are far away from the proposed project, it is unlikely to have any project related impact on the eco system of the water bodies.

8. Bamuni nala which is flowing adjacent to the boundary for proposed plant needs

proper attention and requires a detail study on any possible adverse impact of project and further requires a proper management / conservation plan to mitigate the adversity if any.

9. A detail hydrology study of a Bamuni nala catchment has been made with maximum flood computation and a preventive measure of construction of earthen embankment of 2m highin the bank of Bamuni Nallah (within project Boundary) has been proposed to prevent flood water entry into the plant area . It will also arrest any accidental flowof storm water from plant area into bamuni nala. Vertiver grass will be planted beyond the embankmentto restrict soil erosion.

10. 100 year chance flood for Bamuni nala is computed as 249 cumecs. With the existing natural regime section of the river, the depth of flow is likely comes to 3.2m. The HFL of river with 100 year chance flood computed to be 523.5.

Since the plant lease area level is above 524m there is no likely hood of entry of flood water into the plant premises.

Mitigative Measures have provided both in Core Zone (Area within plant Boundary and Zone of Impact / Buffer Zone). This Management plan has addressed all theremedial measures to minimize the adversities as detailed below :

11. Proposed Mitigating Measures for Core Zone.

2m High embankment at the outer periphery of the plant boundary along the Bamuni nala will be constructed to arrest accidental flow of storm water from plant area into Bamuni Nala and to prevent flood water entry to plant . Vertiver grass will be planted beyond the embankment to restrict soil errosion. An estimated amount of Rs 30, 00,000.00 (Rupees Thirty Lakh) will be spent by the Project Proponent for the purpose.

The Maximum daily rain fall is computed to be 180 mm (considering 20 years daily rain falldata). The maximum probable storm water from the plant area is 87 KLD.

It is proposed to construct a pond in 2.5 acres (1 ha area) in northwest corner within plant Boundary for storage of Storm water which shall be reused / released after sedimentation of 24 hours.

The storm water from the plant lease area shall be taken by planned/designated drainage network tosettling tank as such no sediment will be allowed to flow outside of the plant.

A reservoir in NW corner of project area will be constructed in 1.0 Ha Area (2.5 Acre)to hold rain / stormwater for 24 Hrs. with an estimated cost of Rs 18.49 Lakh to enable settlement of sediments.The plant is designed with zero discharge and there will not be any waste water flowing outsideto pollute any water body.

1.0 INTRODUCTION

M/s Sree Metaliks Limited is a pioneer industrial House engaged in sponge iron, steel, power production and iron ore mining having their Registered Office at Kolkata and Head Office at Barbil in Odisha State. Sree Metaliks Limited has got the certification for ISO 9001:2000 for Quality Management System and ISO 140001:2004 for Environment Management System for its Integrated Steel Plant Operation. Presently Sree Metaliks has grown to a multi- product manufacturing unit starting from manufacturing Sponge Iron to Steel to Rolling products. This is the expansion project of 1 MTPA Iron ore Beneficiation Plant and 0.6 MTPA Pelletization plant along with the existing 0.6 MTPA pelletization Plant at Village – Anra, Tehsil – Telkoi, Dist – Keonjhar, Odisha. Major raw material and fuel requirement for project will be various grades of iron ore (captive /other mines). Other raw materials required are coal, limestone, dolomite, bentonite and semi finished products.

2.0 LOCATION

The proposed plant is expansion of M/s Sree Metaliks Limited situated at Anra village, Keonjhar district of Odisha. The geographical co-ordinates of proposed plant are Latitude 21° 41' 11.257" to 21° 41' 9.614" North and Longitude 85° 25' 48.499" to 85° 26' 0.979" East. The study area comes in Survey of India OSM Nos. F45N5, F45N6, F45H9 & F45N10. The project site is well connected to AH- 46 (AsianHighway-46) at a distance of 11.5 km in south east direction. Nearest Railway Station is Goaldihi Railway Station at about 11.7 km in WNW direction and nearest airport is Rourkela Airport, at almost 89 km of distance in NW direction. In this study the project area has been referred to as the “core zone” and the area upto 10 km radius of the plant site has been referred as the “buffer zone”.

The topography of the plant area is flat and the slope is towards the North West direction. The elevation of the Existing site is varies from 524m to 533m AMSL. The average elevation is 530m AMSL. A location map of project site has been shown below.

LOCATION MAP OF BAMNI NALA NEAR PLANT BOUNDARY OF M/s SREE METALIKS LTD.
AT - ANRA, P.O - UPPER RAIGODA, DIST - KEONJHAR

SCALE - 1 : 2,000

0 100 200 300 400

N
W E
S

BAMNI NALA

PATARPAGI NALA

BAMNI NALA

LEGEND

EXISTING PLANT BOUNDARY		
CONTOUR	532	
NALA		
EXISTING PLANT		
EMBANKMENT		
PROPOSED FUTURE PLANTATION IN LIKELY GAP		3.5 Ac.
OLD PLANTATION		16.5 Ac.
CURRENT PLANTATION		23.5 Ac.
WATER BODY		
ROAD		
DRAINAGE		

LOCATION : VILLAGE ANRA, P.O - UPPER RAIGODA IN KEONJHAR DISTRICT

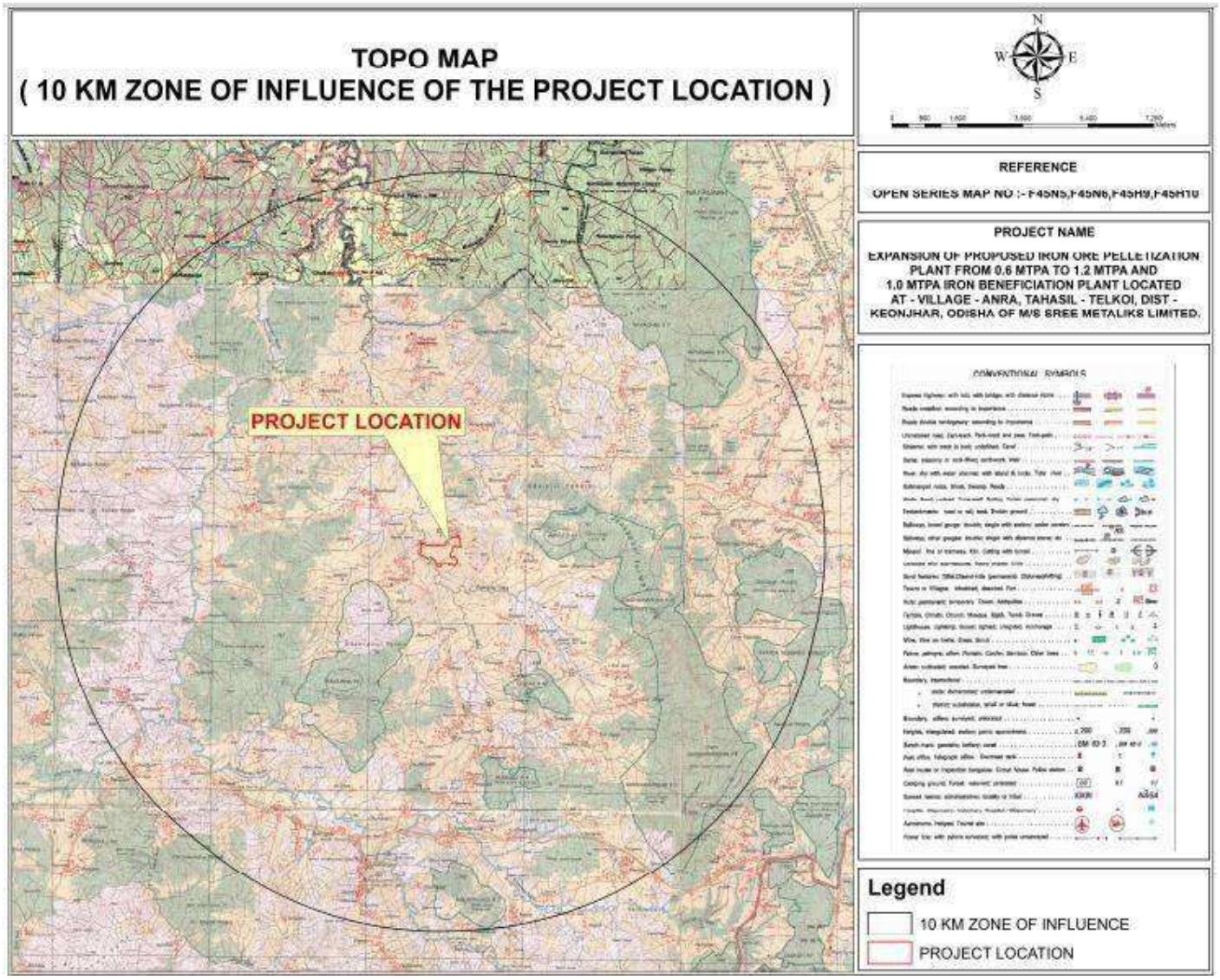


Fig. No. 1.1: Location map of Project site

3. NATURAL DRAINAGE

The study area is drained by a number of streams of different order. This areais mainly drained by the river Baitarani and its tributaries. It comes under Biatarani river basin.

The major drainage within the 10km buffer zone of project site is Baitarani River at almost 6.14Km distance in western part of buffer area. Major portion of the study area is drained by a number of sub-parallel drainage, which ultimately joins Baitarani River are Bamni nala, Chamda nala, Kadal Nala, Jagdhala Nalla and Patarpagi Nalla. These all are the distributaries of Baitarani River perennial in nature. The Bamni nala flows adjacent to western side plant boundary. The flow direction of Bamni nala is from south to north. It joins with river Baitarani in north- North West direction of plant at almost 9km of distance. Chamda nala flows at about 7 km away in south direction from plant. The Patarpagi Nalla flows at about 1.2 km away in south east direction of plant site and joins with Bamni nala at 1 km distance in south. The natural drainage pattern is dendritic in nature around the project site. A map of natural drainage channel is shown below.

The project area forms a part of Bamani Nala watershed. The maximum & minimum elevation of core zone is 568 and 524 m above mean sea level. Bamani Nala forms the main drainage of the project area and forms the south western boundary of the project. The Nala flows North West ward, draining the storm water from the south and southeastern high land, finally joins in Baitarani River.

The structural hills cover a significant portion of the study area in the south eastern and western parts. Except the hills in the eastern half and the western border, around 57% of the study area depict land surface slope of<5%, another 13% of area show surface slope of <10%. From map medium slope show ranges 10-20%, high slope from 20-40% and very high surface slope show >40%.

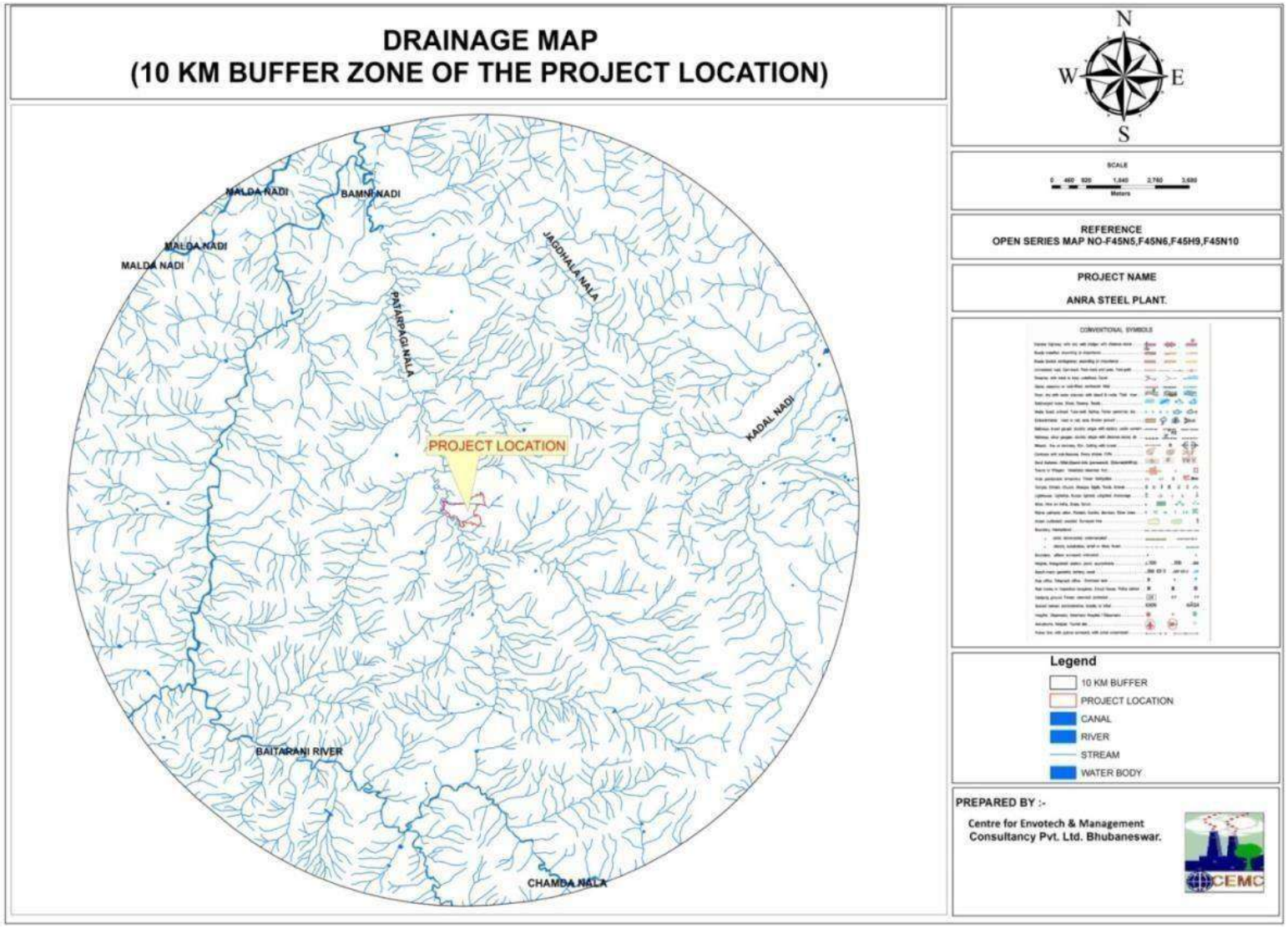


Fig. **No. 1.2: Natural Drainage Channel**

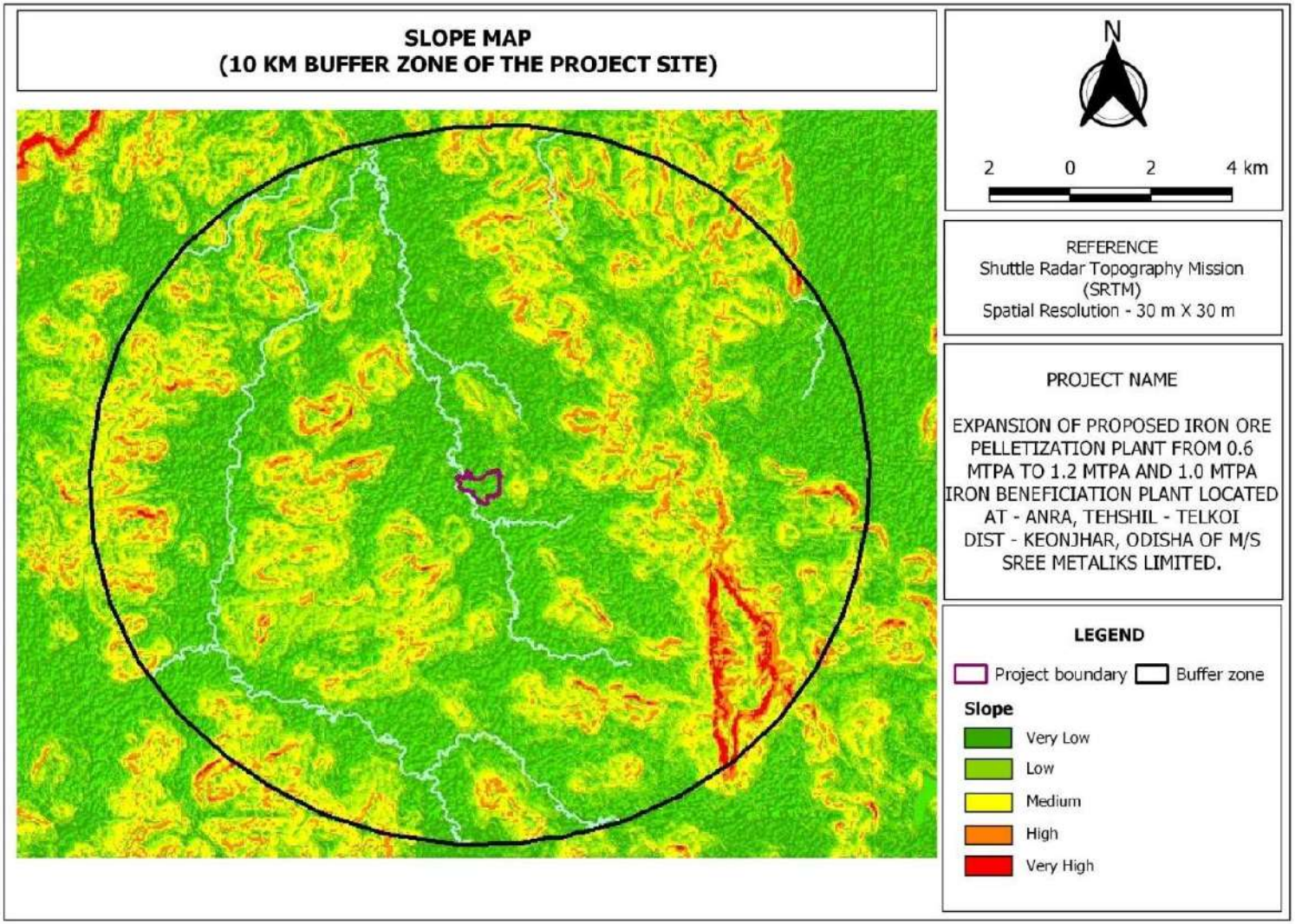


Fig. No. 1.3: Slope map

4. METHODOLOGY OF APPROACH

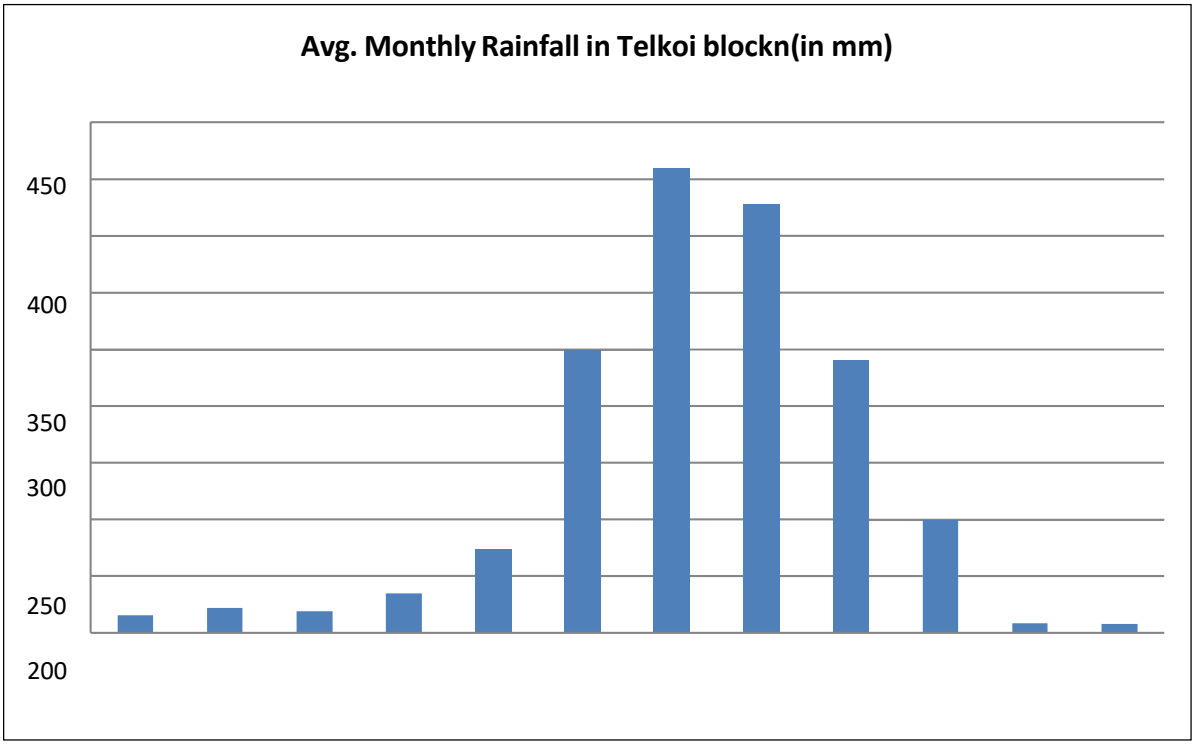
1. The study will comprise of collection of hydrological data including rainfall and analysis of storm water flows, factors responsible for generation of run off; infiltration rate, the climatic condition and rainfall pattern as depicted above.
2. Rainfall analysis to identify flood frequency and magnitude.
3. Estimation of storm water generation
4. Drainage study of entire Bamani nallah watershed using topographical map shall be carried out to have a general picture of morphology of the area.
5. Analysis and preventive measures to be taken for Storm Water Management in Project area.

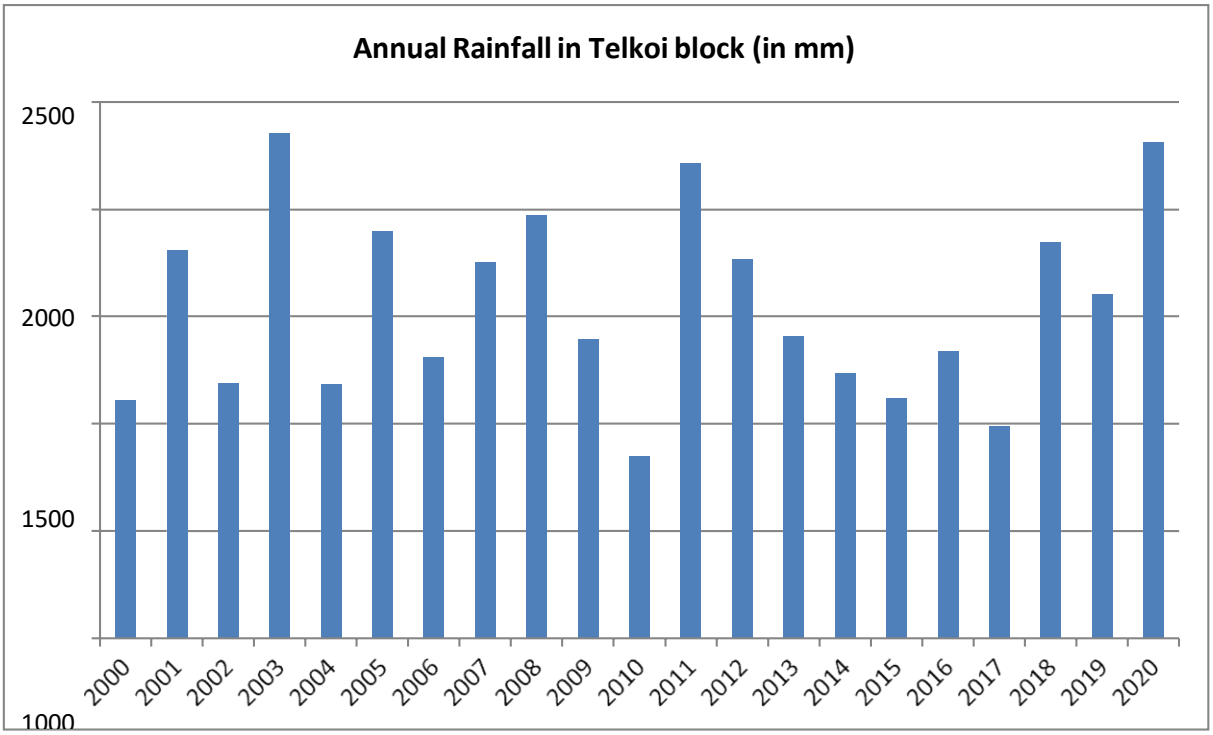
5. CLIMATE AND RAINFALL

The area experiences subtropical climate with hot & dry summer well distributed rainfall during monsoon period and cold winter season. The nearest meteorological observatory of IMD is located at Angul / Bhubaneswar & rainfall data of 20 years is available for Telkoi Block rain gauge station. The available month wise rainfall data is given below which shows larger parts of annual rainfall occurs between June to September every year. The monthly variation of rainfall has been graphically represented.

The review of hourly data indicates maximum rain fall value of 89.5mm and two hourly values as 119.3mm. The heaviest 24 hours rainfall at Telkoi is 257.8mm as pre records.

Month wise Rainfall Data for Telkoi Block Rain Gauge Station													
YEAR	**JAN**	**FEB**	**MAR**	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**	**DEC**	**TOTAL**
2000	0	31	0	10.6	110.6	273.4	267.4	152.2	186.2	57.8	22.8	0	1112
2001	0	0	77.6	35.4	41	175.4	803	427	120	133	0	0	1812.4
2002	18	0	5	4.4	61	190	122	501	250.6	39	0	0	1191
2003	0	17	35	35.5	34.8	514.8	653.4	477	300.7	262.8	7	17	2355
2004	0	0	0	92	30	125.6	306.2	361.8	135.6	132	0	0	1183.2
2005	0	0	47	25	115	595	585.3	163.3	97.5	272.6	0	0	1900.7
2006	0	0	0	1	130.4	144.3	320.4	484.7	198.8	15.4	17.6	0	1312.6
2007	11.2	90.2	8.8	19	119.8	294	447.2	337.1	359	62.9	3	0	1752.2
2008	27	0	0	13	36	591	493	342	455	15	0	0	1972
2009	0	0	0	0	154	91.8	700.1	252	64	84	47	0	1392.9
2010	0	0	4	28	68	36	145	315	163.2	74	0	19	852.2
2011	0	20	2	86.2	92	477	363	367.5	767	41	0	0	2215.7
2012	158	10	0	2.9	2	204.5	428.6	499.1	335.7	76.4	51	0	1768.2
2013	12.2	0	17	36	27.3	159.8	402.7	198.8	275.7	278.4	0	0	1407.9
2014	0	89.5	12	5	36	67.4	484	310.8	181	52	0	0	1237.7
2015	67	14.4	5	51.2	131	230.8	314.3	155.5	57.5	22.5	0	73.5	1122.7
2016	4	51.1	59.7	0	43	152.7	306	509.6	81.6	110.9	17.1	0	1335.7
2017	0	0	38.6	16.4	65.6	143.3	268.4	170.3	158.2	123.7	5.6	0	990.1
2018	0	0	0	97.6	91.4	185.9	579.7	539.5	243.5	66.4	0	45.5	1849.5
2019	0	43.6	49.3	54.4	23.1	113.6	387.7	363.2	463.8	101.8	0	7.4	1607.9
2020	28.4	88.1	30.6	119.9	131.1	467.4	216.8	1018	146.6	65.8	0	0	2312.7
Avg.	**15.5**	**21.6**	**18.6**	**34.9**	**73.4**	**249.2**	**409.2**	**378.3**	**240.0**	**99.4**	**8.14**	**7.7**	**1556.3**


Avg. Monthly Rainfall in Telkoi blockn(in mm)
450
400
350
300
250
200


Annual Rainfall in Telkoi block (in mm)
2500
2000
1500
1000
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018
2019
2020

FLOODING SCENARIO:

Based on the study it has been found that the total catchment area of Bamuni Nala spreads over 66.36 Sq. KM and it has been suggested that HFL of river with 100 yearchance flood computed to be 523.5m.

Since the plant area level is above 524m there is no likely hood of entry of flood waterinto the plant premises.

However, considering the safety factor, It is proposed to construct a 2m high embankment along the bank of Bamni nala as a protection measure for any probability of flood water entry into the project lease area.

Stream pattern

The combined effect of climate and geology on catchment topography yields an erosion pattern which is characterized by network of channel or stream. The stream pattern gives an idea of characteristic of formation present in the study area. The catchment of all three nallas represents a dendritic or tree like drainage pattern. Such a pattern represents homogeneous character of formation over the entire catchment. When the variation in resistance to flow are found more or less same, then resultingthe stream run in all direction with no definite preference of particular direction.

Stream order

The stream order is a classification reflecting the degree of branching bifurcation of stream channel with in the basin. The smallest fingertip tributary is given order 1. When two order 1 tributaries join each other, order 2 stream commences. Higher order stream develops in same fashion. The trunk of stream though which the entire discharges passes becomes the stream of highest order in a particular catchment. The length and number of each order of stream has been worked out and given in Table.

Table -Drainage Analysis

Order of stream	Length of stream (km) Bamani nala
1	4.598
2	8.2
Total	12.798
Area	5.023
Drainage density	2.5478

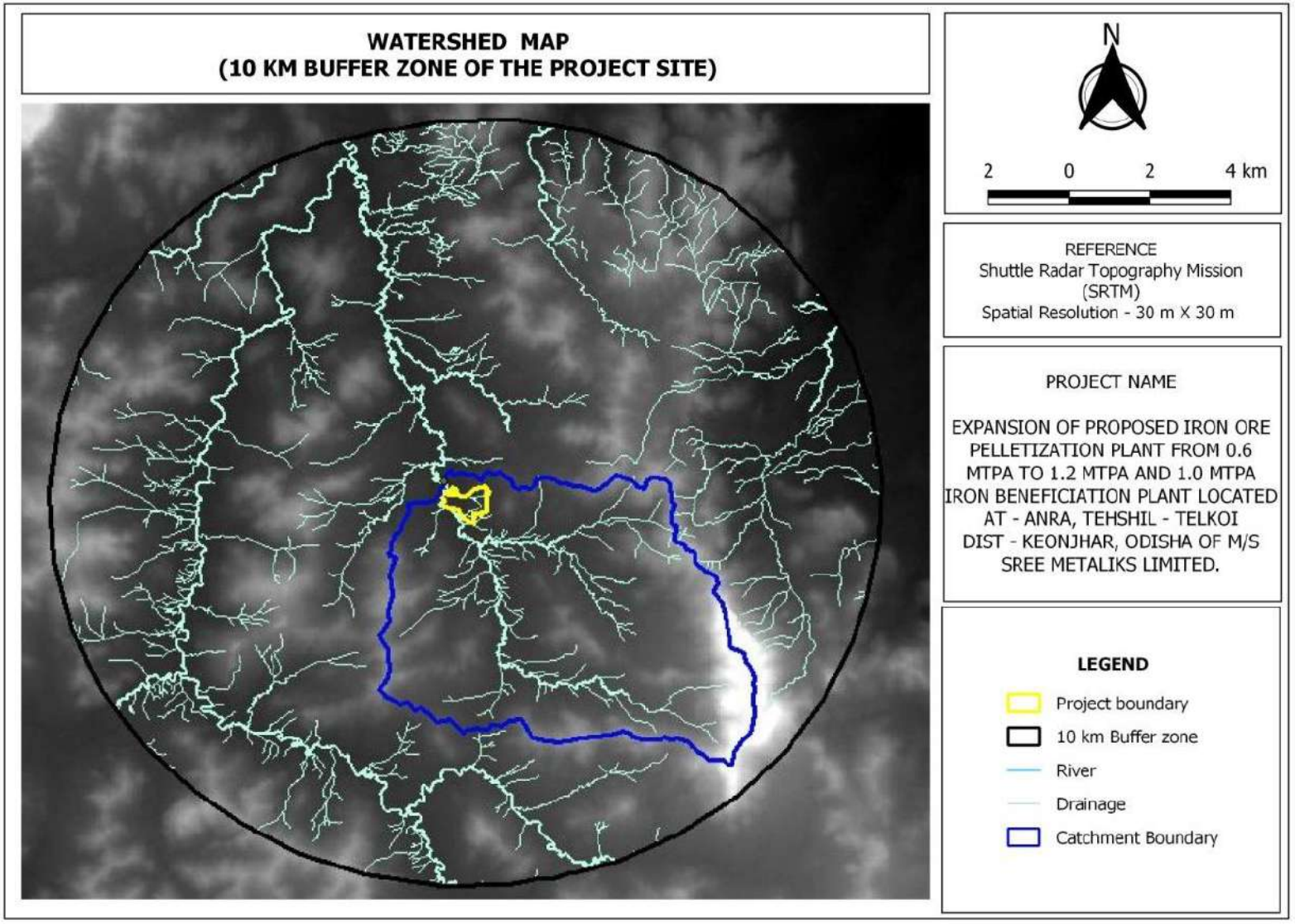


Fig. No. 1.4: Catchment Map

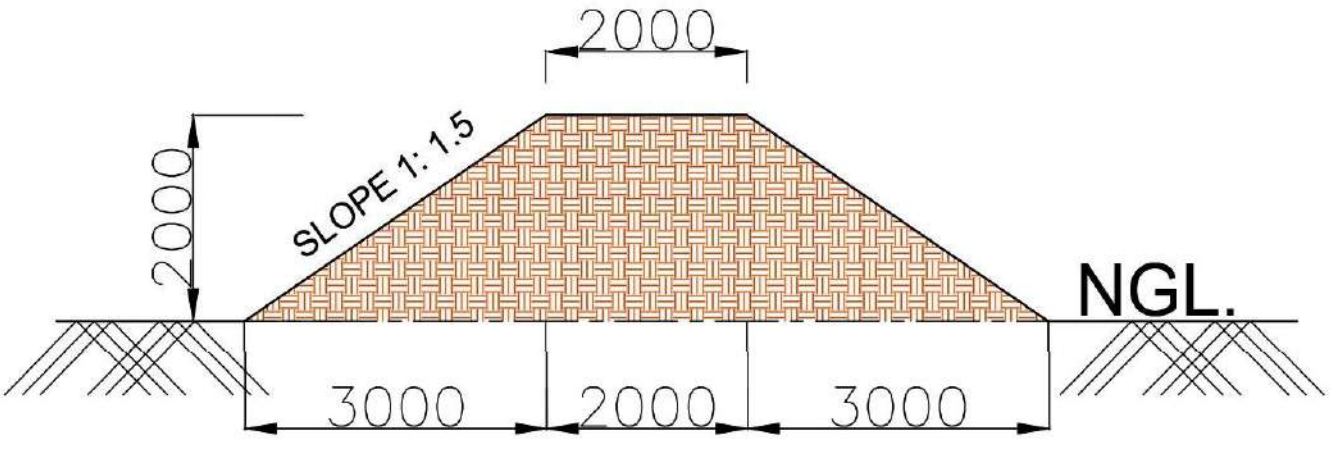
6. STORM WATER MANAGEMENT (Plant Area)

The maximum daily rainfall is computed to be 180mm (considering 20 years daily rainfall data). The maximum probable storm water computation for the plant area has been suggested 87KLD. It is proposed to construct a pond of 2.5 acres for storage of the storm water which shall be released after sedimentation of 24 hours.

A proper drainage network is planned to collect the storm water to avoid any flooding of plant area, which ultimately shall be processed through a settling tank beforedischarging outside.

7. CONSTRUCTION OF EMBANKMENT & POND

SL NO.	DESCRIPTION	AMOUNT
1.	Embankment Area Earth Filling , Levelling, Dressing , Slope Making , Rolling & Water Compection (1200 Mtr)	3000000.00
2.	Construction of Pond	1849000.00
		4849000.00



SECTION OF EMBANKMENT
1200 Mtr. LONG.

M/S SREE METALIKS LIMITED
ANRA, KEONJHAR

Annexure-8

Annexure-9

No. : KJR23C0754
Date: 13-Sep-2023

GOVERNMENT OF ODISHA

CERTIFICATE OF VERIFICATION

(See Rule 16 (3) Schedule – VIII of the Odisha Legal Metrology (Enforcement) Rules, 2011)

Office of the Legal Metrology Officer **KEONJHAR**, Camp/Place **Anra**

Name of Legal Metrology Officer **Sri. Jyoti Ranjan Behera** No. **OR-361**

I here by certify that I have this day verified and **STAMPED** the under mentioned weights, measures, etc., belonging to **SREE METALIKS LTD (SREE METALIKS LTD)** Locality **Anra, Keonjhar.**, Name of the trade **Other**

Quantity	Denomination	Weighing instruments	Measuring instruments	Verification fees	Carriage, Conveyance,
1	Flow Meter , Capacity (Max) : 800 liter/min , Make : DMS , Model No. : DMAG-121 , SL No. : DMS2021-09-300 Addl Fee R17(2) : Rs.0.00, Addl Fee R17(3) : Rs.2500.00			5000.00	2000.00
1	Flow Meter , Capacity (Max) : 800 liter/min , Make : DMS , Model No. : DMAG-121 , SL No. : DMS2021-09-298 Addl Fee R17(2) : Rs.0.00, Addl Fee R17(3) : Rs.2500.00			5000.00	2000.00
No of seals on each flow meter-01					

[In the case of rejected weights, measures, etc. the Legal Metrology Officer shall give separate Certificate of rejection mentioning the reasons of rejection against each item]

Total Rs. **19000.00** deposited vide T. Receipt / Money Receipt No. **35C314E12D** dated **2023-09-06**

Repaired by / Used by **SREE METALIKS LTD** (Signature)

NEXT VERIFICATION DUE ON **13-Sep-2024**

Document certified by JYOTI RANJAN BEHERA <malkangirilmunit@gmail.com>
Digitally signed by JYOTI RANJAN BEHERA
Date: 2023.09.13 19:29:50 IST

Legal Metrology Officer , KEONJHAR

Note:1.The Certificate is to be exhibited in a conspicuous place in the related premises as per Rule 24
2.If the weight or measure is repaired or reinstalled, these shall not be put into use unless it has been duly re-verified and stamped, notwithstanding that periodical re-verification of such weight or measure has not become due as per Rule 20.

No. : KJR23C0775
Date: 27-Sep-2023

GOVERNMENT OF ODISHA

CERTIFICATE OF VERIFICATION

(See Rule 16 (3) Schedule – VIII of the Odisha Legal Metrology (Enforcement) Rules, 2011)

Office of the Legal Metrology Officer KEONJHAR, Camp/Place ANRA

Name of Legal Metrology Officer Sri. Jyoti Ranjan Behera No. OR-361

I here by certify that I have this day verified and STAMPED the under mentioned weights, measures, etc., belonging to SREE METALIKS LTD (SREE METALIKS LTD) Locality Anra, Keonjhar., Name of the trade Other

Quantity	Denomination	Weighing instruments	Measuring instruments	Verification fees	Carriage, Conveyance,
1	Flow meter with totalizer, Capacity (Max) : 1050 liter/min , Make : UPC , Model No. : UPCS MAG-110 , SL No. : P5023072661 Addl Fee R17(2) : Rs.0.00, Addl Fee R17(3) : Rs.0.00			5500.00	2000.00
1	Flow meter with totalizer, Capacity (Max) : 1050 liter/min , Make : UPC , Model No. : UPCS MAG-110 , SL No. : P5023072631 Addl Fee R17(2) : Rs.0.00, Addl Fee R17(3) : Rs.0.00			5500.00	2000.00
No of seals-1 in each flow meter.					

[In the case of rejected weights, measures, etc. the Legal Metrology Officer shall give separate Certificate of rejection mentioning the reasons of rejection against each item]

Total Rs. 15000.00 deposited vide T. Receipt / Money Receipt No. 35C41E6878 dated 2023-09-23

Repaired by / Used by SREE METALIKS LTD (Signature)

NEXT VERIFICATION DUE ON 27-Sep-2024

Document certified by JYOTI RANJAN BEHERA <malkangirlmunit@gmail.com>
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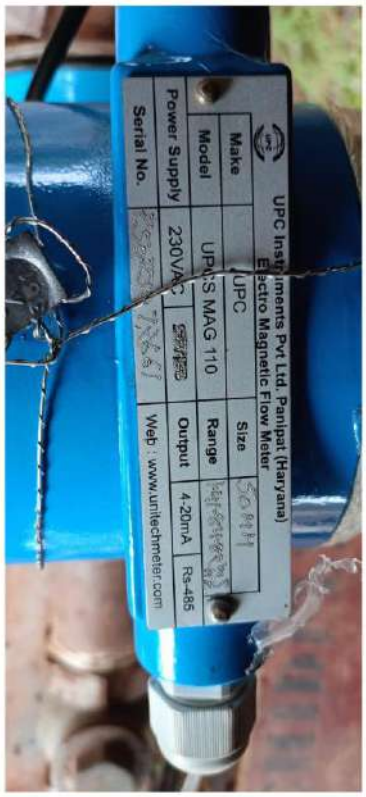
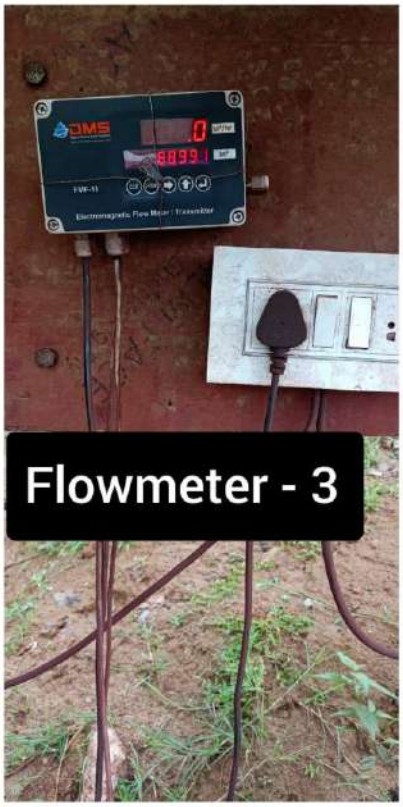
Date: 2023.09.28 19:06:30 IST

Legal Metrology Officer , KEONJHAR

Note: 1.The Certificate is to be exhibited in a conspicuous place in the related premises as per Rule 24
2.If the weight or measure is repaired or reinstalled, these shall not be put into use unless it has been duly re-verified and stamped, notwithstanding that periodical re-verification of such weight or measure has not become due as per Rule 20.

Some Photographs of Water Flow Meter





Annexure-10

5 VILLAGES (Anra, Dudhpasi,Raigoda,Bheldih & Bininda)

ADOPTED AS "MODEL VILLAGES"

SREE METALIKS

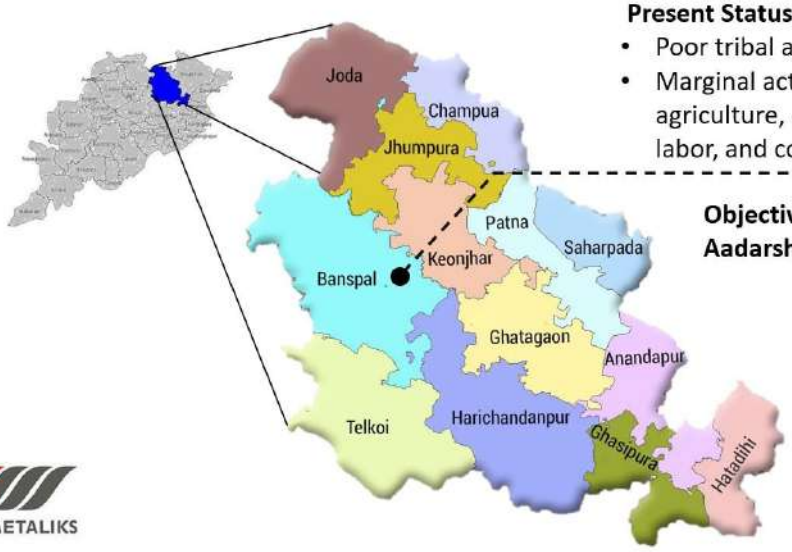
5 VILLAGES ADOPTED AS MODEL VILLAGES BY M/S SREE METALIKS LTD.

To make it "SWACHHA-NIRMAL-SWABLAMBI Aadarsh GRAM" :

- **5 peripheral Villages of Anra Plant in Banspal Block (Anra, Dudhpasi, Raigoda, Bheldih, Bininda)**

Present Status:

- Poor tribal and other backward communities
- Marginal activities, which includes traditional agriculture, cutting and selling fuel wood, casual wage labor, and collection of non-timber forest produces



Objective: 5 Nos. SWACHAA-NIRMAL-SWABLAMBI Aadarsh Gram

Solution Proposed

Integrated Collaborative Approach

- Government Schemes Convergence
- Integrated NRM Approach for making Villages Water Positive by 2028
- Capacity Building for Self Employment

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5 Model Villages

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Anra, Dudhpasi, Raigoda, Bheldih, Bininda

SWACHHA-NIRMAL GRAM

" It's an initiative to outreach villagers for Rural cleanliness, Sanitation and Mindset change."
to enable implementation of cleanliness and sanitation is Rural India
(in adopted model village in remote area)

Changing mindset of villagers to reduce open defecation and use toilets.

To start with :

i. Developing mindset of children and women folks for cleanliness.
ii. Girl child hygiene and comfort at school.
iii. Extensive use of low cost sanitary napkins by highlighting its benefits for improved hygiene and elimination of related health risk.
iv. Educating villagers on use of toilets, baths and keeping these clean.

(Contd,,,)

SWACHH NIRMAL GRAM (Contd....)

Construction of " NITYA-KARMA" complex for men and women in model villages.

- In phase-I, 2 Nos. NITYA-KARMA complex in 2 clusters would be built with continuous water availability in large open tanks / overhead tanks and lighting arrangements after sunset. Availability and its use use (24x7) round the clock.
  - NGO is engaged for organizing awareness program on cleanliness.
  - Distribution and proper use of sanitary napkins (in house production by "SAANCHI" an initiative of team CSR, Sree Metaliks limited, Barbil) is being facilitated by roping in Anganbadi workers.
  - Vaccination drive for children by involving Anganbadi workers .
  - KPI's -Reduction in open defecation.
    - Use NITYA KARMA complex by Men, Women and Children.
    - Use of sanitary napkins and recording it's benefit as felt by users.

Our Approach

With the help of implementation partner- SG foundation

Ensuring **indigenous rural knowledge** is revived and built upon, through local CBOs **focusing on Women**

Encompassing Socio-economic, cultural and environmental development through **innovative models**

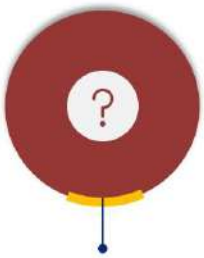
- Unreached **Tribals** with focus on Particularly Vulnerable Tribal Groups (**PVTGs**) in peripheral villages of Anra plant
- **Migrating** Youth

- NRM- National Resource Management viz, Land, Water, Forest wild Flora and Fauna
- CBOs – Community Based Organization

With **Government** agencies, **Project Proponent** (Sree Metaliks Ltd, Anra) and Civil Society Organizations to unlock synergy

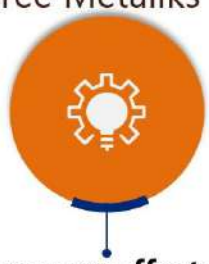
Mission: 5 Model Villages
Approach of Programme / Management Team :

(Including Engagement of Team Sree Metaliks Ltd.)



Need Assessment

- Understanding **community**
- **values** and desired outcome
- Systematically examining what **criteria** must be met in order to achieve the **desired impact**



Focus on affected communities

A **holistic approach** is taken up along with a **scalable model** for the periphery development of the company while prioritizing the focus on **directly affected communities**

Collaboration

Focus is imparted upon **government collaboration** and convergence while CSR funds supports the **gap funding**

SWACHHA-NIRMAL-SWABLAMBI- Aadarsh Gram :

PROJECT IMPLEMENTATION STRATEGY :

The proposed project would have three major components consisting of three major sets of activities:

First component:

It would address **revival and confidence building of local communities**, which would ensure:

(i) The participation of each family in the programme.

(ii) Gradually these groups would be taken through intensive training and exposure **on improved Natural Resource Management (NRM) practices** and environmental regeneration.

Second component:

It would be to include the families through a **farming system approach** that includes:

i. Horticulture
ii. Forestry
iii. Intercrops for food and cash income
iv. intensive cultivation of cash crops

- It would take the family as a unit and build on the resources that the family possesses.
- The approach would ultimately lead to increased agricultural production, augmenting food supply, fodder, fuel, timber and medicines.
- It would as well ensure improvement of local environment through
  a) better water resource development and biomass production.
  b) Gradual phasing out of fire wood as fuel for cooking by adopting free cooking gas connection under "UJJWALA SCHEME".

(Contd,,,)

SWACHHA-NIRMAL-SWABLAMBI- Aadarsh Gram : (Contd.....)

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Third component:

It would give emphasis on :

(i) Strength Building & **Skill Development for better employability**

(ii) To promote broader well-being of the community and **creating employment opportunities** in farm and non-farm sector.

(iii) For improved living condition electricity supply under "Deendayal Upadhayay Gram Jyoti Yojna" to each village household and farming of BPL families.

Under the Swachha-Nirmal-Swablambi Aadharsh Gram project it is proposed to cover about 600 Households in 5 villages of Anra Plant viz.,

(i) Anra
(ii) Dudhpasi
(iii) Raigoda,
(iv) Bheldhi
(v) Bininda

of Banspal block in Keonjhar district.

As per the progress on ground, the implementation period would be extended at regular interval of one year till concrete results are visible.

It would be measured by gradual improvement in living standard of natives through KPI's and it's sustainability.

The project period would be 1 year initially to check it's applicability and effectiveness for native community.

Building ecosystem to develop Model Villages (Key Performance Areas)

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- Sanitation facilities
  - Construction of Nitya Karma toilet complex for men and women
  - Provision of sanitary napkins to women and girls
- Clean and green environment
  - 7.5 km avenue plantation
  - Waste management system in public toilets
- Access to clean drinking water
  - Installation of drinking water supply points in 5 villages
  - Regular supply of tankers with fresh drinking water to be continued

Building ecosystem to develop model villages

- Healthcare facilities
  - Expansion of dispensary to cater to villagers free of cost
  - Ambulance services and dispensation of free medicines
  - Regular health camps for villagers
  - Vaccination drive for children and elderly persons
  - Reduction in malnutrition and stunting of children
- Promotion of clean energy
  - Facilitation of free gas connection under UJJwala Yogna
  - With subsidized LPG cylinders for BPL families.
  - Biogas plants may be setup on trail in one of the clusters of houses for its affective utilization.
  - It found useful by natives, few more numbers would be replicated.

Building ecosystem to develop Model Villages

SREE METALIKS

- Education and skill development
  - Maintenance of schools and bearing expenditure for teachers where required
  - Sponsorship of students for ITI/Diploma/Engineering studies
  - Academic and sports scholarship for deserving students
  - Training of 50 youth every year for self-employment
- Food sufficiency/agricultural improvement
  - Kitchen garden in 500 households
  - Renovation of 2 canals for irrigation
  - Renovation/digging of 6 wells
  - Digging of 4 farm ponds
  - Diversification of crop production

Building ecosystem to develop model villages

- Environmental sustainability
  - Recharging of water sources through integrated NRM approach
  - Soil conservation and agro forestry development
- Community empowerment
  - Self Help groups led by women for driving and sustaining initiatives
  - Participation of villagers in decision making
  - Awareness drive for sanitation and hygiene
  - Contributory approach (money/material/labour) to infrastructure building for ownership
  - Maintenance to be done within the community (training/resources) to be provided

Project Financial Summary

Periphery area development of Shree Metaliks Ltd.

Total Project Cost: Rs. 89.69 lakhs. (Year-1)

Source of fund:

Zilla Parishad, Keonjhar; Agriculture Dept.; Horticulture Dept. and other government bodies: **63%** (56.5 Lakhs)

Shreemetaliks: **33%** (29.2 Lakhs)

Benificiary Contribution: **3%** (2.8 Lakhs)

Sl. No.	Program components	Total Cost(Rs. Lakh)	% Shareof Shree Metaliks
1	Infrastructure Development & NRM Activities	80.34	24.70 %
2	Capacity Building through Training	1.2	100 %
3	Management cost	8.15	100 %
4	**Total financial Outlay**	**88.69**	**33%**

Key Focus Areas

Periphery area development of Shree Metaliks Ltd.

SREE METALIKS

01 **Water Positivity:**
- Recharge water sources through Integrated NRM approach
- Soil Conservation and Agro-forestry development

02 **Access to Healthcare:**
- Establish and upgrade healthcare facilities.
- Mobile medical clinics for remote areas.

03 **Nutrition Education:**
- Workshops on balanced diets.
- Community-based nutrition programs.

04 **Agricultural Support:**
- Promote sustainable farming practices.
- Diversify crop production for nutrition.

05 **Clean Water and Sanitation:**
- Improve access to clean water sources.
- Hygiene awareness campaigns.

Projected Impact

Periphery area development of Sree Metaliks Ltd.

SREE METALIKS

01 **7.5 KMs.** (Both side) **Avenue Plantation** will be done at Upar Raigoda, Bali Beda & Sankriposi (2.5 KM. each)

02 **Kitchen Garden** will be developed in **500 Households at** Upar Raigoda, Bali Beda, Sankriposi, Amuni & Anra

03 **Masonry Canal** at Upar Raiguda will be renovated & **Earthen Canal** at Balibeda will be developed

04 **5 Drinking water supply** points in (Bali Beda-1 , Sankriposi-1, Amuni-1 & Anra-2) will be established

05 **4 Wells** (Upar Raigoda -2 , Bali Beda -2) will be renovated

06 **2 Wells** (Sankriposi-1, Amuni-1) will be dug

07 **4 Farm Ponds** will be done at Amuni

08 **Soil & water conservation** activities will be done for **30 Ha. of land every year**

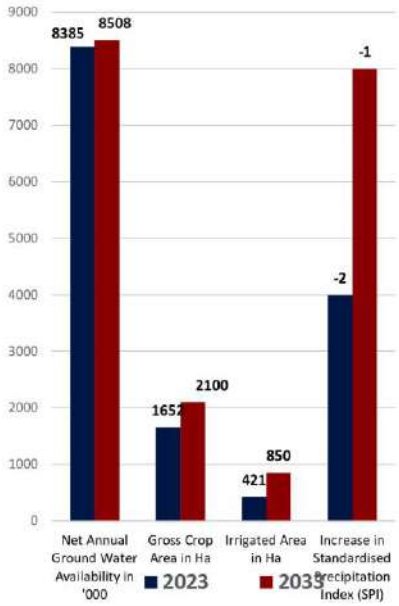
09 **Free gas connection for BPL card holder under "Ujwalla Yojna" with proper Training for its safe use .**

10 **50 Candidates** will be trained for **Self Employment activities every year**

Projected Impact Indicators after 10 year intervention

SREE METALIKS

Periphery area development of Sree Metaliks Ltd.



01 **Access to Healthy & Nutritious Diet** though Kitchen Garden, Millets, Backyard Poultry interventions

02 **Transition to Multi Crop from Mono Crop** by ensuring irrigation

03 Recharge of ground water and soil moisture preservation

04 Self-Employment generation through Capacity Building

05 Reduced Migration to outer cities/states

Annexure-11

ANNEXURE-11

ISSUES RAISED BY PUBLIC

&

COMMITMENT OF PROJECT PROPONENT

DURING PUBLIC HEARING MEETING
ON 20-02-2009

STATUS OF COMPLIANCE BY PP.

SREE METALIKS

STATEMENT OF ISSUES AND DEMAND RAISED BY THE PUBLIC AND COMMITMENT OF THE PROJECT PROPONENT DURING THE PUBLIC HEARING MEETING HELD ON 20.02.2009 (11.00 AM) NEAR RADHAKRUSHNA CLUB OF ANRA VILLAGE, TEHSIL- TELKOI, DIST. KEONJHAR IN RESPECT OF PROPOSED INTEGRATED STEEL PLANT OF 0.5 MTPA CAPACITY OF M/s. SREE METALIKS LIMITED.

ISSUES RAISED BY THE PUBLIC	COMMITMENT OF THE PROJECT PROPONENT
The issues raised at the public hearing meeting are the following: ❖ **Health** ❖ **Road & Infrastructure development** ❖ **Education** ❖ **Communication.** ❖ **Skill Up-gradation of local youths and Employment**	Sri Manmoranjan Sahoo, Vice President of M/s Sree Metaliks Limited who was present at the public hearing meeting, at the end addressed the gathering and gave his commitment to the issues and demands raised by the public are as mentioned below: 1. The Company has organised regular health camp in the past and will continue it in future. It will set up a dispensary near the factory premises with the provision for treatment of local people through a qualified Doctor along with Ambulance facility. Together with the Govt. agencies they will conduct Malaria eradication programmes in the locality. 2. In consortium with other upcoming industrial units and the government machinery, the company will facilitate construction of the roads like Rangdihi-Kumudihi-Raigoda-Phuljhar-Malda and Anra-Sankarposi-Raisuan. Besides the existing culvert over Bamuni Nala, a larger bridge is planned to be constructed in the near future to facilitate movement of heavy traffic. In view of bleak power situation in Palaspang Grid the company has already taken the lead in construction of a new 220/132 KV Grid Sub-station at Nuagaon jointly with other six upcoming industrial units with an investment of Rs 50 Crore. 3. The company will take appropriate steps to improve the infrastructure and standard of the village schools in phases. 4. They have already taken steps to set up a BSNL tower for transmission and provide tele-communication facilities for the locality, the job is under progress. 5. The company has already sponsored 18 boys for ITI training in various trades. They also assured that as per the requirement of the industry, selected candidates will be sponsored for various training programmes in future. Till date 400 people are already engaged in the construction activities. As per the schedule of implementation of the project, the people will be provided with suitable employment opportunities based upon their qualification, skill and experience. Huge skilled manpower is required for the project for which priority will be given to the candidates from Keonjhar district.

20/02/09

Sri Bijay Kumar Bilung,
Addl. District Magistrate,
Keonjhar

Sri Niranjan Mallick
Regional Officer,
State Pollution Control Board,Keonjhar

Compliance of Previous Public Hearing Commitments 1

❑ HEALTH

Commitment by PP:

"The company has organized regular health camp in the past and will continue it in future. It will set-up a dispensary near the factory premises with the provision for treatment of local peoples through a qualified doctor along with ambulance facility. Together with the Govt. agencies they will conduct malaria eradication programme in the locality.

Compliance Status:

- ❖ Dispensary is setup for free treatment of villagers
- ❖ Free Medicine is provided to villagers
- ❖ Two nos. of Ambulances are provided for free transportation of patients round the clock (24x7) to Dist. Hospital/Medical college, Keonjhar.
- ❖ Regular fogging is done for malaria eradication (in consultation with Govt. agencies)
- ❖ Health Camp is organized once in a year.

Compliance of Previous Public Hearing Commitments 2

❑ **Hygiene** (for good Health, good Hygiene viz., availability of Portable Water is a necessity)

(as desired by villagers)

- ❖ Drinking water supply in Anra.
  (Borewell, Submersible Pump, Overhead Tank, Pipe line network)
- ❖ Drinking water supply in Raigoda.
  (Borewell, Submersible Pump, Overhead Tank, Pipe line network)
- ❖ Round the year operation and maintenance of water supply system.

- ❖ Drinking water supply by water tankers to nearby villages viz. Dudhpasi, Bheldih, Binida on daily basis.

Compliance of Previous Public Hearing Commitments 3

❑ ROAD AND INFRASTRUCTURE:

Commitment by PP:

"In consortium with other upcoming industrial units and the Government Machinery, the Company will facilitate construction of roads like Rangdihi-Kumundi-raigoda-Phulijhar-Malda and Anra-Sankaraposi-Raisuan. Besides the existing culvert over BamuniNala, a larger bridge is planned to be constructed in the near future to facilitate movement of heavy traffic. In view of bleak power situation in Palaspanga Grid, the Company has already taken the lead in construction of a new 220/132 KV Grid Sub-station at Nuagaon jointly with other six upcoming industrial units with an investment of Rs.50 Crore."

(Contd...)

Compliance Status [Roads & bridges]

- Concrete road at Raigoda chowk constructed.
- Maintenance of existing bridge over Bamuninala (built by PP) and road from Anra to Raigoda chowk are being done by PP.
- Regular repairing of existing roads are being done by PP.
- By continuous persuasion with Govt. officials at District level and necessary facilitation by PP following infrastructure projects implemented / under implementation by DMF(District Mineral Fund) schemes .
  - I. Road from Rangdihi to Malda constructed.
  - II. Anra- Shankrapasi-Raisuan Road(22.5K.M.) has been renovated and almost completed.
  - III. New Bridge Bamuni Nala is being taken up for construction.
- Improved power supply to nearby village raigoda, anra etc. could be achieved by regular follow up and facilitation by PP to power distribution company NESCO / TPNODL.
- New 220 / 132 KV Substation not done as other industrial units have not come up.

(Contd...)

Compliance of Previous Public Hearing Commitments 4

❑ **ROADS & INFRASTUCTURE** (Contd...)

CSR & COMMUNITY BUILDING ACTIVITIES AS DESIRED BY VILLAGERS:

- ❖ Construction of Rahas Mandap at Anra.
- ❖ Construction of Durga Puja & Bisri Puja Mandap at Anra.
- ❖ Construction of village Club at Anra.
- ❖ Construction of Mandap at Raigoda.
- ❖ Construction of Community Centre at Sankarposi.
- ❖ Construction of front Portico of Puja Mandap at Dudhpasi.
- ❖ Pala Mandap constructed at Dudhpasi
- ❖ Construction of Bishri Puja Mandap at Binida.
- ❖ Financial support under CSR towards various sports and cultural events.

Compliance of Previous Public Hearing Commitments 5

❑ **Education:**

Commitment by PP:

"The Company will take appropriate steps to improve the infrastructure and standard of the village schools in phases."

Compliance Status (in consultation with Village School Committee)

- ✓ Salary Support of one Social Science school teacher at Anra U.P. School.
- ✓ Salary Support of two General school teachers at Saraswati Sishu Mandir, Anra
- ✓ Maintenance and civil works done in Sarawati Sishu Mandir, Anra
- ✓ Development of Playground, School building etc. in neabouring villages.
- ✓ Sponsorship for organizing sports, educational and cultural events.

Compliance of Previous Public Hearing Commitments 6

❑Communication:

Commitment by PP:

" They have already taken steps to set up a BSNL tower for transmission and provide tele-communication facilities for the locality, the job in progress.

Compliance Status:

- ✓ One BSNL tower installed
- ✓ One Reliance Jio tower installed.
- ✓ Round the clock power provided for uninterrupted operation.

Compliance of Previous Public Hearing Commitments 7

❑ **Skill Up-gradation of Local youths and employments.**

Commitment by PP:

"The Company has already sponsored 18 boys for ITI training in various trades. SML assured that as per the requirement of the industry, selected candidates will be sponsored for various training programmes in future. Till date 400 people are already engaged in the construction activities. As per the schedule of implementation of the project, the people will be provided with suitable employment opportunities based upon their qualification, skill and experience. Huge skilled manpower is required for the project for which priority will be given to the candidates from Keonjhar District."

Compliance Status:

- ✓ 2 youths from nearby villages, qualified as (Degree) Engineers, employed at Anra Plant.
- ✓ 9 youths from nearby villages, qualified as (Diploma) Engineers, employed at Anra Plant.
- ✓ 35 youths from nearby villages, qualified as ITI trained technicians , employed at Anra Plant.
- ✓ 572 nos. local villagers and candidates from Keonjhar district are employed as regular employee.
- ✓ 100 nos. local villagers engaged through contract (in cleaning, housekeeping, canteen etc.)

EXPENDITURE INCURRED ON PH ISSUES

Sl. No	Description	Amount Spent (in Rs. Lakhs)				
		Capital Expenditure			Recurring Expenditure	
		Up to 31st Mar2022	During (2022-23)	Up to 31st Mar2023	2021-22	2022-23
1.	Health	28.15	3.40	31.55	29.98	26.87
	Hygiene	26.32	5.19	31.51	2.27	3.20
2.	Road & Infrastructure	75.80	54.38	130.18	12.75	10.95
3.	Education	2.22	8.73	10.95	4.23	3.01
4.	Skill Up Gradation of Local Youth	13.68	--	13.68	--	--
5.	Support for community programme	--	--	--	--	12.40
6.	Employment of local People	572 persons are employed from neighboring villages as regular employee. 100 Local persons are employed on contract (cleaning, canteen wash etc				
Total		**146.17**	**71.70**	**217.87**	**49.23**	**56.43**

HEALTH			
Sl. No	**Description**	**Amount Spent in Lakhs**	
	Recurring Annual Expenditure	**Year2021-22**	**Year2022-23**
1.	Annual expenditure for medicines, etc. for villagers	6.26	7.11
2.	Ambulance 2 Nos. facility is provided to all local people	12.02	6.66
3.	Malaria eradication support. Regular Fogging and Anti-Larva operation is being done in neighbouring villages regularly. Free Malaria Medicine distribution.	7.14	8.00
4.	Annual Health Camps are organised for last 3 years	4.55	5.10
	Total	**29.97**	**26.87**
	Capital Expenditure		
1.	New Dispensary building is under construction adjacent to the boundary of the factory (Existing dispensary is inside boundary)	28.15	3.40

HYGIENE (Water Supply to Villages)			
Sl. No	**Description**	**Amount Spent in Lakhs**	
Capital Expenditure		**Year2021-22**	**Year2022-23**
1.	Pond renovation at Anra Village	8.00	0.42
2.	Drinking water supply at Anra Village (Borewell, Submersible Pump, Overhead Tank, Pipeline Network	15.00	4.77
3.	Drinking water supply to Raigoda village (Borewell, Overhead Tank & Pump)	3.32	--
	Total	**26.32**	5.19
Recurring Annual Expenditure			
1	One Operator for Water Supply	1.57	2.40
2	Maintenance of water supply system	0.70	0.80
	Total	**2.27**	**3.20**

ROAD & INFRASTRUCTURE DEVELOPMENT				
Sl. No	**Description**	**Amount Spent in Lakhs**		
	Description of Capital Expenditure	**Upto 2021-22**	**Description of Capital Expenditure**	**2022-23**
1.	Construction of Concrete Road at Raigoda Chowk	35.52	Kirtan Mandap at Colony	0.71
2.	Construction of Rahas Mandap at Anra	20.00	Culvert at Bamuni Nala	21.60
3.	Construction of Puja Mandap for Goddess Puja at Anra	3.78	Shiv Mandir Portico at Dudhpasi	3.49
4.	Construction of Club at Anra	4.00	Bisiri Puja Mandap, Anra	9.78
5.	Construction of Mandap at Raigoda	10.00	Pala Mandap at Dudhpasi	2.82
6.	Construction of Community Centre at Sankaraposi	2.50	Construction of Bisiri Puja Mandap at Binida	0.88
7.	--	--	Supply of Road Barricades 10 nos.	1.51
	Total	**75.80**		**40.79**
Annual Expenditure for Road & Culvert Maintenance				
1.	**Expenditure towards Road Repairing**	11.00	**Expenditure towards Road Repairing**	8.85
2.	**Expenditure towards Culvert Repairing**	1.75	**Expenditure towards Culvert Repairing**	2.10
	Total	12.75	**Total**	10.95

EDUCATION			
Sl. No.	Description	Amount Spent in Lakhs	
Annual Expenditure for Improvement of Infrastructure and Standard of Village School		Year2021-22	Year2022-23
1.	Salary of One School Teacher at Anra U.P. School	1.09	1.09
2.	Salary of 2 School Teachers At Anra UG High School	1.92	1.92
3	Maintenance Civil Works done in Saraswati Sishu Mandir, Anra	1.22	—
	Total	**4.23**	**3.01**

Communication
To improve communication, BSNL towers has been installed within Plant premises. 24 hrs Power supply is being provided by company for its uninterrupted operation.

SKILL UPGRADATION		
Sl. No.	Description	Amount Spent in Lakhs
1.	35 nos. of local youth sponsored in various trade in ITI.	**13.68**

EMPLOYMENT OF LOCAL PEOPLE	
Sl. No.	Description
1.	572 persons are employed from neighboring villages as regular employee.
2	100 Local persons are employed on contract (cleaning, canteen wash etc jobs)

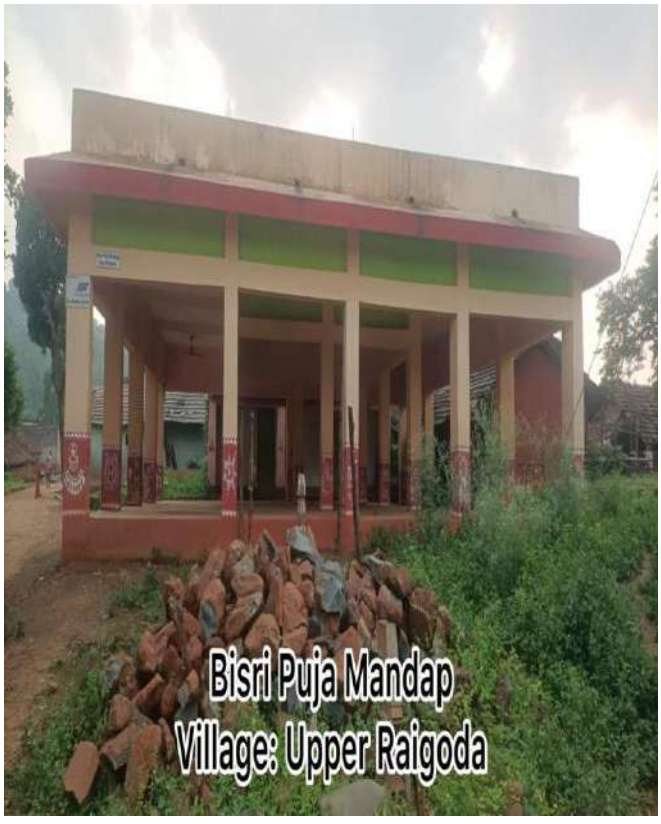
Photos of CSR Activities


Shankraposhi Village
Club House


Binida Village
Maa Mangala Temple


Beldisahi,Urmunda Village
Maa Durga Temple


Drinking water supply
Village : Raigoda


Bisri Puja Mandap
Village: Upper Raigoda


Dudhpashi Village
Lord shiva Temple


Dudhpasi Village
Puja Mandap


Anra Village
Maa Bisri Temple


Fuljhar to Anra village
road repairing work


Village Raiguda Approaching Road


Dudhposhi Village Road reparing work
By Sree Metaliks Limited

Annexure-11(A)

COMPLIANCE OF COMMITEMENT (UNDERTAKING) DURING EAC MEETING		
SL.NO.	**Undertaking**	**Compliance**
1	We do hereby declare that we will adopt five nos. of villages i.e. (1) Anra, (2) Dudhpasi, (3) Raigoda, (4) Bheldih, & (5) Bininda in the Keonjhar district to provide financial assistance to meritorious students of poor family for higher studies, to provide study materials & support for getting coaching for professional courses, to provide ambulance facility to each villages, Medical Camp, Skill development centre and any other aspects depending on the need based assessment. We shall also undertake responsibility to coordinate with the District Administration & support the villagers to avail the various assistance/benefit/scheme provided by Central/State Government in their localitv.	**Complied** Annexure-10 may be referred.
2	As per Additional Detail Sought by MoEF&CC New Delhi dated 12.09.2022, We do hereby undertake the responsibility to develop the Greenbelt in balance remaining area 6.26 ha (15.5 Acres) within the Pelletization Complex of Sree Metaliks Limited at Anra, Dist-Keonjhar, Odisha on or before 15th October, 2022.	**Complied** Green Belt Has been completed in 33% area in and around Plant.
3	As per Additional Detail Sought by MoEF&CC New Delhi dated 12.09.2022, We do hereby undertake the responsibility of installation of CAAQMS (Continuous Ambient Air Quality Monitoring System) in Pelletization Complex of Sree Metaliks Limited at Anra, Dist-Keonjhar, Odisha on or before 31st December, 2022.	**Complied** Continuous Ambient Air Quality Monitoring System (CAAQMS) Have been installed
4	As per discussion held during 15th meeting of the EAC (Industry - I) on 17.10.2022 of our proposal "Expansion of Proposed Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant of M/s Sree Metaliks Ltd. located in village - Anra, Tehsil - Telkoi, Dist. Keonjhar, Odisha", We do hereby commit / undertake the responsibility that we will continue to supply Drinking Water to Ana & Raigoda village through Borewell, Pump &Overhead Tank.	**Complied** Drinking Water to Anra to Raiguda Village through Bore well, Pump & Overhead Tank, are being supplied.

SREE METALIKS

Ref: SML/ANRA-EC/UT-VILLAGE/2022-23

Dt. 19.09.2022

To

The Director (IA Division) (Industry-1)
Ministry of Environment, Forests &
Climate Change (MoEF&CC),
Indira Paryavaran Bhawan
Jor Bagh road, Aliganj
New Delhi- 110003i.

Undertaking / Declaration

We do hereby declare that we will adopt five nos. of villages i.e. (1) Anra, (2) Dudhpasi, (3) Raigoda, (4) Bheldih, & (5) Bininda in the Keonjhar district to provide financial assistance to meritorious students of poor family for higher studies, to provide study materials & support for getting coaching for professional courses, to provide ambulance facility to each villages, Medical Camp, Skill development centre and any other aspects depending on the need based assessment. We shall also undertake responsibility to coordinate with the District Administration & support the villagers to avail the various assistance/benefit/scheme provided by Central/State Government in their locality.

Thanking you,

Yours faithfully,

For Sree Metaliks Limited

Authorized Signatory

SREE METALIKS

UNDERTAKING

As per Additional Detail Sought by MoEF&CC New Delhi dated 12.09.2022, We do hereby undertake the responsibility to develop the Greenbelt in balance remaining area 6.26 ha (15.5 Acres) within the Pelletization Complex of Sree Metaliks Limited at Anra, Dist- Keonjhar, Odisha on or before 15th October, 2022.

SREE METALIKS LIMITED

15/9/22

Authorized Signatory

M/s Sree Metaliks Limited

CIN U26939WB1995PLC075633
Head Office: SML House, Main Road, P.O. Barbil, Distt. Keonjhar-758035, Odisha
W www.sreemetaliks.com E info@sreemetaliks.com
Registered Office: 8/1 New Tangea Road, China Town, Kolkata - 700046

SREE METALIKS

UNDERTAKING

As per Additional Detail Sought by MoEF&CC New Delhi dated 12.09.2022, We do hereby undertake the responsibility of installation of CAAQMS (Continuous Ambient Air Quality Monitoring System) in Pelletization Complex of Sree Metaliks Limited at Anra, Dist- Keonjhar, Odisha on or before 31st December, 2022.

SREE METALIKS LIMITED

15/9/22

Authorized Signatory

M/s Sree Metaliks Limited

SREE METALIKS

Annexure-3

UNDERTAKING

As per discussion held during 15th meeting of the EAC (Industry –I) on 17.10.2022 of our proposal "Expansion of Proposed Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant of M/s Sree Metaliks Ltd. located in village - Anra, Tehsil – Telkoi, Dist. Keonjhar, Odisha", We do hereby commit/undertake the responsibility that we will continue to supply Drinking Water to Anra & Raigoda village through Borewell, Pump & Overhead Tank.

SREE METALIKS LIMITED

18/10/22

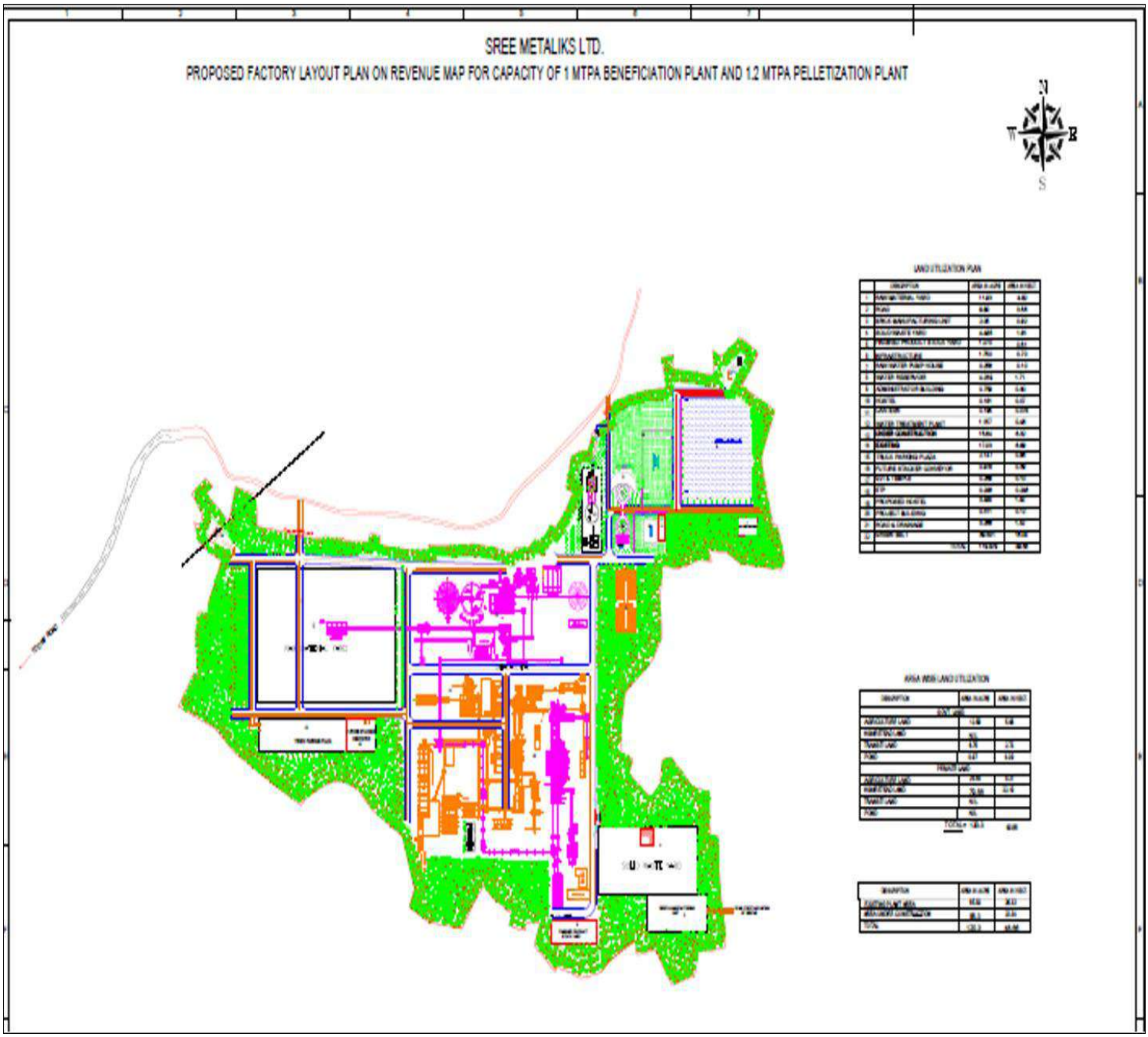
Authorized Signatory

M/s Sree Metaliks Limited

Annexure-12

PLANTATION

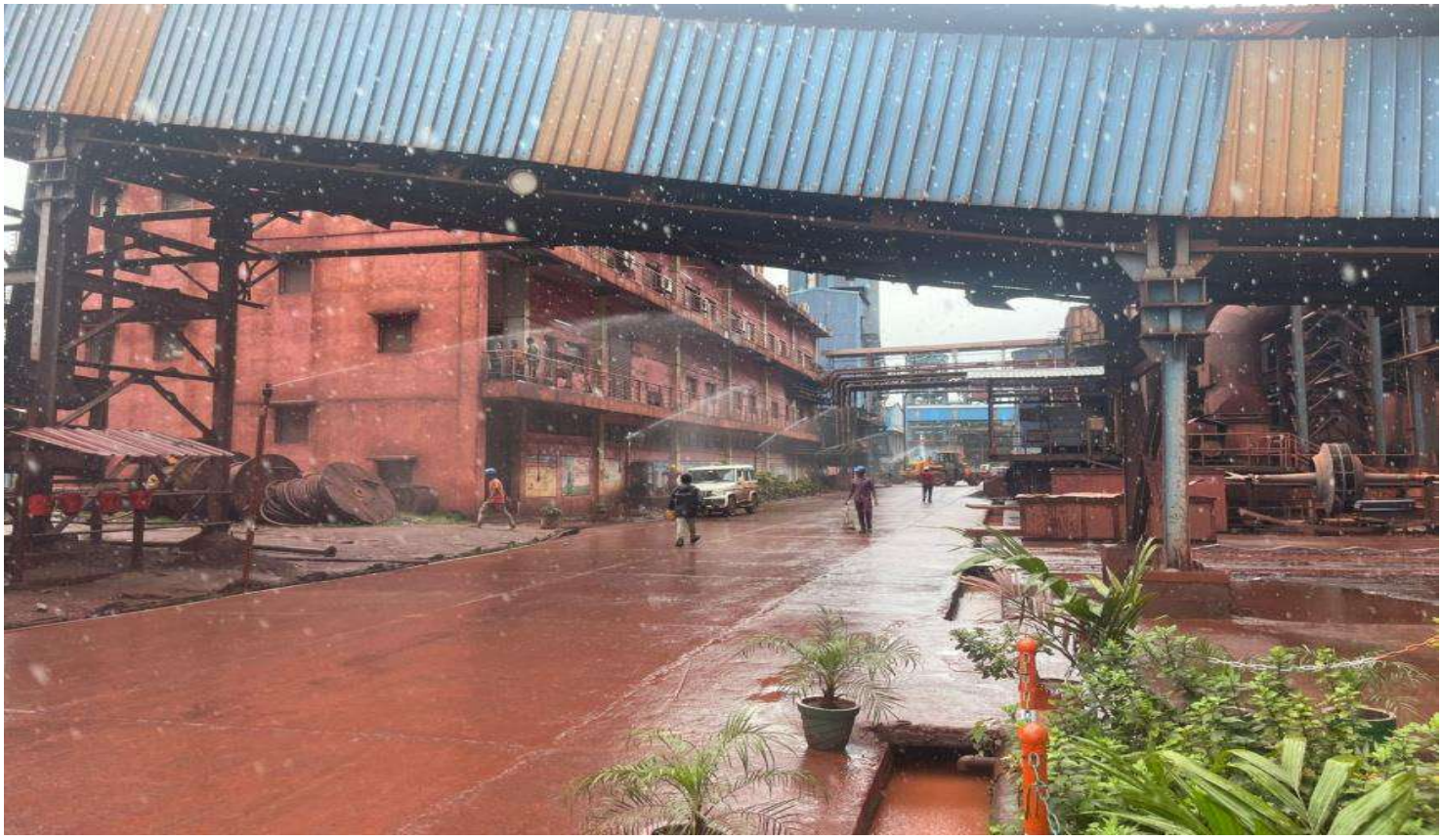
Annexure-12(A)



Annexure-13

GREENING

Paving




I ❤ SML

Annexure-14

Anexure-15

Roof-top Rain Water Harvesting

Annexure16

EHS 360 LABS

TC-9583

TEST REPORT

Report No	EHS360/TR/2023-24/001	**Report Date**	28.08.2023
Issued To	***M/s Sree Metaliks Ltd,*** Anra, Upper Raigoda, Banspal Dist-Keonjhar,Odisha.		
Customer Name	***M/s Sree Metaliks Ltd,***		
Sampling Method	IS 5182	**Sample Drawn by**	Laboratory
Sample Description	Personal Dust Sampling	**Sample Code**	EHS360/001
Sampling Location	Near PCI	**Sample Condition**	Good
Date of Sampling	24.08.2023		

Name of the Employee : Rajendra Dehuri
Designation : Operator
Age : 34 Years
Date of Sampling : 24.08.2023
Sampling Time : 8 Hrs

Dust Collected (mg)	Dust Concentration (mg/m^3)	Free Silica (%)
0.94	0.78	0.64

**********End of Report**********

Pages 1 of 1

EHS360 LABS PRIVATE LIMITED CHENNAI 600 083

Verified by

Authorised Signatory

Name : Santhosh Kumar A
Designation : Quality Manager

Annexure17

STP

Annexure-18

Vacuum Cleaner

Annexure-19 **CONSENT TO OPERATE ORDER LETTER**

BY REGD. POST WITH AD

STATE POLLUTION CONTROL BOARD, ODISHA

[DEPARTMENT OF FOREST, ENVIRONMENT & CLIMATE CHANGE, GOVERNMENT OF ODISHA]
A/118, Nilakantha Nagar, Unit-VIII, Bhubaneswar-751012
Phone-2561909, Fax: 2562822, 2560955 E-mail: paribesh1@ospcboard.org, Website: www.ospcboard.org

CONSENT ORDER

No. 10631 / IND-I-CON-6355 Dt. 07.07.2023 /

CONSENT ORDER NO. 2757.

Sub : Consent for discharge of sewage and trade effluent under Section 25/26 of Water (PCP) Act, 1974 and emission under Section 21 of Air (PCP) Act, 1981 for operation of the plant.

Ref : Your online application **ID No. 4931846, Dtd.18-05-2023 and online reply dated 01-07-2023.**

Consent to operate is hereby granted under section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of Air (Prevention & Control of Pollution) Act, 1981 and rules framed thereunder to:

Name of the Industry: **M/s Sree Metaliks Ltd., (Iron Ore Pelletisation Plant)**

Name of the Occupier & Designation : **Sri Mahesh Kumar Agarwal, Managing Director**

Address : **At: Anra, PO: Upper Raiguda, Banspal, Keonjhar-758018, Odisha**

This consent order supersedes the earlier consent order issued vide Board's Letter No.5403, dtd.31.03.2023.

Details of Products Manufactured :

Sl. No.	Product	Quantity
01	Iron Ore Pellet	1.2 Million Metric Tonne/Annum
02	Producer Gas	25,800 Nm^3/Hr
03	Pulverized Coal Injection Plant	5 TPH

This consent order is valid for the period utpo **31.03.2026.**

This consent order is valid for the specified outlets, discharge quantity and quality of effluents (ii) quantity of emission and its quality, specified chimney / stack (iii) quantity of solid waste and its disposal as specified below.

This consent is granted subject to the General and Special Conditions stipulated below:

A. Discharge permitted through the following outlet subject to the standard

Outlet No.	Description of outlet	Point of discharge	Quantity of discharge KLD or KL/hr	Prescribed Standard			
				pH	BOD (mg/l)	TSS (mg/l)	Fecal Coliform (MPN/ml)
01.	Process effluent through settling tanks	Recycled back to process	290 KLD	-	-	-	--
02	Outlet of STP for domestic wastewater from plant premises	To be used for gardening	50 KLD	6.5-9.0	<30	<100	<1000

B. Emission permitted through the following stack subject to the prescribed standard

Chimney Stack No.	Description of Stack (Stack attached to)	Stack height (m) from GL	Quantity of emission (M^3/hr)	Prescribed Standard		
				PM (mg/Nm^3)	SO_2	NO_x
01	Bag filter of Proportionate system	18.0	8,000	100	--	--
02	Raw material transfer point of mixer	15.0	4,000	100	--	--
03	Raw material transfer point of mixer (Expansion)	15.0	3,000	30	--	--
04	Bentonite hopper	23.0	5,000	100	--	--
05	ESP connected to travelling grate and rotary kiln	50.0	5,00,000	100	--	--
06	ESP connected to travelling grate and rotary kiln (Expansion)	50.0	5,00,000	30	--	--
07	Bag filter of Ash Hopper	15.0	3,000	100	--	--
08	Bag filter of Coal Injection Unit	25.0	3,300	100	--	--

C. Disposal of solid waste permitted in the following manner

Sl. No.	Type of Solid waste	Quantity generated (TPM)	Quantity to be reused on site (TPM)	Quantity to be reused off site (TPM)	Quantity disposed off (TPM)	Description of disposal site
01	Ash of Producer Gas Plant	75	--	--	--	Back filling of low lying land
02	Tar Residue	2 TPA	--	--	--	Disposed off to authorized operators
03	Dust from ESP, Bag Filter and Pellet Fines	26,000 TPA	--	--	--	Reused in the process

D. GENERAL CONDITIONS FOR ALL UNITS

1. The consent is given by the Board in consideration of the particulars given in the application. Any change or alternation or deviation made in actual practice from the particulars furnished in the application will also be the ground for liable to review/variation/revocation of the consent order under section 27 of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 and to make such variations as deemed fit for the purpose of the Acts.
2. The occupier would immediately submit revised application for consent to operate to this Board in the event of any change in the quantity and quality of raw material / products / manufacturing process or quantity /quality of the effluent rate of emission / air pollution control equipment / system etc.
3. The applicant shall not change or alter either the quality or quantity or the rate of discharge or temperature or the route of discharge without the previous written permission of the Board.
4. The application shall comply with and carry out the directives/orders issued by the Board in this consent order without any negligence on his/her part. In case of non-compliance of any order/directives issued at any time and/or violation of the terms and conditions of this consent order, the applicant shall be liable for legal action as per the provisions of the Law.
5. The applicant shall make an application for grant of fresh consent at least 90 days before the date of expiry of this consent order.
6. The issuance of this consent does not convey any property right in either real or personal property or any exclusive privileges nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Central, State laws or regulation.
7. This consent does not authorize or approve the construction of any physical structure or facilities or the undertaking of any work in any natural water course.
8. The applicant shall display this consent granted to him in a prominent place for perusal of the public and inspecting officers of this Board.
9. An inspection book shall be opened and made available to Board's Officers during the visit to the factory.
10. The applicant shall furnish to the visiting officer of the Board any information regarding the construction, installation or operation of the plant or of effluent treatment system / air pollution control system / stack monitoring system any other particulars as may be pertinent to preventing and controlling pollution of Water / Air.
11. The applicant shall display suitable caution board at the place where the effluent is entering into any water-body or any other place to be indicated by the Board, indicating therein that the area into which the effluents are being discharged is not fit for the domestic use/bathing.
12. Storm water shall not be allowed to mix with the trade and/or domestic effluent on the upstream of the terminal manholes where the flow measuring devices will be installed.
13. The applicant shall maintain good house-keeping both within the factory and the premises. All pipes, valves, sewers and drains shall be leak-proof. Floor washing shall be admitted into the effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
14. The applicant shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems install or used by him to achieve with the term(s) and conditions of the consent.
15. Care should be taken to keep the anaerobic lagoons, if any, biologically active and not utilized as mere stagnation ponds. The anaerobic lagoons should be fed with the required nutrients for effective digestion. Lagoons should be constructed impervious.
16. The utilization of treated effluent on factory's own land, if any, should be completed and there should be no possibility of the effluent gaining access into any drainage channel or other water courses either directly or by overflow.
17. The effluent disposal on land, if any, should be done without creating any nuisance to the surroundings or inundation of the lands at any time.
18. If at any time the disposal of treated effluent on land becomes incomplete or unsatisfactory or create any problem or becomes a matter of dispute, the occupier must adopt alternate satisfactory treatment and disposal measures.
19. The sludge from treatment units shall be dried in sludge drying beds and the drained liquid shall be taken to equalization tank.
20. The effluent treatment units and disposal measures shall become operative at the time of commencement of production.
21. The applicant shall provide port holes for sampling the emissions and access platform for carrying out stack sampling and provide electrical outlet points and other arrangements for chimneys/stacks and other sources of emissions so as to collect samples of emission by the Board or the applicant at any time in accordance with the provision of the Acts or Rules made therein.
22. The applicant shall provide all facilities and render required assistance to the Board staff for collection of samples / stack monitoring / inspection.
23. The applicant shall not change or alter either the quality or quantity or rate of emission or install, replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in any change in quality and/or quantity of emissions, without the previous written permission of the Board.

24. No control equipments or chimney shall be altered or replaced or as the case may be erected or re-erected except with the previous approval of the Board.

25. The liquid effluent arising out of the operation of the air pollution control equipment shall be treated in the manner so as to meet the standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 (as amended).

26. The stack monitoring system employed by the applicant shall be opened for inspection to this Board at any time.

27. There shall not be any fugitive or episodal discharge from the premises.

28. In case of such episodal discharge/emissions the occupier shall take immediate action to bring down the emission within the limits prescribed by the Board and stop the operation of the plant if required. Report of such accidental discharge /emission shall be brought to the notice of the Board within 24 hours of occurrence.

29. The applicant shall keep the premises and air pollution control equipments clean and make all hoods, pipes, valves, stacks/chimneys leak proof. The air pollution control equipments, location, inspection chambers, sampling port holes shall be made easily accessible at all times.

30. Any upset condition in any of the plant/plants of the factory which is likely to result in increased effluent discharge/emission of air pollutants and / or result in violation of the standards mentioned shall be reported to the Headquarters and Regional Office of the Board by E-mail within 2 hours of its occurrence.

31. The occupier has to ensure that minimum three varieties of trees are planted at the density of not less than 1000 trees per acre. The trees may be planted along boundaries of the premises. This plantation is stipulated over and above the bulk plantation of trees in that area.

32. The solid waste such as sweeping, wastage packages, empty containers residues, sludge including that from air pollution control equipments collected within the premises of the shall be disposed off scientifically to the satisfaction of the Board.

33. All solid wastes arising in the premises shall be properly classified and disposed off to the satisfaction of the Board by :
   i) Land fill in case of inert material, care being taken to ensure that the material does not give rise to leachate which may percolate into ground water or carried away with storm run-off.
   ii) Controlled incineration, wherever possible in case of combustible organic material.
   iii) Composting, in case of bio-degradable material.

34. Any toxic material shall be detoxicated if possible, otherwise be sealed in steel drums and buried in protected areas after obtaining approval of this Board in writing. The detoxication or sealing and burying shall be carried out in the presence of Board's authorized persons only. Letter of authorization shall be obtained for handling and disposal of hazardous wastes.

35. If due to any technological improvement or otherwise this Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any control equipment either in whole or in part) this Board shall after giving the applicant an opportunity of being heard, vary all or any of such condition and thereupon the applicant shall be bound to comply with the conditions so varied.

36. The applicant, his/heirs/legal representatives or assignees shall have no claim whatsoever to the condition or renewal of this consent after the expiry period of this consent.

37. The Board reserves the right to review, impose additional conditions or condition, revoke change or alter the terms and conditions of this consent.

38. Notwithstanding anything contained in this conditional letter of consent, the Board hereby reserves to it the right and power under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 to review any and/or all the conditions imposed herein above and to make such variations as deemed fit for the purpose of the Act by the Board.

39. The conditions imposed as above shall continue to be in force until revoked under section 27(2) of the Water (Prevention & Control of Pollution) Act, 1974 and section 21 A of Air (Prevention & Control of Pollution) Act, 1981.

40. In case the consent fee is revised during this period, the occupier shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.

41. The occupier shall comply to the conditions stipulated in CTE order issued by Odisha State Pollution Control Board and conditions stipulated in Environmental Clearances issued by MoEF&CC, Govt. of India.

42. The occupier shall abide by E(P) Act, 1986 and Rules framed there-under.

43. The Board reserves the right to revoke/refuse consent to operate at any time during period for which consent is granted in case any violation is observed and to modify/ stipulate additional conditions as deemed appropriate.

GENERAL CONDITIONS FOR UNITS WITH INVESTMENT OF MORE THAN Rs.50 CRORES, AND 17 CATEGORIES OF HIGHLY POLLUTING INDUSTRIES (RED A)

1. The applicant shall analyse the effluent / emissions and Ambient Air Quality every month through approved laboratory for the parameters indicated in TABLE- 'B', 'C' & Part -'B' as mentioned in this order and shall furnish the report thereof to the Board on monthly basis.
2. The following information shall be forwarded to the Member Secretary on or before 10th of every month.
   a) Performance / progress of the treatment plant.
   b) Monthly statement of daily discharge of domestic and/or trade effluent.
3. Non-compliance with effluent limitations
   a) If for any reason the applicant does not comply with or is unable to comply with any effluent limitations specified in this consent, the applicant shall immediately notify the consent issuing authority by telephone and provide the consent issuing authority with the following information in writing within 5 days of such notification.
      i) Causes of non-compliance
      ii) A description of the non-compliance discharge including its impact on the receiving waters.
      iii) Anticipated time of continuance of non-compliance if expected to continue or if such condition has been corrected the duration or period of non-compliance.
      iv) Steps taken by the applicant to reduce and eliminate the non-complying discharge and
      v) Steps to be taken by the applicant too prevent the condition of non-compliance.
   b) The applicant shall take all reasonable steps to minimize any adverse impact to natural waters resulting from non-compliance with any effluent limitation specified in this consent including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying discharge.
   c) Nothing in this consent shall be construed to relieve the applicant from civil or criminal penalties for non-compliance whether or not such non-compliance is due to factors beyond his control, such as break-down, electric failure, accident or natural disaster.
4. Proper housekeeping shall be maintained inside the factory premises including process areas by a dedicated team.
5. The industry must constitute a team of responsible and technically qualified personnel who will ensure continuous operation of all pollution control devices round the clock (including night hours) and should be in a position to explain the status of operation of the pollution control measures to the inspecting officers of the Board at any point of time. The name of these persons with their contact telephone numbers shall be intimated to the concerned Regional Officer and Head Office of the Board and in case of any change in the team it shall be intimated to the Board immediately.
6. The industry shall engage dedicated qualified manpower to ensure continuous and effective operation of online stack / Ambient Air Quality / Effluent monitoring stations for maintenance of database, real time data transfer to SPCB server, data analysis and co-ordination with concerned personnel of process units for taking corrective measures in case of non-compliances and to respond to the instructions of SPCB in this matter.

E. SPECIAL CONDITIONS:

1. Adequate air pollution control measure shall be taken at raw material handling, product handling and other potential dust generating points to control fugitive emission.
2. Dust suppression (dry fog) & extraction (bag filter) system shall be provided at all dust generating source such as crushing and material transfer points of Coal Pulveriser and at other areas of potential dust generating sources.
3. The proponent shall use low ash and slow Sulphur content imported coal as proposed. If any case, SO_2 emission exceed the norms, the proponent shall install scrubbing system for the purpose.
4. The proponent shall not use pet coke in the pellet plant except in gasification plant as per fuel policy of the State.
5. The air pollution control devices shall be commissioned before commissioning of the pellet plant (expansion project).
6. Heat exchanger, cyclone followed by pulse jet bag filter at re-heating furnace and pulse jet bag filter at Coal Pulveriser shall be installed.
7. Pneumatic dust handling system shall be provided for collection of dust from ESP, bag filters and other dust extraction systems.
8. Mechanical road sweeping machine shall be deployed for the roads and various work zone areas.
9. The raw material stack yard shall be provided with adequate nos. of rain guns and fixed sprinklers to suppress wind born fugitive dust.
10. Mechanised wheel washing facility with wastewater recirculation system shall be installed at the exit point of the factory for the vehicles leaving the factory premises.
11. The unit shall operate air pollution control devices properly with adequate stack height at all sources of emissions so as to meet the prescribed standard as mentioned at Section-A of this order.
12. Porthole and platform shall be provided at suitable location with safe approach such as spiral staircase / elevator to conduct emission monitoring at all stacks.
13. Coal tar generated from producer gas plant shall be stored in an impervious pit and disposed of through authorized operators.
14. The ash generated shall be used as binder in pellet plant. The excess shall be dumped in an area earmarked for the same. Sprinkling arrangement shall be provided so that the ash does not become air borne during dry season.
15. Fixed type water sprinklers shall be installed along the internal roads.

16. The height of the stack attached to DG set shall conform the followings :

    $H = h+0.2\sqrt{KVA}$

    h = Height of building where DG set is installed in meter

    KVA = capacity of DG Set

    H = Height of the stack in meter from ground level.

17. Cooling tower blow down water shall be taken to storage pond and shall be used in green pellet making / dust suppression.

18. Wastewater generated from soft water plant shall be treated in settling pit and shall be reused for dust suppression.

19. The water used for Cooling of shaft of Travelling Grate shall be recycled through cooling tower. Under no circumstances the untreated wastewater shall be discharged to outside the plant premises.

20. Garland drain shall be provided around raw material storage area and all the stock pile area, followed by series of settling tanks to retain the solids, if any, in order to prevent damage to the surrounding land and waterbodies. The stored water shall be reused in the plant.

21. The surface runoff treatment system shall be augmented consisting of sedimentation through settling tanks / ponds in series followed by high-rate clarification through clarifloculator / tube settlers shall be installed to meet the discharge norms notified under E(P) Rule, 1986 and shall be recycled / discharged specially during monsoon period.

22. The unit shall maintain and operate Sewage Treatment Plant (STP) for treatment of domestic effluent generated from the colony and plant buildings. The treated wastewater shall be re-used for gardening and plantation after meeting the prescribed standard mentioned in Section-A of this order.

23. There shall not be any discharge of phenolic wastewater from the catchment pit. The wastewater generated from the sealing of producer gas plant shall be recycled back to the process after separation of tar.

24. Plantation shall be carried out in all vacant areas of the factory premises.

25. The unit shall make necessary arrangements at the furnace oil handling area to avoid any spillage into the ground and if there is some accidental spillage, the same shall be recovered and reused.

26. The unit shall provide oil and grease trap in the internal drain surrounding the furnace oil handling area to prevent carriage of oil in the drain.

27. The unit shall obtain authorization from the Board under the Hazardous & Other Wastes (Management and Transboundary Movement) Rules, 2016.

28. In case the consent fee is revised during this period, the industry shall pay the differential fees to the Board (for the remaining years) to keep the consent order in force. If they fail to pay the amount within the period stipulated by the Board the consent order will be revoked without prior notice.

29. The Board reserves the right to revoke / refuse consent to operate / to modify or stipulate additional conditions as deemed appropriate at any time during period for which consent is granted.

30. Rain water harvesting shall be followed by utilizing the rain water collected from the roof of the administrative buildings for recharging of ground water within the premises as per the concept and practices prescribed by CPCB.

To

The Managing Director,
M/s. Sree Metaliks Ltd.,
SML House, Main Road,
Barbil, Keonjhar-758035

CHIEF ENV. ENGINEER (M)
STATE POLLUTION CONTROL BOARD, ODISHA

Memo No. 10632 /Dt. 07-07-2023

Copy forwarded to:

i) Regional Officer, SPC Board, **Keonjhar**
ii) District Collector, **Keonjhar**
iii) DFO, **Keonjhar**
iv) CES, Central Laboratory, SPC Board, Bhubaneswar
v) ACEE, H.S.M. Cell, (Head Office)
vi) Consent Register

7/7/2023

ADDL. CHIEF ENV. ENGINEER
STATE POLLUTION CONTROL BOARD, ODISHA

GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENT POLLUTANTS PART – A : EFFLUENTS

Sl. No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
1.	Colour & odour	Colourless/ Odourless as far as practible	--	See 6 of Annex-1	See 6 of Annex-1
2.	Suspended Solids (mg/l)	100	600	200	a. For process wastewater – 100 b. For cooling water effluent 10% above total suspended matter of influent.
3.	Particular size of SS	Shall pass 850	--	--	--
4.	pH value	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
5.	Temperature	Shall not exceed 5°C above the receiving water temperature	--	--	Shall not exceed 5°C above the receiving water temperature
6.	Oil & Grease mg/l max.	10	20	10	20
7.	Total residual chlorine	1.0	--	--	1.0
8.	Ammonical nitrogen (as N) mg/l max.	50	50	--	50
9.	Total Kajeldahl nitrogen (as NH_3) mg/1 max.	100	--	--	100
10.	Free ammonia (as NH_3) mg/1 max.	5.0	--	--	5.0
11.	Biochemical Oxygen Demand (5 days at (20°C) mg/1 max.	30	350	100	100
12.	Chemical Oxygen Demand, mg/1 max.	250	--	--	250
13.	Arsenic (as As) mg/1 max.	0.2	0.2	0.2	0.2
14.	Mercury (as Hg) mg/1 max.	0.01	0.01	--	0.001
15.	Lead (as pb) mg/1 max.	01.	1.0	--	2.0
16.	Cardmium (as Cd) mg/1 max.	2.0	1.0	--	2.0

Sl. No.	Parameters	Standards			
		Inland surface	Public sewers	Land for irrigation	Marine Costal Areas
		(a)	(b)	(c)	(d)
17.	Hexavalent Chromium (as Cr + 6) mg/l max.	0.1	2.0	--	1.0
18.	Total Chromium (as Cr) mg/l max.	2.0	2.0	--	2.0
19.	Copper (as Cu) mg/l max	3.0	3.0	--	3.0
20.	Zinc (as Zn) mg/l max.	5.0	15	--	15
21.	Selenium (as Sc) mg/l max.	0.05	0.05	--	0.05
22.	Nickel (as Nil) mg/l max.	3.0	3.0	--	5.0
23.	Cyanide (as CN) mg/l max.	0.2	2.0	0.2	0.02
24.	Fluoride (as F) mg/l max.	2.0	15	--	15
25.	Dissolved Phosphates (as P) mg/l max.	5.0	--	--	--
26.	Sulphide (as S) mg/l max.	2.0	--	--	5.0
27.	Phennolic compounds as (C_6H_5OH) mg/l max.	1.0	5.0	--	5.0
28.	Radioactive materials a. Alpha emitter micro curie/ml. b. Beta emitter micro curie/ml.	10^{-7} 10^{-8}	10^{-7} 10^{-8}	10^{-8} 10^{-7}	10^{-7} 10^{-8}
29.	Bio-assay test	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent
30.	Manganese (as Mn)	2 mg/l	2 mg/l	--	2 mg/l
31.	Iron (Fe)	3 mg/l	3 mg/l	--	3 mg/l
32.	Vanadium (as V)	0.2 mg/l	0.2 mg/l	--	0.2 mg/l
33.	Nitrate Nitrogen	10 mg/l	--	--	20 mg/l

NATIONAL AMBIENT AIR QUALITY STANDARDS

Sl. No.	Pollutants	Time Weighed Average	Concentrate of Ambient Air		
			Industrial Residential, Rural and other Area	Ecologically Sensitive Area (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1.	Sulphur Dioxide (SO_2), µg/m³	Annual *	50	20	-Improved west and Gacke
		24 Hours **	80	80	- Ultraviolet fluorescence
2.	Nitrogen Dioxide (NO_2), µg/m³	Annual *	40	30	- Modified Jacob & Hochheiser (Na-Arsenite)
		24 Hours **	80	80	- Chemiluminescence
3.	Particulate Matter (size less than 10µm) or PM_{10} µg/m³	Annual *	60	60	-Gravimetric - TOEM
		24 Hours **	100	100	- Beta Attenuation
4.	Particulate Matter (size less than 2.5µm) or $PM_{2.5}$ µg/m³	Annual *	40	40	-Gravimetric - TOEM
		24 Hours **	60	60	- Beta Attenuation
5.	Ozone (O_3) µg/m³	8 Hours **	100	100	- UV Photometric - Chemiluminescence
		1 Hours **	180	180	- Chemical Method
6.	Lead (Pb) µg/m³	Annual *	0.50	0.50	-AAS/ICP method after sampling on EMP 2000 or equivalent filter paper. - ED-XRF using Teflon filter
		24 Hours **	1.0	1.0	
7.	Carbon Monoxide (CO) mg/m³	8 Hours **	02	02	- Non Dispersive Infra Red (NDIR) Spectroscopy
		1 Hours **	04	04	
8.	Ammonia (NH_3) µg/m³	Annual*	100	100	-Chemiluminescence - Indophenol Blue Method
		24 Hours**	400	400	
9.	Benzene (C_6H_6) µg/m³	Annul *	05	05	-Gas Chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10.	Benzo (a) Pyrene (BaP) Particulate phase only, mg/m³	Annual*	01	01	-Solvent extraction followed by HPLC/GC analysis
11.	Arsenic (As), mg/m³	Annual*	06	06	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper
12.	Nickel (Ni), mg/m³	Annual*	20	20	-AAS/ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year, 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

CONSENT TO ESTABLISH ORDER LETTER

FAX : 2562822/2560955
Tel : 2564033/2563924
EPABX : 2561909/2562847
E-mail: paribesh1@ospcboard.org
Web site : www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[Department of Forest, Environment & Climate Change, Government of Odisha]
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751 012

BY SPEED POST
THROUGH ONLINE

No. 7589 / **IND-II-CTE – 6912** **Date** 11.05.2023 /

CONSENT TO ESTABLISH ORDER

In consideration of the online application no. **4719829** for obtaining Consent to Establish for **M/s Sree Metaliks Ltd.,** the State Pollution Control Board is pleased to convey its Consent to Establish under section 25 of Water (Prevention & Control of Pollution) Act, 1974 and section 21 of Air (Prevention & Control of Pollution) Act, 1981 for **establishment of additional Iron Ore Pellet Plant of capacity 0.6 MTPA and Iron Ore Beneficiation Plant 1.0 MTPA within its existing premises of 48.56 Ha.** with project cost of Rs. 300 Crores, At-Anra, Upper Raigoda, Tahasil-Banspal (Plot Nos. & Khata Nos. as mentioned in application form) in the district of Dist- **Keonjhar**, Odisha with the following conditions:

GENERAL CONDITIONS:

1. This Consent to Establish is valid for the raw materials, product, manufacturing process and capacity mentioned in the application form. This order is valid for **five** years, which means the proponent shall commence construction of the balance activity of the project within a period of five years from the date of issue of this order. If the proponent fails to do substantial physical progress of the project within five years then a renewal of this consent to establish shall be sought by the proponent.
2. The industry shall comply to the provisions of Environment Protection Act, 1986 and the rules made there under with their amendments from time to time such as the Hazardous and Other Wastes (Management and Trans-boundary Movement) Rules, 2016 as amended from time to time, Hazardous Chemical Rules, / Manufacture, Storage and Import of Hazardous Chemical Rules, 1989 etc. and amendments there under. The industry shall also comply to the provisions of Public Liability Insurance Act, 1991, if applicable.
3. The Industry is to apply for grant of Consent to Operate under Section 25/26 of Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of Air (Prevention & Control of Pollution) Act, 1981 at least 3 (three) months before the commercial production and obtain Consent to Operate from this Board.
4. **This consent to establish is subject to statutory and other clearances from Govt. of Odisha and/or Govt. of India, as and when applicable.**

SPECIAL CONDITIONS:

A. GENERAL:

1. **The proponent shall carryout construction activity of the Pellet Plant & Beneficiation Plant as per Environmental Clearance granted by MoEF&CC, Govt. of India vide EC Identification No. EC23A007OR189888, File No- J-11011/192/2008-IA.II(I), Dtd. 23.02.2023 for expansion of Iron Ore peletization Plant 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Ore Beneficiation Plant by M/s Sree Metaliks Ltd., with an observation by MoEF&CC that more than 65 % of construction works has been completed for the facilities proposed in the instant proposal as on 31.03.2013.**
2. This Consent to Establish is granted for the capacity as mentioned above and any expansion in the capacity change or modification in the process addition, alternation any nature has to be undertaken with prior approval of the Board. For any change in the site or area fresh consent to establish has to be obtained from the Board. The proponent shall carry out construction activity as per approved lay out map (**copy enclosed**). If the proponent wants to change the approved plant layout map, they can submit a modified plant layout map with adequate justification for such modification.
3. The proponent shall obtain permission from concerned authorities for drawal of surface water and ground water.
4. The unit shall obtain NOC from CGWA for using of ground water for getting Consent to Operate of State Pollution Control Board, Odisha.
5. The industry shall implement the pollution control measures and safeguards as proposed in the Environment Management Plan (EMP) of Environment Impact Assessment (EIA) report and Risk Assessment Report (RAR).
6. The construction shall be carried out with the fly ash bricks. If the fly ash bricks are not available locally the construction may carried out with other bricks with prior intimation to the concerned Regional Office of SPC Board. A quarterly statement indicating the use of fly ash bricks during construction shall be submitted to the Board for record.
7. The proponent shall comply to the provisions of E-Waste (Management) Rules, 2016 and amendment thereafter and shall handover e-waste to authorized collection centers/ register dismantlers/ recyclers for proper disposal of e-waste.
8. The proponent shall comply the plastic waste generated from the premises as per the Plastic Waste Management Rules, 2016 and amendment thereafter.
9. The construction and demolition wastes to be generated from the proposed project shall be disposed of in accordance with the provision under "Construction & Demolition Wastes Management Rules 2016".
10. All compliance shall be made with respect to manufacture, storage and import of Hazardous Chemical Rue, 1989 and amendment thereof and other provisions of E (P) Act, 1986.

11. Separate energy meter shall be installed for all the pollution control equipments and the records shall be maintained for verification of the Board from time to time.
12. Good housekeeping practices shall be followed to improve the work environment. All roads and shop floors shall be cleaned regularly.
13. Adequate drinking water and sanitary facilities shall be provided for construction workers at the site.
14. All vehicles carrying construction materials to the site shall be covered to avoid spreading of dust. Vehicles hired for bringing construction material at site shall be in good condition and shall have valid Pollution Under Check (PUC) certificate and to conform to applicable air and noise emission standards and shall be operated only during non-peaking hours.
15. The proponent shall provide full-fledged environmental management cell and the head of environmental management cell shall report directly to the unit Chief Administrator. A detailed proposal to this effect shall be submitted.
16. A green belt of adequate width and density preferably with local species along the periphery of the unit shall be raised so as to provide protection against particulates and noise. It must be ensured that at least 33% of the total land area shall be under green cover.
17. The industry shall take up adequate measure for routine health checkup of its employees / workers and the people residing in the neighborhood of the plant free of cost.
18. The unit shall abide by the provisions of Environment (Protection) Act, 1986 and rules framed thereunder.
19. No production activity shall commence prior to installation of all pollution control measures. In case it is found that the industry is operated without installation of adequate pollution control equipment, direction for closure shall be issued u/s 31 (A) of Air (PCP) Act, 1981 and / or u/s 33(A) of Water (PCP) Act, 1974 as the case may be without any further notice.
20. The Board may impose further conditions or modify the conditions stipulated in this order during installation and /or at the time of obtaining Consent to Operate and may revoke this clearance in case the stipulated conditions are not implemented and /or any information suppressed in the application form.

B. <u>WATER POLLUTION:</u>

21. The proponent shall install treatment facility like, thickener, filter press etc. of adequate capacity for treatment of wastewater generated from the beneficiation plant and treated water shall be recycled back to the beneficiation process.
22. The unit shall provide mechanized wheel washing system along with effluent treatment and recycling facilities at the exit point of the unit.
23. The unit shall install a thickener for wastewater treatment and the outflow of the thickener shall be recycled back in beneficiation process.

24. The tailing from beneficiation process and underflow from thickener shall be taken to thickener cake area and decanted water shall be reused in the process.

25. The unit shall adopt zero discharge concept and under no circumstances wastewater shall be discharged to outside the premises.

26. The unit shall provide high pressure water spraying nozzle at the iron ore fines stock yards and feeding section to control fugitive emission.

27. Tailing filter cake area pond shall be located on impervious areas with deep water table. The ground under lying must be structurally sound and able to bear the weight of impoundment.

28. The unit shall make effort to use the tailings generated from wet beneficiation plant as raw materials for value added products.

29. The industry shall protect natural streams passing through plant area if any with suitable measures and to protect all water bodies adjacent to the plant boundary.

30. The Waste water generated from plant canteen, factory toilets, colony equipment floor washing and other sources shall be treated adequately in a Sewage Treatment Plant (STP) to meet the following standards as notified by the MoEF&CC, Govt. of India vide G.S.R. 1265 (E), dated 13.10.2017. The treated water shall be reused for gardening and plantation to the maximum possible extent.

Sl. No.	Parameters	Standards
1.	pH	6.5-9.0
2.	BOD (mg/l)	30
3.	TSS (mg/l)	<100
4.	Fecal Coliform (MPN/100ml)	< 1000

31. The proponent shall provide garland drains around raw material storage area and all the stock pile area, followed by series of settling tanks to retain the solids, if any, in order to prevent damage to the surrounding land and water bodies.

32. Surface runoff treatment system consisting of sedimentation through settling tanks/ ponds in series followed by high-rate clarification through clarifloculator / tube settlers shall be installed to meet the discharge norms and shall be recycled / discharged specially during monsoon period.

33. Rain water harvesting shall be followed by utilizing the rain water collected from the roof of the administrative buildings within the premises as per the concept and practices prescribed by CPCB.

C. AIR POLLUTION:

34. The proponent shall comply with the emission standards for Integrated Iron & Steel plant notified by the MoEF&CC, Govt., of India vide Gazette Notification No. G.S.R. 277(E) dt. 31.03.2012.

35. The unit shall install online Continuous Stack Emission Monitoring Systems (CEMS) at the stacks of the Pellet Plant for online real time monitoring for PM and data transmission through GPRS system to SPCB RTDAS server and also upload data for use by CPCB.

36. Industry shall install HD IP (Internet Protocol) surveillance cameras at suitable location to view emission from the stacks and fugitive emission of the Pellet Plant, having PAN, Tilt, Zoom (PTZ) with wiper facility and minimum 30X optical zoom. The camera shall support day & night operation with Infra-red cut filters, cover 400m or more distance. The camera must support latest network protocols, network security (password protection, IP address filtering, HTTPS encryption), 3rd party applications and supported with Network Security Certificate of NIST. This camera shall comply with international standards IEC 62262, IP66 with IK10 ratings or higher quality. Real Time Un-interrupted data from this online IP camera shall be connected with the Central Server of State Pollution Control Board, Odisha through IoT/GPRS device for data streaming and/or through dedicated lease line by the industry. The industry shall make provisions at the site to store video streaming data of this camera for at least one month and facility for data migration to external devices.

37. The minimum stack height of the boilers, furnaces, kilns etc., shall be according to the following formula:

$$H = 14\ (Q)^{0.3} \text{ meters}$$

H = Height of the stack in meter and Q = Quantity of SO_2 emission in kg/hr

38. The unit shall provide porthole and platform at suitable location with safe approach to conduct emission monitoring at all the stacks.

39. Necessary preventive measures shall be taken during construction phase so that the ambient air quality including noise shall conform to National ambient air quality standards and standards for noise in industrial area (As per **Annexure-I&II**).The construction material which has potential to be air borne shall be transported in covered trucks.

40. The unit shall install air pollution control devices with adequate stack height at all sources of emissions (as per project report) so as to meet the prescribed standard for particulate matter emission as follows :

Sl. No.	Source	Stack height (above G.L.) (in meter)	APC devices to be installed	Prescribed standard for PM (mg/Nm3)
1.	Indurating machine	50	Process ESP	30
2.	All other areas	35	De-Dusting Bag House	30

41. Adequate air pollution control measures shall be taken at raw material handling, product handling and other potential dust generating points to control fugitive emission.

42. The roads inside the plant premises shall be black topped/concreted. Permanent high pressure water sprinkling system shall be installed for regular spraying of water on roads to minimize fugitive dust emission.

43. The unit shall provide pneumatic dust handling system for collection of dust from ESP hoppers / bag filter hoppers to a silo and reused in process for pellet making. Sludge from wet scrubber shall be dried and reused in pellet making.

44. Air pollution control devices shall be maintained properly. Fabric bags and cages in bag house shall be checked regularly and replaced whenever required. Adequate availability of spares with respect to bag filter and ESP fields shall be ensured for immediate replacement.

D. SOLID AND HAZARDOUS WASTE:

45. Raw materials and products shall be properly stored and adequate dust suppression measures shall be taken to control fugitive emission from handling of raw materials and products.

46. The unit shall obtain authorization from the Board under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and amended thereafter.

47. Municipal Solid Waste generated from the unit shall be disposed off as per the Solid Waste Management Rules, 2016 and amendment thereafter.

Encl: Plant lay out map & Annexures-I & II

MEMBER SECRETARY

To

The Managing Director,
M/s Sree Metaliks Ltd.,
SML House, Main Road,
At-Anra Upper Raigoda, Tahasil-Banspal,
Dist-Keonjhar, Pin No.-758018

Memo No. 7590 **/Dated** 11.05.2023/

Copy forwarded to:

1. The Collector and District Magistrate, **Keonjhar**.
2. The Director, Factories & Boiler, Bhubaneswar.
3. The Divisional Forest Officer, **Keonjhar**.
4. Consent to Operate Cell, SPC Board, BBSR
5. Hazardous Waste Management Cell, SPC Board, BBSR.
6. The Regional Officer, SPC Board, **Keonjhar**.
7. Copy to Guard file.

10/5/2023

ADDL. CHIEF ENV. ENGINEER

Annexure-20

OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS (WILDLIFE) & CHIEF WILDLIFE WARDEN, ODISHA

Government of Odisha, Forest, Environment & Climate Change Department

PRAKRUTI BHAWAN, PLOT NO.1459, SAHEED NAGAR, BHUBANESWAR- 751007

Phone: 0674-2602250, Website: www.wildlife.odisha.gov.in, Email: odishawildlife@gmail.com

No. 1458 / CWLW-FDWC-FD-0064-2022

Bhubaneswar, Dated the 08 February, 2023

To

The Authorised Signatory
M/s Sree Metaliks Limited
SML House, Main Road
PO-Barbil, Keonjhar – 758035

Sub: Submission of revised Site Specific Wildlife Conservation Plan in respect of M/s Sree Metaliks Ltd. for expansion of proposed Iron Ore Pelletization Plant from 0.6 MPTA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant in Anra Village, Banspal in Keonjhar District.

Sir,

I am directed to convey the approval of PCCF (WL) & CWLW, Odisha for the Site-Specific Wildlife Conservation Plan at financial outlay of ₹223.07 lakh (Rupees Two crore twenty-three lakh seven thousand) only as per the details of activities mentioned in Chapter-5 of the plan in compliance to Standard ToR No.28 of Letter No.J-11011/192/2008-IA.II(I) dt 26.07.2022 of MoEF&CC (IA Divn.), New Delhi.

A sum of ₹223.07 lakh (Rupees Two crore twenty-three lakh seven thousand) only shall be deposited in State CAMPA fund only through e-portal (https://parivesh.nic.in/) for implementation of various activities within the project impact area by the Forest Department through concerned DFO.

2. Activities in the project area as per Chapter-5 of the Plan will be executed by the project proponent under the guidance of DFO, Keonjhar Division.

3. The plan period is five years and will be revisited by concerned DFOs at least one year before expiry on its implementation. The User Agency will bear the cost of such plan on its approval. Further, the User Agency will bear additional cost, if any, towards enhancement of wage rate and escalation of price of materials at the time of implementation of this plan. In case of any deviation, it will be dealt as per law for violations of Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 and Wildlife (Protection) Act,1972.

Encl: Copy of approved Plan

Yours faithfully

08/02/2023

Conservator of Forests (Eco-tourism)

P.T.O.

-2-

Memo No. 1459 /dt 08/02/2023

Copy forwarded for information and necessary action to:

1. OSD-cum-Special Secretary to Government of Odisha, FE&CC Department
2. PCCF (FD & NO, FC Act), O/o the PCCF & HoFF, Odisha
3. Regional Chief Conservator of Forests, Rourkela Circle along with copy of approved SSWLCP with reference to his office Memo.No.3573 dt 15.10.2022
4. Divisional Forest Officer, Keonjhar Division along with copy of approved SSWLCP

08/02/2023

Conservator of Forests (Eco-tourism)

Annexure-21

REVISED

SITE SPECIFIC

WILDLIFE CONSERVATION PLAN

For

EXPANSION OF PROPOSED IRON ORE PELLETIZATION PLANT FROM 0.6 MTPA TO 1.2 MTPA AND 1.0 MTPA IRON BENEFICIATION PLANT IN ANRA VILLAGE, TELKOI TAHASIL OF KEONJHAR DISTRICT

OF

M/s SREE METALIKS LIMITED (SML)

PREPARED BY

DIVISIONAL FOREST OFFICER

KEONJHAR FOREST DIVISION

CONTENTS

PREFACE

The present proposal of M/s. Sree Metaliks Limited is Expansion of Iron Ore Beneficiation & pelletization plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant. The total area of existing plant is 120 Acres. MoEF&CC has granted Environmental Clearance vide their letter No. F. No. J-11011/192/2008-IA. II (I), Dated 13/07/2009. While authenticating flora and fauna of the Project, it was noticed that there is the presence of wild elephants inZoI. The MoEF&CC while granting the ToR vide their letter No. J-11011/192/2008-IA. II(I) Dt.26.07.2022 have stipulated a Condition that, **("A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of Flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any schedule-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of project cost".)**

For the sake of completeness and to make the wildlife management plan more meaningful we have added Chapter-III dealing with mitigation measures to address the adverse impact of Plant.

We are thankful to management of M/s Sree Metaliks Ltd. for providing us documents and accompanying during field visits which has given fruitful inputs to the formulation of this Plan.

Divisional Forest Officer
Keonjhar Forest Division

EXECUTIVE SUMMARY

1. Sree Metaliks Limited (SML) incorporated in the year 1995, is a pioneer industrial house having interest in sponge iron, steel, power and iron ore mining having their Registered Office at Kolkata and Head Office at Barbil in Odisha State. SML has got the certification for ISO 9001:2000 for Quality Management System and ISO 140001:2004 for Environment Management System for its Integrated Steel Plant Operation.

2. Since inception, Sree Metaliks has grown to a multi-product manufacturing unit starting from manufacturing Sponge Iron to Steel to Rolling products.

3. SML has set up its manufacturing units in Loidapada & Anra, close to its Iron Ore Mines at Khanbandh, situated in Keonjhar District, Odisha.

4. SML had obtained prior Environmental Clearance for setting up of an Integrated Steel Plant at Village Anra of Keonjhar district in Odisha vide F. No. J-11011/192/2008- IA. II (I), Dated 13/07/2009.

5. The cost of the proposed Project profile (1.0MTPA Beneficiation plant and 1.2 pelletization plant) is Rs. 286.00 Crore.

6. This Site-Specific Wildlife Conservation Plan has been prepared to meet the conditions no. 26,27 & 28 of Standard Terms of Reference of ToR dt. 26.07.2022.

7. During 2011, one unit of Pelletization of capacity 0.6 MTPA was set up and also Consent to Operate was obtained for the same and another unit of Beneficiation & pelletization plant of capacity 0.6 MTPA and Beneficiation Plant capacity of 1 MTPA was under construction.

8. SML has proposed for 1 MTPA Beneficiation Plant & 0.6 MTPA pelletization plant (As Expansion of the existing 0.6 MTPA pelletization plant) at village Anra in Banspal Tahasil of Keonjhar district. The co-ordinates of corner points ofthe proposed plant are latitude N 21° 40' 49.810" to N 21° 41' 13.213" and longitudeE 85° 25' 48.499" to E 85° 26' 27.809".

9. The project site is well connected to AH (Asian Highway)-46 (11.58km, SE). Nearest Railway Station is Goaldihi Railway Station (~11.77 km in WNW direction) and nearest airport is Rourkela Airport, (~89 km in NW direction).

10. The total land requirement for the beneficiation & pellet plant is 48.14 Ha. of land.

11. While authenticating the flora and fauna of the Project area it was noticed that there is the presence of Wild Elephants in ZoI. Since pachyderms have been included in the Schedule-I, preparation of Site-Specific Wildlife Conservation Plan is mandatory.
12. Nayagarh RF (6.92 Km NE), Khairimundi RF (9.20 Km S) & Gachinda RF (7.77 Km E) are coming within the impact area i.e., within 10 Km radius of the project area belonging to Keonjhar Forest Division of Keonjhar District. Also, on the other part Amuni PF (2.18 Km E), Gandhamardan PF (4.58 Km SE), Jagar PF (3.83 Km SE), Kumundi PF (6.39 Km S) & Raigurha PF (2.25 Km SW) are located within ZoI.
13. The important drains within the study area are Bamni Nala, Jagdhala Nalla and Patarpagi Nalla.
14. In this plan protection and management of Schedule-I species have given sufficient importance. The anticipated degradation due to this project are *habitat degradation, habitat fragmentation, Air pollution, Noise pollution,* and *related impact on wildlife & its habitat and also on local forest dependent community*.
15. Mitigative measures have provided both in Core Zone and Zone of Impact.

This Management Plan has addressed all the above threats with remedial measures to minimize the adversities as detailed below: -

Within the Project area

- To create awareness among the plant workers).
- Pollution Monitoring.
- Fixing of glow signages.
- Provision for one 4-wheeler.
- Provision for one GIS Export
- Strengthening of electrical Infrastructure

Within the Impact Area/Buffer zone

- Creation of water hole.
- Plantation of Ficus Species, Bamboo, Jack fruit (*Artocarpus heterophyllus)*, Elephant apple (*Dillenia indica*) & Wood apple *(Feronia elephantum*).
- Creation of Grasslands for elephants.
- Provision of elephant squad to watch movement of the Pachyderms and distract their depredation to villages for crop raiding, house damage andhuman-wildlife interface.
- Distribution of metallic Grain Storage bin.

- Provision for Solar Street Lights.
- Provision for Hand Search Torch Lights.
- Immunization of cattle.
- Incentive to informers
- NGO Support - FES in all Podu cultivated area.
- Provision of Rice Thresher.
- Jan Rakshya, Gaja Surakshya Community Solar fencing.

16. **Cumulative total of interventions for both Project Area and Zone of Influence:** The total cost of the conservation plan is **Rs. 223.07 Lakhs** including **cost escalation @ 20%.**

17. **Funds to be deposited With DFO : Rs. 223.07 Lakhs**

***Cost of Mahindra Bolero.**

[Four Wheeler hard top vehicle Mahindra Bolero will be procured by pp and hand over to DFO, Keonjhar from use by forest department for Elephant Depredation.

CHAPTER-4

OBJECTIVE OF MANAGEMENT AND MITIGATION STRATEGIES

A. OBJECTIVE OF MANAGEMENT:

The main objective of this plan is to reduce various stresses occurring due to the implementation of this project in this particular locality having wildlife importance. The site-specific Wildlife Conservation Plan will suggest measures to mitigate such stress and if possible, how to avoid certain activities which could reduce the negative influence. Wildlife management consists of promoting welfare factors, arresting or reducing the impacts of decimating factors, and neutralizing harmful effects of limiting factors that keep the animal population lower than the carrying capacity of the area. It also aims at the management of human dimensions relating to the regulation of habitat use, sufferance from animal damages, livelihood issues, and taking people as partners in conservation management. Such concerns are reflected in the prescriptions. The management of the project's core areawill aim for the maintenance of habitat for smaller animals that used to live and share habitat with the Project area. The management of ZoI will target optimization and maintenance of wildlife habitat and biodiversity, involving local people as far as practicable, and aim to avoid/minimize or mitigate the adverse impacts of the project activity. Small animals & larger ones like deer and elephants make use of the area regularly, as the area isundisturbed. Large animals will be disturbed from the area once the Plant commences with full expansion. The displaced animals should not be left as a refugee. Their rehabilitation would be the major objective of the plan. To fulfill all these requirements, the plan focused on improving forage and browse volume by increasing food plant diversity with vertical and horizontal cover. These will arrest habitat destruction and fragmentations and also prevent soil erosion and loss of biodiversity. Keeping natural water resources free from the negative impact of the project activity will also be targeted.

The objective of management to mitigate the threats to wildlife is covering the following aspects:

1. Conservation, Protection, and Improvement of the flora and fauna in and around the Project area on a sustainable basis despite the production of Coal and other ancillary activities.

2. To conserve a viable population of Wildlife in general and the Pachyderm in particular in their natural habitat.
3. To conserve the natural biodiversity, and aesthetic and geomorphological value of the area through appropriate management of site, habitat, and landscape.
4. To reduce the dependency of local people on the forest resources of the ZoI through culturally, socially, economically acceptable and ecologically sustainable, and viable alternatives by undertaking eco-development programs.
5. To reduce man-animal conflict by ensuring continuity of habitat in the buffer zone by improving forest cover on a long-term basis.

B. STRATEGIES TO MITIGATE AND MINIMIZE ADVERSE IMPACTS:

I) STRATEGIES FOR CORE ZONE & NEAR BY AREAS BY PP:

Awareness Promotion:

The User Agency will create awareness among the Mines Executive/staff/and workers and sensitize them to maintain the cleanliness of the project premises. They will also be aware to protect any destitute wildlife including snakes if noticed in the project area. In such an event instead of being afraid of killing the animal, they should intimate the nearby Forest staff or snake charmer available in every Division Office nowadays for the rescue of the wildlife and safe release in the nearby forest. They should also be aware not to domesticate any wildlife as it goes against the Wildlife (Protection) Act, 1972. The Drivers of heavy earth-moving vehicles will be appraised to keep the noise levels to the barest minimum below 60 decibels, take all precautions against fire, cover 50% of headlight during night hours, etc. Drivers will be convinced to control speed so as not to run over slow-moving wildlife like snakes, lizards, mongooses, civets, etc. Behavioral change will be expected from each worker on the above points and instead of throwing used Polythene bags (one- time used ones) here and there rather use garbage bins. Any sick and injured animal will have to be rescued and given first aid and water. Such animal is to be subsequently handed over to the nearest forest official and released after healing of the wound. No worker shall get involved in poaching or illicit felling.

Pollution Monitoring:

The Executives and their associates responsible for environment monitoring should also be entrusted to measure pollution monitoring like dust pollution, light pollution, air pollution, noise pollution, etc. so that, those will remain within the permissible limit.

Glow Signage (Sign Boards):

To promote co-existence with wildlife and to aware people, good quality sign boards with the display of wildlife features should be placed along the Project premises, road, etc. Fluorescent Sign Boards with good write-ups about the movement path of wild animals will be provided to make aware the passers-by of the occurrence of the accident, if they confront wildlife, particularly in the wee hours.

Provision for one 4-wheeler:

One Four-wheeler (Mahindra Bolero) to be procured by the User Agency and delivered to DFO, Keonjhar to be used by forest staff of BJP Range for Elephant Depredation.

Strengthening of Electrical Infrastructure

Transformer fencing spiking in Electrical poles, capping of 4 poles of dedicated power network of SML to be implemented.

ACTION TAKEN REPORT TO MITIGATE AND MINIMIZE ADVERSE IMPACT IN CORE ZONE & NEARBY AREAS.

[By Project Proponent (PP) in core zone of project and nearby areas to mitigate and minimize adverse impact.]

Site Specification Plan has been prepared in consultation with state forest Department regarding likely impact of the proposed plant on the surrounding reserve/protected forest located within 10 km radius of project site as schedule-1 Fauna-Elephant found in the study area.

A. Awareness Promotion:

The user agency, M/s Sree Metaliks Limited,Anra, is carrying out awareness programme, at regular interval (once in every quarter) among plant Executive, staff and workers. The programme is conducted by Shri Subhash Swain, Advisor (Forest) of SML, (Former Addl. PCCF, Govt. of Odisha & RCCF, I/C Keojhar and Sundargarh District with additional charge of Angul District) to sensitize them about

I. Project and Impact Area.

II. Presence of Elephant, Schedule-1 mammal in 10km Buffer Zone, its movement pattern, the Human-wildlife conflict, poaching/killing of elephants etc.

III. Probable impacts of project on Flora & Fauna.

IV. Objective of wildlife Management and mitigative strategies.

V. Employees to be awarded to protect any destitute wildlife including snakes if noticed in project area.

VI. Employees, advised not to domesticate any wildlife.

VII. Drivers of HEMM and vehicles are apprised to keep the noise level to the barest minimum<60 dB and to control speed, so as not to run-over slow-moving wildlife like snakes, lizards, mongoose, civets etc.

VIII. Not to use and throw one time use polythene bags.

IX. To make aware regarding glow signage (Sign Board), regarding elephant in particular and wild life in General.

B. Pollution Monitoring:

The concerned officer and staff are ensuring pollution monitoring to keep it within the prescribed limits.

C. Strengthening of Electrical Infrastructure:

Increasing the height of electrical poles have been completed by SML, Anra to avoid any untoward electrocution of Elephants.

X

Annexure-22


SREE METALIKS
BAG
SAY NO
SINGLE USE PLASTIC
Toll free 1800-202-1355 | For enquiry info@sreemetaliks.com | www.sreemetaliks.com


SREE METALIKS
Let's say
NO to
single-use
PLASTIC
Toll free 1800-202-1355 | For enquiry info@sreemetaliks.com | www.sreemetaliks.com

Annexure- 23

COVERED TRUCKS

Covered Conveyor

Annexure-24

Tel : 2564033/2563924
EPABX : 2561909/2562847
E-mail: hwmd@ospcboard.org / paribesh1@ospcboard.org
Website: www.ospcboard.org

STATE POLLUTION CONTROL BOARD, ODISHA

[FOREST, ENVIRONMENT AND CLIMATE CHANGE DEPARTMENT, GOVERNMENT OF ODISHA]
Paribesh Bhawan, A/118, Nilakantha Nagar, Unit – VIII
Bhubaneswar – 751012, INDIA

BY SPEED POST

FORM 2
[See rule 6(2)]

RENEWAL OF AUTHORISATION BY STATE POLLUTION CONTROL BOARD, ODISHA TO THE OCCUPIER UNDER HAZARDOUS AND OTHER WASTES (MANAGEMENT AND TRANSBOUNDARY MOVEMENT) RULES, 2016

1. Number of authorization : **IND-IV-HW-1300/** 8414 and date of issue: 25-05-2023
2. Reference of application (No. and date): **4587641, dtd. 20-12-2022/ 22-05-2023.**
3. **M/s Sree Metaliks Limited (Iron Ore Pelletisation Plant)** is hereby granted an authorization based on the enclosed signed inspection report for generation, storage, transport, reuse, recycling, recovery, preprocessing, co-processing, utilization, treatment, disposal or any other use of hazardous or other wastes or both on the premises situated **At - Anra, Po - Upper Raigoda, Banspal, Dist - Keonjhar, Odisha.**

Details of Authorization

Sl. No.	Category of Hazardous Waste as per the Schedules I, II and III of these Rules	Waste Description	Quantity	Authorized Mode of Disposal or Recycling or utilization or Co-processing, etc.
1.	Schedules - I Stream - 5.1	Used Oil	7.2 T/A	Storage in containers over impervious floor under well ventilated covered shed followed by disposal through Actual Users having valid authorization from SPCB, Odisha
2.	Schedules - I Stream - 5.2	Wastes Containing Oil	0.36 T/A	Storage in impervious pits / containers under well ventilated covered shed followed by disposal through Authorized Co-processing in Cement Kiln authorized by SPCB, Odisha/ HW incinerator / Common Hazardous Waste Treatment Storage Disposal Facility (CHWTSDF).

(1) The authorization shall be valid up to **31-03-2026**.
(2) The authorization is subject to the following general and specific conditions.

A. General Conditions of authorisation:

1. The authorized person shall comply with the provisions of the Environment (Protection) Act, 1986, and the rules made there under.
2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by the State Pollution Control Board.
3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this authorization.
4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
5. The person authorized shall implement Emergency Response Procedure (ERP) for which this authorization is being granted considering all site specific possible scenarios such as spillages, leakages, fire, etc. and their possible impacts and also carry out mock drill in this regard at regular interval of time.
6. The person authorized shall comply with the provisions outlined in the Central Pollution Control Board guidelines on "Implementing Liabilities for Environmental Damages due to Handling and Disposal of Hazardous Waste and Penalty". Any accident in this respect shall be intimated to the Board immediately.
7. It is the duty of the authorized person to take prior permission of the State Pollution Control Board to close down the facility.
8. The imported hazardous and other wastes shall be fully insured for transit as well as for any accidental occurrence and its cleanup operation.
9. The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
10. The hazardous and other waste which gets generated during recycling or reuse or recovery or pre-processing or utilization of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of authorization.
11. The importer or exporter shall bear the cost of import or export and mitigation of damages if any.
12. An application for the renewal of an authorization shall be made as laid down under these Rules.
13. Any other conditions for compliance as per the Guidelines issued by the Ministry of Environment, Forest and Climate Change or Central Pollution Control Board from time to time.
14. Annual return shall be filed by 30th day of June of every year for the preceding period from April to March.

B. Specific Conditions:

1. Authorization granted herewith does not relieve you in complying with other provision laid down under Water (PCP) Act, 1974, Air (PCP) Act, 1981 and Environment (Protection) Act, 1986, and the Rules made there under.
2. This authorization is subject to statutory and other clearances from Govt. of Odisha and / or Govt. of India as and when applicable.
3. In case the quantity of generation of hazardous Waste exceeds the Authorized quantity, the industry / mine shall apply for amendment of Authorization order.

4. The industry / mine shall strictly comply to the provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and amendments made thereafter.

5. Annual returns in Form - 4 (See Rules- 6 (5), 13 (8), 16 (6) & 20 (2)) shall be submitted to the Board for the financial year by 30th June of every year. It shall contain the detail quantities of generation, storage and disposal of different type of hazardous wastes such as recyclable, incinerable, land disposable.

6. Steps shall be taken for reduction and prevention of the hazardous waste generated or for recycling or reuse.

7. Environmental Information with respect to Air, Water, Hazardous Waste and Hazardous Chemicals shall be displayed at the main gate for public view.

8. The transport of the hazardous and other waste shall be in accordance with the provisions of the Rule, 2016 and the rules made by the Central Government under the Motor Vehicles Act, 1988 and the guidelines issued by the Central Pollution Control Board from time to time in this regard.

9. The occupier shall provide the transporter with the relevant information in **Form 9**, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency and shall label the hazardous and other wastes containers as per **Form 8**.

10. In case of transportation of hazardous waste and other wastes for recycling or utilization including co-processing to outside the state, the sender shall intimate both the State Pollution Control Boards before handing over the waste to the transporter.

11. Manifest system (Movement document) shall be strictly followed as per Rule-19 and to be submitted to this office as per the Rule. The industry / mine shall check the authenticity of the way bill of the transport vehicle to ensure supply of hazardous waste to the authorized destination.

12. The hazardous waste shall be sold if required only to Actual User having valid authorization from the State Pollution Control Board, Odisha and concerned SPC Board. Details of such wastes shall be entered in the passbook issued by respective SPCB.

13. All the hazardous waste shall be stored in impervious pits / containers / floors under cover shed with adequate capacity having spill containment facility. The spilled hazardous waste shall be re-collected and stored in impervious pits / containers / floors under cover shed prior to sale / disposal.

14. The schedule of hazardous waste and the quantity as specified shall only be disposed off as per the stipulation prescribed in this authorization.

15. This authorization does not permit you to either receive and process or generate hazardous waste in case validity of Consent to Operate of your industry / mine ceases. However you can carry out handling, storage, treatment, transport and disposal of hazardous waste and other wastes generated previously during such period to avoid accumulation of hazardous waste.

16. The industry / mine shall store the accumulated hazardous waste for a period not exceeding 90 days and shall dispose as per the stipulation prescribed in this authorisation order. In case of any violation, authorization granted shall be suspended / cancelled.

17. The industry / mine shall apply for renewal of authorization in Form-1, 120 days before expiry of this authorization order enclosing Annual Return in Form - 4, Manifest copies in Form - 10 and compliance to the conditions stipulated in this order along with adequate processing fees.

18. In case of transportation of hazardous and other waste, the responsibility of safe transport shall be either of the sender or the receiver whosoever arranges the transport and has the necessary authorisation for transport from the concerned State Pollution Control Board. This responsibility should be clearly indicated in the manifest.

19. Hazardous Wastes having calorific value of more than 2500 Kcal/Kg shall not be land filled. It can only be disposed through authorized Actual Users or incinerated in authorized Hazardous Waste incinerator or co-processing in authorized cement kiln.

20. The industry shall follow On-site and Off-site Emergency plan during all activities involving hazardous wastes to avert accidents, fire and other environmental damages.

21. The industry shall follow all safety protocols during handling, transportation and disposal of hazardous wastes.

Member Secretary

To

The Managing Director
M/s Sree Metaliks Limited
(Iron Ore Pelletisation Plant)
At - Anra, Po - Upper Raigoda,
Banspal, Dist - Keonjhar, Odisha

Memo No. 8415 **Dt.** 25-05-2023

Copy to the

1. Collector & District Magistrate, **Keonjhar.**
2. Director, Factories & Boilers, Odisha, **Bhubaneswar.**
3. Regional Officer, State Pollution Control Board, Odisha, **Keonjhar.**
4. Guard file.

25/05/23

Additional Chief Environmental Engineer

Annexure-25

Date:-20.12.2022

Certified that I visited M/s. Sree Metaliks Ltd. At-Anra,Po-Upar Raigoda, Ps-Nayakote, Dist-Keonjhar, Odisha on Dated - 11.06.2022, 12.06.2022, 02.12.2022, 03.12.2022 & 13.12.2022 (05 days) and undertook periodical health check-up of 533 employees / workers. No major complaints / hazards found during the check-up.

S. Mahanta 20.12.22

Dr.Sudarsan Mahanta
Medical Officer
General Physician
Regd. No:-24371/2019

Dr.Sudersan Mahanta
Regd No.24371

Annexure-26

Environmental Management Policy

M/s Sree Metaliks Ltd. already has framed Environmental Policy and is committed to preserving the environment in an integral manner.

The Corporate Environment Policy states:

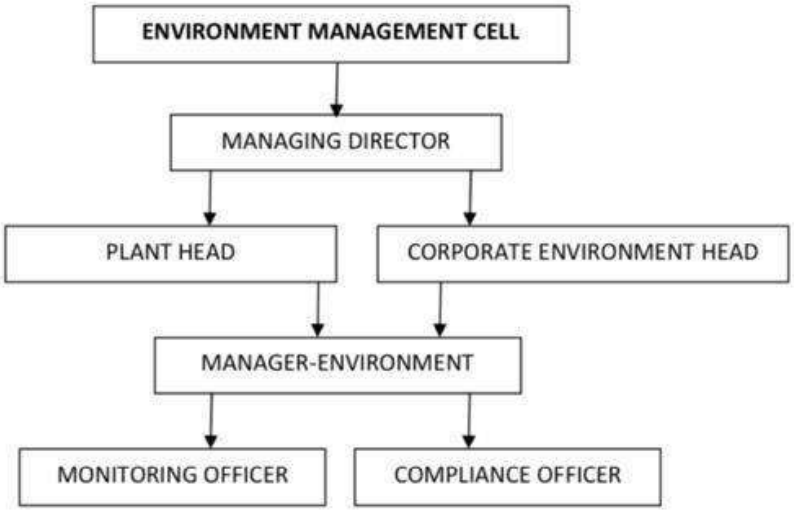
"It is the policy of M/s Sree Metaliks Ltd. to strive to ensure that all aspects of the business have the least harmful effect on the Environment by implementing an effective Environmental Management system to:

- **Have full awareness of all Environmental and Factory legislation in India and to ensure that regulatory requirements are duly met with including the conditions/ stipulations/ norms of Environment Clearance.**
- **Monitor the implementation of the Policy by carrying out periodic audits of compliance with full reporting to the Board of Directors and to suggest necessary remedial measures, if required, thereto.**
- **Ensure that all Employees in the course of their duties act in accordance with the Environmental Policy. To encourage suppliers, contractors and vendors to act accordance with Company's Environmental Standards.**
- **Maintain transparency in matters of Environmental compliance.**
- **Selection of non polluting technology, waste minimization, reuse/ recycling and the reduction of energy consumption will be particular areas of attention of the business.**
- **The Company will also make a positive environmental contribution in the local community by encouraging open communication, general Environmental awareness and the promotion of CSR activities."**

Date: ***10.06.2021***
Place: ***Barbil***

Managing Director

Annexure-27


ENVIRONMENT MANAGEMENT CELL
MANAGING DIRECTOR
PLANT HEAD
CORPORATE ENVIRONMENT HEAD
MANAGER-ENVIRONMENT
MONITORING OFFICER
COMPLIANCE OFFICER

Annexure-28

SREE METALIKS

Ref. No. SML/ANRA-EC-ADVT.2023 Date – 01/03/2023

The Deputy Director General
Regional Office (EZ),
Ministry of Environment, Forest & Climate Change,
A-31, Chandrasekharpur,
Bhubaneswar

Sub: Expansion of Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant by M/s Sree Metaliks Limited, located at village - Anra, Tehsil – Telkoi, Dist. - Keonjhar, Odisha- Grant of Environmental Clearance – **Regarding Paper advertisement.**

Ref: **MoEF&CC Environment Clearance letter F. No. J-11011/192/2008-IA II (I) dated 23rd February 2023**

Dear Sir,

With reference to the miscellaneous condition (X) i on the above subject, we have advertised the Environmental Clearance letter F. No. J-11011/192/2008-IA II(I) dated 23rd February 2023 in two local news paper i.e. one in Odia news paper **"The Dharitri"** and the other one in English newspaper **" The Indian Express" on dated 28.02.2023**

The same is attached for your kind information please.

Thanking you,

Yours faithfully
For Sree Metaliks Limited.

Authorized Signatory

Encl.: Copy of paper advertisement

GOVT. OF INDIA
MoEF & CC Integrated R.O.
Bhubaneswar-751023
RECEIVED

CIN U26939WB1995PLC075633
Head Office: SML House, Main Road, P.O. Barbil, Distt. Keonjhar-758035, Odisha
W www.sreemetaliks.com E info@sreemetaliks.com
Registered Office: 8/1 New Tangea Road, China Town, Kolkata - 700046

ଧରିତ୍ରୀ
DHARITRI
ଭୁବନେଶ୍ୱର, ମଙ୍ଗଳବାର, ୨୮ ଫେବୃୟାରୀ, ୨୦୨୩

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To
The Asst. General Manager
SREE METALIKS LIMITED
SML HOUSE, MAIN ROAD, P.O.: BARBIL Kendujhar, Orissa-758035

Subject: Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

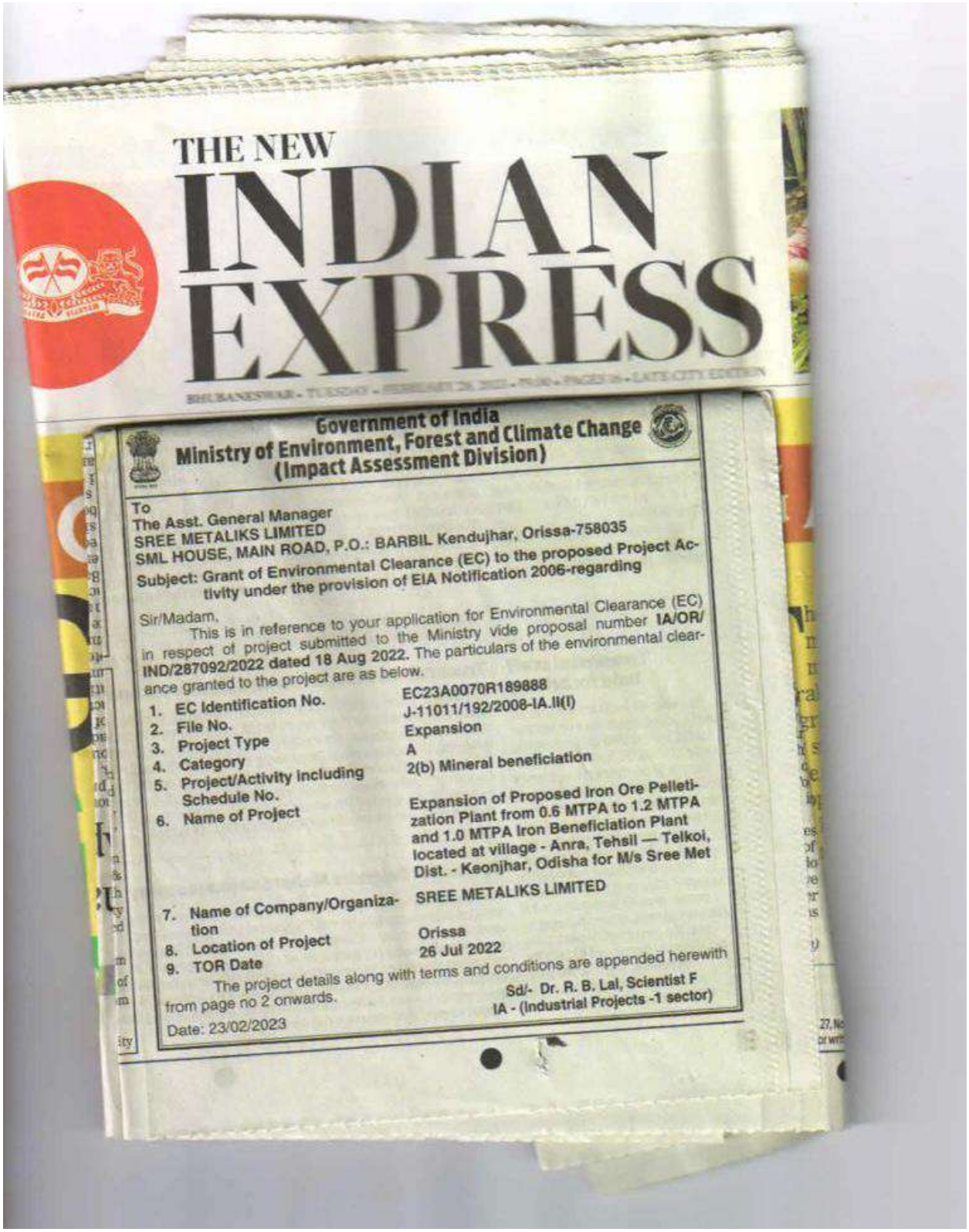
This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the Ministry vide proposal number **IA/OR/IND/287092/2022 dated 18 Aug 2022.** The particulars of the environmental clearance granted to the project are as below.

1.	EC Identification No.	EC23A0070R189888
2.	File No.	J-11011/192/2008-IA.II(I)
3.	Project Type	Expansion
4.	Category	A
5.	Project/Activity including Schedule No.	2(b) Mineral beneficiation
6.	Name of Project	Expansion of Proposed Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant located at village - Anra, Tehsil — Telkoi, Dist. - Keonjhar, Odisha for M/s Sree Met
7.	Name of Company/Organization	SREE METALIKS LIMITED
8.	Location of Project	Orissa
9.	TOR Date	26 Jul 2022

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Sd/- Dr. R. B. Lal, Scientist F
IA - (Industrial Projects -1 sector)

Date: 23/02/2023



THE NEW
INDIAN
EXPRESS

BHUBANESWAR • TUESDAY • FEBRUARY 28, 2023 • PAGES 16 • LATE CITY EDITION

Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

To
The Asst. General Manager
SREE METALIKS LIMITED
SML HOUSE, MAIN ROAD, P.O.: BARBIL Kendujhar, Orissa-758035

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6.	Name of Project	Expansion of Proposed Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant located at village - Anra, Tehsil — Telkoi, Dist. - Keonjhar, Odisha for M/s Sree Met
7.	Name of Company/Organization	SREE METALIKS LIMITED
8.	Location of Project	Orissa
9.	TOR Date	26 Jul 2022

The project details along with terms and conditions are appended herewith from page no 2 onwards.

Sd/- Dr. R. B. Lal, Scientist F
IA - (Industrial Projects -1 sector)

Date: 23/02/2023

Annexure-29

SREE METALIKS

Ref. No.: SML/ANRA/EC/413/2022-23 **Date – 03.03.2023**

The Chief Executive Officer,
Zilla Parishad,
Keonjhar.

Sub: Expansion of Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant by M/s Sree Metaliks Limited, located at village - Anra, Tehsil – Telkoi, Dist. - Keonjhar, Odisha- **Environmental Clearance Regarding.**

Ref: **MoEF&CC Environment Clearance letter F. No. J-11011/192/2008-IA II (I) dated 23rd February 2023.**

Dear Sir,

We are herewith submitting the copy of above Environmental Clearance for Expansion of Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant by M/s Sree Metaliks Limited, located at village - Anra, Tehsil – Telkoi, Dist. - Keonjhar, Odisha.

This is for your kind information, please.

Thanking you,

Yours faithfully
For **SREE METALIKS LIMITED.**

AUTHORIZED SIGNATORY
Encl.: Copy of Environment Clearance

Received the Letter with enclosure

14/3/2023
Section Officer-Cum-Accountant
DRDA, Keonjhar

CIN: U26939WB1995PLC075633
SML HOUSE, MAIN ROAD, BARBIL – 758035, KEONJHAR, ORISSA, INDIA
Tel No.: 06767-276292/275585, Fax: 06767-275529/276219, Web: www.sreemetaliks.com, e-mail ID: mdsreemetaliks@gmail.com

SREE METALIKS

Ref. No.: SML/ANRA/EC/414/2022-23 **Date – 03.03.2023**

The General Manager,
District Industries Centre,
Keonjhar.

Sub: Expansion of Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant by M/s Sree Metaliks Limited, located at village - Anra, Tehsil – Telkoi, Dist. - Keonjhar, Odisha- **Environmental Clearance Regarding.**

Ref: **MoEF&CC Environment Clearance letter F. No. J-11011/192/2008-IA II (I) dated 23rd February 2023.**

Dear Sir,

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This is for your kind information, please.

Thanking you,

Yours faithfully
For **SREE METALIKS LIMITED.**

AUTHORIZED SIGNATORY

Encl.: Copy of Environment Clearance

14/03/2023

CIN: U26939WB1995PLC075633
SML HOUSE, MAIN ROAD, BARBIL – 758035, KEONJHAR, ORISSA, INDIA
Tel No. : 06767-276292/275585, Fax: 06767-275529/276219, Web: www.sreemetaliks.com, e-mail ID: mdsreemetaliks@gmail.com

SREE METALIKS

Ref. No.: SML/ANRA/EC/412/2022-23 Date – 03.03.2023

The District Magistrate & Collector,
Keonjhar District,
Keonjhar.

Sub: Expansion of Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant by M/s Sree Metaliks Limited, located at village - Anra, Tehsil – Telkoi, Dist. - Keonjhar, Odisha- **Environmental Clearance Regarding.**

Ref: **MoEF&CC Environment Clearance letter F. No. J-11011/192/2008-IA II (I) dated 23rd February 2023.**

Dear Sir,

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Received letter No- 412 dt- 3.3.23 addressed to collector

This is for your kind information, please.

Thanking you,

14.3.23

Yours faithfully
For **SREE METALIKS LIMITED.**

AUTHORIZED SIGNATORY

Encl.: Copy of Environment Clearance

CIN: U26939WB1995PLC075633
SML HOUSE, MAIN ROAD, BARBIL – 758035, KEONJHAR, ORISSA, INDIA
Tel No. : 06767-276292/275585, Fax: 06767-275529/276219, Web: www.sreemetaliks.com, e-mail ID: mdsreemetaliks@gmail.com

OFFICE OF THE TAHASILDAR, BANSPAL

Received letter No. SML/ANRA/EC/115/ dt. 3.3.23
of Authorised Signatory. Sree Metaliks Ltd. 2022-23
addressed to Tahasildar, Banspal.

14.3.23
SECTION OFFICER
BANSPAL TAHASIL
Banspal Tahasil

Dear Sir,

We are herewith submitting the copy of above Environmental Clearance for Expansion of Iron Ore Pelletization Plant from 0.6 MTPA to 1.2 MTPA and 1.0 MTPA Iron Beneficiation Plant by M/s Sree Metaliks Limited, located at village - Anra, Tehsil – Telkoi, Dist. - Keonjhar, Odisha.

This is for your kind information, please.

Thanking you,

Yours faithfully
For **SREE METALIKS LIMITED.**

AUTHORIZED SIGNATORY

Encl.: Copy of Environment Clearance

CIN: U26939WB1995PLC075633
SML HOUSE, MAIN ROAD, BARBIL – 758035, KEONJHAR, ORISSA, INDIA
Tel No. : 06767-276292/275585, Fax: 06767-275529/276219, Web: www.sreemetaliks.com, e-mail ID: mdsreemetaliks@gmail.com

Annexure-30 **Photographs of CEMS**

CEMS Room (SML, Anra)

Gas Analyser for Pellet -1 (White)

Gas Analyser for Pellet -2 (Black)

Photographs Of CAAQMS

Annexure-31

Annexure-32

COMPLIANCE OF OBSERVATION MADE BY IRO (w.r.t. Compliance of Previous EC Conditions)		
1	**Stipulated Specific Condition No.vii:** Total water requirement from Baitarni River and bore wells shall not exceed 857 m3/hr. Ground water requirement shall not exceedthe limit stipulated by the CGWA vide letter no. 21-4 (71)/SER/CGWA/2008/035 dated 22nd September, 2008. Closed circuit re-circulation system shall be installed to reduce fresh water consumption and no wastewater generation. BF-GCP and coal washery water shall be treated in thickener and used in the pig casting machine. Acidic and alkaline effluent from DM water plant shall be neutralized and reused for dust suppression and gardening etc. All the wastewater from coal washery (belt press), MBF (ventury scrubber), Power Plant (cooling tower and boiler blow down) and back wash of filtration unit of Water Treatment Plant shall be treated in Common Effluent Treatment Plant (CETP) and recycled/reused for various activities at the site including dust suppression, green belt, ash moistening and firefighting etc. No wastewater shall be discharged outside the premises and Zero effluent discharge shall be ensured. Domestic effluent shall be treated in septic tank followed by soak pit and used for green belt development.	
	Observation by IRO	**Compliance**
	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed. However, proper collection arrangement for runoff rain water from the raw material yard yet to be made. PA submitted that action has been initiated to construct a settling-cum-harvesting pond with increase dimension with network of drain and the work will be completed by March, 2023.	**Complied** Settling cum harvesting pond with network of drain has been constructed.

2	**Stipulated Specific condition No.xi:** Iron ore fines, DRI fines, coal fines, sinter dust, GCP dust, SMS dust etc. shall be used in sinter plant. Bag filter dust from pellet plant shall be recycled in the process. Usable scrap from BF and SMS shall be recycled back in theSMS. Slag from IF, EAF and LRF shall be recycled through sinter/blast furnace. Tailings from Iron ore beneficiation plant shall be disposed off in tailing ponds. All the other solid wastes including broken refractory mass shall be properly disposed off in environment-friendly manner. Used oil and oily waste shall be provided to authorized recyclers / re-processors.	
	Observation by IRO	**Compliance**
	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed. It was informed that Very minimal quantity of Hazardous Waste like Used Oil and Waste Containing Oil is generated.	**Complied** Very minimal quantity of hazardous waste like used oil is generated and REUSED in lubrication. "PP has obtained hazardous waste authorization from State Pollution Control Board vid. letter no. IND-IV-HW-1300/8414 dated 25-05-2023 validity up to 31-03-2026 copy enclosed as annexure-24.
3	Stipulated Specific Condition No.xiv: Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Regional Office at Bhubaneswar, CPCB and OPCB.	
	Observation by IRO	**Compliance**
	The PP has obtained Hazardous waste Authorization from state Pollution control Board vide letter No.IND-IV-HW-1300/2731 dated 16-03-2019 with validity up to 31-03-2023. It was informed that Very minimal quantity of Hazardous Waste like Used Oil and Waste Containing Oil is generated. T 126 being reused in lubrication.	**Complied** Same as given Para(ii).

4	Stipulated Specific Condition No. xv: A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.	
	Observation by IRO	**Compliance**
	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. PP informed that there is no such solid waste generation from the plant process and the waste generated during process i.e. dust from ESP is being completely reused in the process. It was informed that as soon as the beneficiation plant and steel plant will come in operation a time bound action plan to reduce solid waste and its proper utilization and disposal will be submitted and implemented.	**Complied** 1.0 MTPA beneficiation Plant expected to commission by October 2023. The thickened slurry from concentrate thickener underflow will be dewatered in pressfilter. The dewatered material will used for pellet fe ed. The thickened slurry from tailing thickener will be dewatered in press filter and water will be recycled in the process. The filter cake generated from the plant will be stacked at the designated place as mentioned in the layout map. Generated tailing cake will be back-filled in mined out area of captive iron ore mines (Khandbandh). Approved progressive mine reclamation plan for captive Iron ore mines (Khanbandh)by "back filling" of mined out area as approved in mining plan/scheme 2021-22 to 2025-26 (4.77 Hectare) by IBM. Enclosed as Annexure-3. There will be not be any tailing pond for beneficiation plant.
5	**Stipulated Specific Condition No.xvii**: As proposed, green belt shall be developed in 33 % area in and around the plant as per the CPCB guidelines in consultation with DFO.	
	Observation by IRO	**Compliance**
	During visit plantation in patches has been observed. PP reported that the green belt has been developed over 24.5 acre of land. Total plantation reported is 24,400 and percentage of survival reported as 72.9. During visit fresh plantation has also been observed. It was also informed that out of total area of 24.5 acre 8.00 acre has been developed during 2022-23.	**Complied** Green Belt has been developed in 33% of project area (40 Acres / 16.18 Ha) in and around plant.

6	**Stipulated Specific Condition No. xviii**: All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Sector shall be implemented.	
	Observation by IRO	**Compliance**
	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed. PP submitted purchase order for stack dust monitor and stack opacity meter vide PO dated 15-07-2022. CREP recommendation for steel plant such as online stack monitoring system, continuous ambient air quality station yet to be provided. Overall housekeeping needs to be improved.	**Complied** i)On-line Stack Monitoring System and Continuous Ambient Air Quality Monitoring Station have been installed. ii) Good housekeeping is being maintained.
7	Stipulated Specific Condition No.xix: All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 20th February, 2009 shall besatisfactorily implemented.	
	Observation by IRO	**Compliance**
	In compliance of the public hearing commitment PP informed that three number of health camp have been organized during 2020-2022, ambulance facility provided to local people, treatment facility provided for the local villagers at the dispensary inside the premises, fogging as Malaria eradication programme is being done, pond renovation at Anra village, drinking water supply to Anra village, drinking water supply at Raigoda village, road repairing from Raigoda to Anra, Kaliapal to Andhari Khaman village, Dumuridihi to Kumudi, construction of Mandap, community centre, club in different villages, 35 number youths of neighboring villages sponsored for various trades in ITI, civil work in school and salary of school teacher. Total expenditure reported to be Rs.1.28 crores.	**Complied** "All the commitements made during the public hearing dated 20-02-2009 have been satisfactorily mimplimented". Comittements made and its compliance details are enclosed as Annexure-11.

8	Stipulated Specific condition No.xx: Recommendations of the State Forest Department shall be obtained regarding likely impact of the proposed steel plant on the surrounding reserve/protected forests viz. Nayagarh RF (6.92 km NE), Amuni PF (2.18 km E), Gandhamardjan RF (4.58 km SE), Gachinda RF (7.77 km E), Jagar PF (3.83 km SE), Kumundi PF(6.39 km S), Khairimundi RF (9.20 km S), Raiguda PF (2.25 km SW) located within 10 km radius of the proposed project site and implemented.	
	Observation by IRO	**Compliance**
	PP has submitted copy of a work order for preparation of site specific wildlife conservation plan along with recommendation of State Forest Department, regarding likely impact of the proposed steel plant on the surrounding reserve/protected forest located with 10 km radius of the proposed project site vide letter No.SML/WO-CEMC/SSWCP/2022/08 Dated 29th July, 2022 to M/s Centre for Envotech and Management Consultancy Pvt. Ltd.	**Complied** i) The Site-Specific Wildlife Conservation (SSWCP) plan with implementation schedule has been approved by the PCCF (wildlife) & Chief Wildlife Warden.Approval letter no.1458/CWLW-FDWC-FD-0064-2022 dated 8th Feb 2023 is enclosed as Annexure-20. ii) Necessary initiative by project proponent (PP) has been taken for preparedness and implementation of mitigative measures in core zone under direct supervision of Sri Subash Swain, Advisor (Forest), SML, IFS (Retd.), Former Additional PCCF Govt. of Odisha. iii)Action taken report (ATR) regarding ongoing preparedness exercise and implementation of strategies in core zone and near by areas by project proponent (Sree Metaliks Limited) is enclosed as Annexure-21 iv) Demand note from DFO has been received. Accordingly, Rs.223.70 Lakhs (Rupees Two crore twenty-three lakhs seven thousand only) shall be deposited in State CAMPA Fund as 5 years implementation cost.

9	Stipulated General Condition No.vi: Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.	
	Observation by IRO	**Compliance**
	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed. However, proper collection arrangement for runoff rain water from the raw material yard yet to be made. PA submitted that action has been initiated to construct a settling-cum-harvesting pond with increase dimension with network of drain and the work will be completed by March, 2023.	**Complied** 1. Two numbers large water harvesting ponds (to collect the run-off has been created within Plant premises to enrich ground water. Photo of the same attached as Annexure-14. 2. Further Roof top rain water harvesting system has been implemented. Photo of the same attached as Annexure-15. 3. Storm water drainage system along with 2 no's retention settling tanks have been constructed to enable settlement of solid particles, thereby ensuring flow of clean water into nearby water bodies. (Annexure-8)
10	Stipulated General condition No.xi: As proposed, Rs. 1401.05 Lakhs and Rs. 753.64 Lakhs shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministryof Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	
	Observation by IRO	**Compliance**
	PP informed that 'due to financial constraints the project integrated steel plant could not be constructed and commissioned'. At present only 0.6 MTPA pellet plant is in operation. Expenditure on environmental protection measure reported as Rs.5.00 crores for capital cost and Rs.40.00 lakhs per annum for recurring cost. It was also informed that in 2022-23 additional capital expenditure of around Rs.15 lakh have been planned in existing pellet plant in addition to recurring cost.	**Complied** (A) Environment related expenditure, Capital up to 31st March 2023 and Recurring (operational) in 2022-23 are Rs. 18,54,87,000 (Up to 31st March 2023) and Rs. 1,83,09,600 (in2022-23) respectively. Detail enclosed as Annexure -1(A).

11	Stipulated General Condition No.xvi: The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	
	Observation by IRO	**Compliance**
	Six monthly compliance for the period Oct., 2021 to March, 2022 has been uploaded in the website. The monitoring data has also been uploaded as annexure-I in the website. Display board has been provided at the main gate of the company in public	**Complied**

भारत सरकार / Government of India
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय / Ministry of Environment, Forest and Climate Change
एकीकृत क्षेत्रीय कार्यालय, भुवनेश्वर / Integrated Regional Office, Bhubaneswar
ए/३, चंद्रसेखरपुर / A/3, Chandrasekharpur
भुबनेश्वर - ७५१ ०२३ / Bhubaneswar - 751 023

Telephone: 0674 - 2301213, 2301248, 2302452, 2302453. Fax: 0674-2302432. E-mail: roez.bsr-mef@nic.in

No.101-521/EPE/*2078* Date: 26-08-2022

सेवा में /To:

Dr. R B Lal
Scientist-E, Industry-I,
Ministry of Environment, Forest and Climate Change,
Indira Paryavaran Bhawan, Jorbagh Road, Aliganj,
New Delhi – 110 003. (E-mail: rb.lal@nic.in)

विषय/ Sub: Comments of Regional Office on the ATR submitted for Integrated steel plant (0.5 MTPA) at village Anra, PO Upra, Raigoda, Dist-Keonjhar by M/s Sree Metaliks Ltd -reg.

संदर्भ/ Ref: Ministry's EC No. J-11011/192/2008-IA.II(I) Dated 13.07.2009

महोदय/Sir,

I am directed to draw your kind attention to the subject and reference letter cited above and to state that the above project has been monitored by Shri M R Prasad, Scientist-C on 20.05.2022. During monitoring non-compliances were observed and was communicated to the project authorities vide this office letter dated 20.06.2022. The project authorities submitted Action Taken Report on 21.07.2022.

Project Authority vide letter dated 25.07.2022 has requested for closure report on the shortcomings observed during the monitoring. Accordingly site was visited by the undersigned on 03.08.2022 to monitor the status of not complied/partially complied conditions. During visit one pellet plant was in operation. Incomplete construction of iron ore beneficiation plant and one incomplete constructed pellet plant was observed. When asked about the period of construction of the incomplete unit, PP informed that the construction has been done for beneficiation plant and 2nd unit of pellet plant during the validity of EC. It was informed that no construction work was carried out in the above mentioned structure after the lapse of EC i.e. 12th July, 2014. When the document was checked the validity of EC dated 13th July, 2009 was till 12th July, 2014.

The EC was accorded for DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant, Pellet plant, Iron ore beneficiation plant. However, DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed.

Contd..p/2

Based on the site visit and the documents furnished the status of compliance of conditions prepared and attached as Annexure-1.

भवदीय,

संलग्नक: उपरोक्तानुसार

(डॉ. टी. एच. महतो/Dr. T. H. Mahato)
वैज्ञानिक-डी / Scientist 'D'

प्रतिलिपि/Copy to:

1. Mrs. Shruti Rai Bhardwaj, Scientist-E, Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi – 110 003, Email: shruti.rai@nic.in
2. The General Manager, M/s Sree Metaliks, village Anra, PO: Upra, Raigoda, Dist-Keonjhar (Email: skray@sreemetaliks.com) for information.

ANNEXURE-1

1	**Stipulated Specific Condition No.vii:** Total water requirement from Baitarni River and bore wells shall not exceed 857 m3/hr. Ground water requirement shall not exceedthe limit stipulated by the CGWA vide letter no. 21-4 (71)/SER/CGWA/2008/035 dated 22nd September, 2008. Closed circuit re-circulation system shall be installed to reduce fresh water consumption and no wastewater generation. BF-GCP and coal washery water shall be treated in thickener and used in the pig casting machine. Acidic and alkaline effluent from DM water plant shall be neutralized and reused for dust suppression and gardening etc. All the wastewater from coal washery (belt press), MBF (ventury scrubber), Power Plant (cooling tower and boiler blow down) and back wash of filtration unit of Water Treatment Plant shall be treated in Common Effluent Treatment Plant (CETP) and recycled/reused for various activities at the site including dust suppression, green belt, ash moistening and firefighting etc. No wastewater shall be discharged outside the premises and Zero effluent discharge shall be ensured. Domestic effluent shall be treated in septic tank followed by soak pit and used for green belt development.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The project authorities should establish a proper water storage and treatment facility for optimum utilization of waste water	Complied Water required in the plant process is mainly used for cooling purpose and is re-circulated through the process. There is no such trade effluent generated from the process i.e. zero discharge from the process. The run off generated during the monsoon period is being channelized to a settling cum harvesting pond.	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed. However, proper collection arrangement for runoff rain water from the raw material yard yet to be made. PA submitted that action has been initiated to construct a settling-cum-harvesting pond with increase dimension with network of drain and the work will be completed by March, 2023.

		Action has been initiated to construct a settling cum harvesting pond with increase dimension with network of drains. Drain network more than 70% has been completed (Annexure I). This work will be completed by March-2023. Further, towards treatment of domestic effluent of the plant premises a STP is under construction (Annexure II) which will be completed by December 2022. The treated water will be used for plantation and sprinkling purpose.	

2.	**Stipulated Specific condition No.xi:** Iron ore fines, DRI fines, coal fines, sinter dust, GCP dust, SMS dust etc. shall be used in sinter plant. Bag filter dust from pellet plant shall be recycled in the process. Usable scrap from BF and SMS shall be recycled back in the SMS. Slag from IF, EAF and LRF shall be recycled through sinter/blast furnace. Tailings from Iron ore beneficiation plant shall be disposed off in tailing ponds. All the other solid wastes including broken refractory mass shall be properly disposed off in environment-friendly manner. Used oil and oily waste shall be provided to authorized recyclers / re-processors.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The components of the iron and steel industrial units have not been installed in the project. Presently only pallet plant is in operation and which has bag filter dust from pellet plant which is being recycled in the process. Used oil and other hazardous water are properly stored and disposed of to authorized recycler unit.		The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed. It was informed that Very minimal quantity of Hazardous Waste like Used Oil and Waste Containing Oil is generated.

3.	**Stipulated Specific Condition No.xiv:** Proper handling, storage, utilization and disposal of all the solid waste shall be ensured and regular report regarding toxic metal content in the waste material and its composition, end use of solid/hazardous waste shall be submitted to the Regional Office at Bhubaneswar, CPCB and OPCB.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	Details on hazardous wastes, if any, should be submitted to this office.	Complied At present only 0.6 MTPA pellet plant is under operation. Very minimal quantity of Hazardous Waste like Used Oil and Waste Containing Oil is generated which is stored as per the guideline of Hazardous and Other Waste (Management and Trans-boundary Movement) Rules, 2016 and amendments thereof. However used oil is being reused for lubrication.	The PP has obtained Hazardous waste Authorization from state Pollution control Board vide letter No.IND-IV-HW-1300/2731 dated 16-03-2019 with validity up to 31-03-2023. It was informed that Very minimal quantity of Hazardous Waste like Used Oil and Waste Containing Oil is generated. The used oil is being reused in lubrication.
4.	**Stipulated Specific Condition No. xv:** A time bound action plan shall be submitted to reduce solid waste, its proper utilization and disposal.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	A copy of the time bound action plan to reduce solid waste, its proper utilization and disposal should be submitted to this office	Complied There is no such solid waste generation from the plant process as only 0.6 MTPA pellet plant is under operation. However, the waste generated during process i.e. dust from ESP is being completely reused in the process. Scrapsis / shall be sold to outside party as and when generated.	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. PP informed that there is no such solid waste generation from the plant process and the waste generated during process i.e. dust from ESP is being completely reused in the process. It was informed that as soon as the beneficiation plant and steel plant will come in operation a time bound action plan to reduce solid waste and its proper utilization and disposal will be submitted and implemented.

5.	**Stipulated Specific Condition No.xvii:** As proposed, green belt shall be developed in 33 % area in and around the plant as per the CPCB guidelines in consultation withDFO.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The project authorities should formulate a comprehensive green belt development plan in consultation with DFO as per the guidelines of CPCB, Detailed information on the species planted and percentage of survival should be communicated to this office	Out of the total existing plant area i.e. 120 Ac, 40 Ac (33% of the area) need to be covered under plantation. Till date 16 Acre has been covered under plantation with native species like Chakunda, Karanj, Neem, Mango, Radhachuda, Krishnachuda etc. A comprehensive green belt development plan as per the guidelines of CPCB, is being prepared, which will be submitted by month of September 2022. Plantation will be done in the remaining 24 Acre in the upcoming monsoon and shall be completed by 2024.	During visit plantation in patches has been observed. PP reported that the green belt has been developed over 24.5 acre of land. Total plantation reported is 24,400 and percentage of survival reported as 72.9. During visit fresh plantation has also been observed. It was also informed that out of total area of 24.5 acre 8.00 acre has been developed during 2022-23.
6.	**Stipulated Specific Condition No. xviii:** All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Sector shall be implemented.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The detailed information on all the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Steel Sector and its status of compliance should be communicated to this office.	Complied Towards the control of pollution, The project authority installed dust extractor system comprising ESP and multi cyclone installed in the Pellet plant towards control of Air Pollution. Fugitive emission generation points have been provided with suction devices connected to bag filter. Dust suppression system for raw material handling area also provided. Water sprinkling is carried out frequently. Further, Water required for plant mainly used for cooling & domestic purpose. Hence there is no such trade effluent generated from this activity. There is no chance of overflow of any type of waste water from the premises. The waste generated during technical process i.e. dust from ESP is being completely reused in the process. Hazardous waste i.e. used oil generated from the DG setsare being reused in lubrications. Towards conservation of rain water, roof-top rain water harvesting structure inside the building roof of plant premises has been completed.	The EC has been accorded for integrated steel plant of 0.5 MTPA; however, at present only one pellet plant is in operation. DRI, MBF pig iron, Sinter plant, SMS, Coal washery, Captive power plant has not been constructed. PP submitted purchase order for stack dust monitor and stack opacity meter vide PO dated 15-07-2022. CREP recommendation for steel plant such as online stack monitoring system, continuous ambient air quality station yet to be provided. Overall housekeeping needs to be improved.
7.	**Stipulated Specific Condition No.xix:** All the commitments made to the public during the Public Hearing / Public Consultation meeting held on 20th February, 2009 shall besatisfactorily implemented.		

	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The project authorities should inform this Office on the status of implementation of the commitments made during public hearing.	Complied Towards the compliance of commitment made during the public hearing project authorities spend Rs 1.34 Crore as a capital investment and Rs 34.16 lakhs as recurring expenditure. The detail of the public hearing compliance with expenditure is attached as Annexure-III. The existing dispensary inside the factory will be shifted to the boundary of the factory premises, so that it can cater better service to villagers, by December -2022. Bridge over BamuniNalla is being taken up by State Govt. under DMF.	In compliance of the public hearing commitment PP informed that three number of health camp have been organized during 2020-2022, ambulance facility provided to local people, treatment facility provided for the local villagers at the dispensary inside the premises, fogging as Malaria eradication programme is being done, pond renovation at Anra village, drinking water supply to Anra village, drinking water supply at Raigoda village, road repairing from Raigoda to Anra, Kaliapal to Andhari Khaman village, Dumuridihi to Kumudi, construction of Mandap, community centre, club in different villages, 35 number youths of neighboring villages sponsored for various trades in ITI, civil work in school and salary of school teacher. Total expenditure reported to be Rs.1.28 crores.
8.	**Stipulated Specific condition No.xx:** Recommendations of the State Forest Department shall be obtained regarding likely impact of the proposed steel plant on the surrounding reserve/protected forests viz. Nayagarh RF (6.92 km NE), Amuni PF (2.18 km E), Gandhamardjan RF (4.58 km SE), Gachinda RF (7.77 km E), Jagar PF (3.83 km SE), Kumundi PF(6.39 km S), Khairimundi RF (9.20 km S), Raiguda PF (2.25 km SW) located within 10 km radius of the proposed project site and implemented.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The project authorities are to submit a copy of the recommendations of the Forest Department along with an action plan along with implementation schedule.		PP has submitted copy of a work order for preparation of site specific wildlife conservation plan along with recommendation of State Forest Department, regarding likely impact of the proposed steel plant on the surrounding reserve/protected forest located with 10 km radius of the proposed project site vide letter No.SML/WO-CEMC/SSWCP/2022/08 Dated 29th July, 2022 to M/s Centre for Envotech and Management Consultancy Pvt. Ltd.
9.	**Stipulated General Condition No.vi:** Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended form time to time. The treated wastewater shall be utilized for plantation purpose.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The project authorities should install a Waste Water Treatment Plant and ensure that all the treated water should be recycled and reused.	Complied As indicate in S No -1,	Same as Sl. No.1.
10.	**Stipulated General condition No.xi:** As proposed, Rs. 1401.05 Lakhs and Rs. 753.64 Lakhs shall be earmarked towards total capital cost and recurring cost/annum for environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministryof Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar

	It has been submitted the project authorities that due to financial constraints the project, Integrated Steel Plant, could not be constructed and commissioned. Presently they are operating only the pelletisation plant. It was observed that pollution control equipment have been installed and is under regular maintenance for which funds has been earmarked in the annual budget. It was reported by the project authorities that an amount of 5 crore for Capital cost and 40 lakhs per annum has been spent under recurring cost for environmental pollution control measures.		PP informed that 'due to financial constraints the project integrated steel plant could not be constructed and commissioned'. At present only 0.6 MTPA pellet plant is in operation. Expenditure on environmental protection measure reported as Rs.5.00 crores for capital cost and Rs.40.00 lakhs per annum for recurring cost. It was also informed that in 2022-23 additional capital expenditure of around Rs.15 lakh have been planned in existing pellet plant in addition to recurring cost.
11.	**Stipulated General Condition No.xvi:** The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.		
	Observation of Regional Office on report dated 20.06.2022	Action Taken Report submitted By M/s Sree Metaliks Ltd Dt.21.07.2022	Comments By IRO Bhubaneswar
	The project authorities should sent url address of the website wherein the status of compliance of the stipulated environment clearance conditions, including results of monitored data has been uploaded and updated to this office. The project authorities should also display the data on criteria pollutant levels namely; SPM, RSPM, S02, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project at convenient location near the main gate of the company in the public domain.	<u>Complied</u> The project has already the url address i.e. https://sreemetaliks.com, where compliance of the Environmental Clearance conditions and monitoring data are being uploaded. Towards display of the data on criteria pollutant levels namely; SPM, RSPM, S02, NOx (ambient levels as well as stack emissions), we have displayed it near the main gate which is being updated every month. The Electronic display board has been installed at the main gate.	Six monthly compliance for the period Oct., 2021 to March, 2022 has been uploaded in the website. The monitoring data has also been uploaded as annexure-I in the website. Display board has been provided at the main gate of the company in public domain to display critical sectoral parameters.

Mahat

(डॉ. टी. एच. महतो/Dr. T. H. Mahato)
वैज्ञानिक-डी / Scientist 'D'

ON-SITE EMERGENCY PLAN

SREE METALIKS

FOR

M/S. SREE METALIKS LIMITED

AT-ANRA, POST-UPPER RAIGODA

CONTENT

1.0 GENERAL INFORMATION ABOUT THE FACTORY:

1.1 Brief Description of Plant:

M/s. Sree Metaliks Limited (SML) is having a steel manufacturing facility to produce TMT bars through Induction Furnace route. It is situated at Anra .Post-Upper Raigoda Dist- Keonjhar, Odisha. This Unit is situated in the Industrial belt of Barbil district between Keonjhar.

Production Detail:

Sl no.	Product	Quantity per Annum
1	0.6MPTA Pelletisation-1 unit existing	
2	1 MPTA Benificatin Plant (under construction)	
3	0.6 MPTA Pelletisation-2(under construiction)	

As Per Direction:- Northern Region-Main road & Anra village
Southern Region:- Cultivated Land Western Region:- Perianal Water line

Eastern Region: - Forest Area (Non-Reserve)

Name & Address of the Factory : **M/s. Sree Metaliks Limited At - Anra, Po – upper raigoda Dist - Keonjhar, Odisha.**

Name & Designation of the Occupier: Shri Rewati Raman Sharma, Director

At - SML House, Main Road, Barbil, Po - Barbil
Dist - Keonjhar, Odisha.
Mob No – 6371087017
Email- raman@sreemetaliks.com

Name of the Manager : **Mr. Sisir Kumar Raut, AVP (HR & Admin) At - Anra, Po - Raigoda,**

Dist - Keonjhar, Odisha.
Mob No – 7653-071211

Email: skraut@sreemetaliks.com

1.2 Metrological Information:

The nearest Metrological station of the existing plant is at Keonjhar. Salient Metrological data the about site as follows:

Metrological Information

Sl. No	Parameter	Summer Season	Rainy Season	Winter Season
1	Average wind speed (m/sec)	12.5	10.7	4
2	Average Ambient Temperature (^{0}C)	37	27	12
3	wind direction	South-North	South-West	North-East
4	Relative Humidity	54-81	80-90	54-63

Source – IMD Centre, Keonjhar

SURROUNDINGS DETAILS OF THE FACTORY: -

M/S Sree Metaliks Ltd. Is situated at Anra, Po-Upper Raigoda, Dist:- Keonjhar, Odisha. This unit is surrounded by the following landscape in it's neighbour.

Co-ordinate:-

As per Direction:-Northern region:-Main road & Anra village
Southern region:- Cultivated Area
Western region:- Perianal water line

Eastern region:- Forest area (Non reserve)

1. Brief Description of Manufacturing Process:

Sree Metaliks Limited (SML) was incorporated in the year 1995. SML has an integrated setup of mining and two manufacturing units in Keonjhar and one manufacturing unit in Angul, Odisha. The Anra Unit of Sree Metaliks Ltd. is having two Pelletisation unit (One in operation and the 2nd one is under construction & one beneficiation unit under constrcution. It is situated at Anra, PO- Raigoda,Dist.- Keonjhar,Odisha.

Production Capacity:-

1. 0.6MPTA Pelletisation -1 Unit Existing
2. 1 MPTA Beneficiation Plant (Under construction)
3. 0.6 MPTA Pelletisation -2 (Under construction)

Process Description- Pelletisation:

The capacity of the pelletizing plant is 0.6 MTPA (million tonnes per annum) finished pellets per year by using Grate–Kiln technology.

Process:

Raw material iron ore fines are fed to Iron ore grinding system (IOGS – 120 t/h) for grinding the ore to 95% -200 mesh. We use the wet grinding process for this. The slurry produced is then fed to filter press. For Pelletisation, we require filter cake of 9.5% to 10.5% moisture.

Filter Press system is then used to remove the excess water from the slurry to produce filter cakes of approximately 9.5% to 10.5% moisture. The produced Filter cakes are then transported to the proportioning building by belt conveyor. The raw material, Bentonite and the dust collected in the plant is subjected to automatic weight proportioning with set proportioning ratio according to production requirements.

The proportioned mix is then mixed in vertical mixer supplied by M/s EIRICH from Germany and the mixed proportioned is fed to Balling Disc building (Pelletizing). The Balling building is provided with 3 sets of 6 m dia balling disc. 0.5% to 1.0% water will be added in pelletizing process so as to realize optimum value of water content in the mix for pelletizing and green pellets are produced.

The green pellets produced are screened by roller screen to screen out (8) mm to (+15) mm grain size and is then distributed onto wide belt conveyor and swing belt conveyor. It is uniformly

distributed onto the travelling grate bed which has a specified thickness of 160-180 mm.

The green pellets are dried and preheated on travelling grate machine (3m width, 36 m Length). The drying process consists of Updraft drying section, Downdraft drying section, Preheating section I and Section II.

The Roasting and solidification process of pellet is done in the rotary kiln (4m dia, 32 m Length) and rolled along the circumference of rotary kiln. Specially designed Powder coal burner is installed at kiln discharge end and the flame length, high temperature position and, air-powdered coal ratio. With heat radiation action inside the kiln, the pellet is roasted at the same time of rolling so as to ensure uniform roasting. The roasting temperature of pellet is 1250 – 1350^{o}C.

The pellets discharged from rotary kiln are about 1250^{o}C and is uniformly distributed on the pellet car of annular cooler through receiving hopper of annular cooler. The pellet is then cooled to below 100^{o}C and is further oxidized in the annular cooler so that the FeO content is reduced to below 1%. The discharging hopper of annular cooler discharges the < 100^{o}C finished pellet to finished product belt conveyor and then to product Stock yard through Tripper conveyor.

Pellet Specifications:

Fe(T)=64.00%(+/- 0.50)
SiO2=4.25%(max) Al2O3
=3.25%(max)
CaO+MgO=1.00%(max)
CCS=220 kg/pellet (+/-10)
Ti=93.50(+/-0.50)
Size = 5mm to
18mm=90(min)
-5mm=5%(max)
+18mm=5%(max)
Porosity= 20(min)

Process Description- Iron Ore Beneficiation

Production of Iron ore Beneficiation: 1,000,000 TPA (Throughput) and the final output will be 780,000 TPA (No. of working days/hr – 330, Working hours/day in 3-shift operation – 24 hrs)

The beneficiation process of ore results in a more concentrated form of the product. It will be used for the preparation of iron ore fines for pelletization. The Raw iron ore fines of the grade 55-58% Fe from various mines will be beneficiated to obtain the product with > 63% Fe for use in the in-house pellet plant.

Process Description: The project utilizes beneficiation technology and produces a

Concentrate of > 63% Fe from the Iron Ore Fines of average grade 55% to 58% Fe. The major technological processes involved in Iron Ore Beneficiation are:

Size reduction,

Size separation or classification,

Iron Ore up-gradation as beneficiation, Thickening of slurry and pumping of slurry, Residual /Slime disposal.

Size Reduction: The Iron Ore in the form of fines (99% passing 10 mm size) are grounded to the size 80% < 45 micron. Grinding of Iron Ore will be done by Wet grinding process

Wet grinding process: Wet Grinding Mill is used to grind iron ore. The ground product in the

form of slurry is pumped to the slurry storage tank fitted with agitating mechanism. Water and finely ground raw materials are separated by filters to obtain filter cakes. In the present context, wet grinding is preferred as there will be low emissions and losses. High Fe grains are liberated from the gangue materials by grinding. Since the downstream of the grinding process, like beneficiation and concentration, are carried out with wet process, wet grinding process is considered to be most suitable instead of dry grinding.

Size Separation: Size classification is done using hydro-cyclone and vibratory screen. This is done to obtain the uniformity in the further feed for efficient concentration of ore.

Beneficiation or Concentration: To achieve the desired Fe level of Concentrate, the

ground and classified material is upgraded by removing the gangue materials.

Slime Disposal: The generation of slime quantity from the Beneficiation Plant will vary from 0.21 – 0.23 MTPA depending on the Fe content/quality of Iron ore feed. Chemical Composition of Residuals / Slimes Fe: < 40%, SiO2: 10-14%, Al2O3: 8-10%. Particle size: 100 % < 75-micron Pressure Filters will be installed to dewater the Slimes and dry slimes of a maximum of 10-15% moisture would be conveyed through a conveyor to designated Slime storage area within the plant boundaries.

Manufacturing Process: Fe content of lean iron ore is improved by the Beneficiation process. The required green ball strength of pellets is obtained by using quality materials. The ore is grounded to obtain the fineness of the required quality. Characteristics of ore fines govern the degree of fineness and it has been observed that under Indian conditions, grinding of ore to size 60-80% passing through 325 mesh (-0.044 mm) is necessary for the production of high strength green pellets.

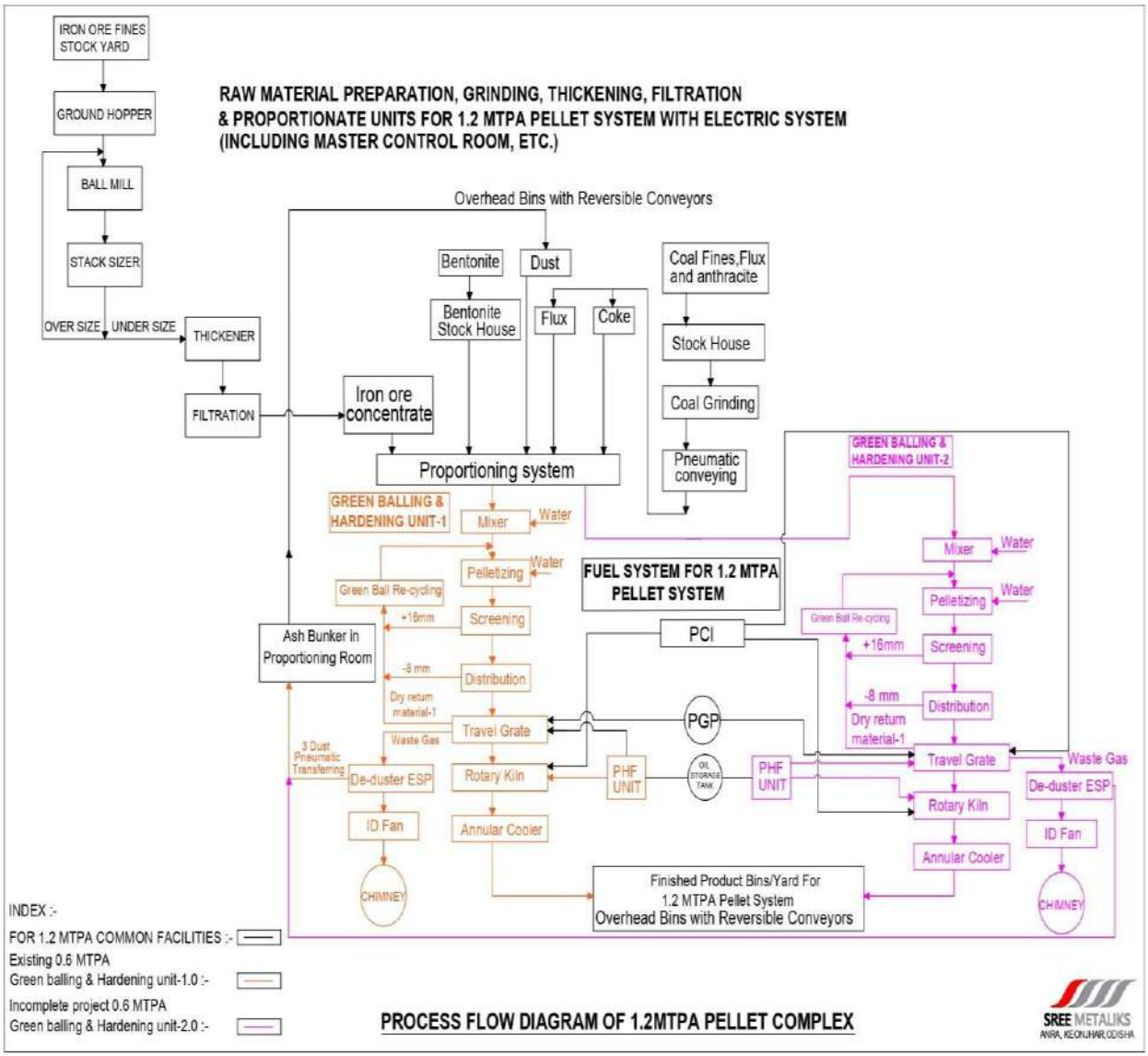
The overall plant yield would be average 77-78% depending on the feed quality of the incoming iron ore. Rejects may vary from 21-23%. Iron Ore feed fines are proposed to be used in beneficiation plant from various mines and the range of its chemical composition is envisaged as Fe%: 55.0 to 58.0, SiO2: 1.7 to 3.8, Al2O3: 2.50 to 3.9 &

Moisture: 8.0 to 10%.

The physical characteristics of the iron ore fines considered or designing the plant and associated facilities are as given below:

- Top size: 10 mm
- Specific gravity of solids: 4.5 – 4.6
- Bulk density: 2.4 – 2.6 Tons/cum
- Bond Work Index: 12 kWh/Ton
- Angle of repose: 35^{o}
- Moisture content: 8-10%.

1.4 Flow Chart (Diagram) of Manufacturing Process:-



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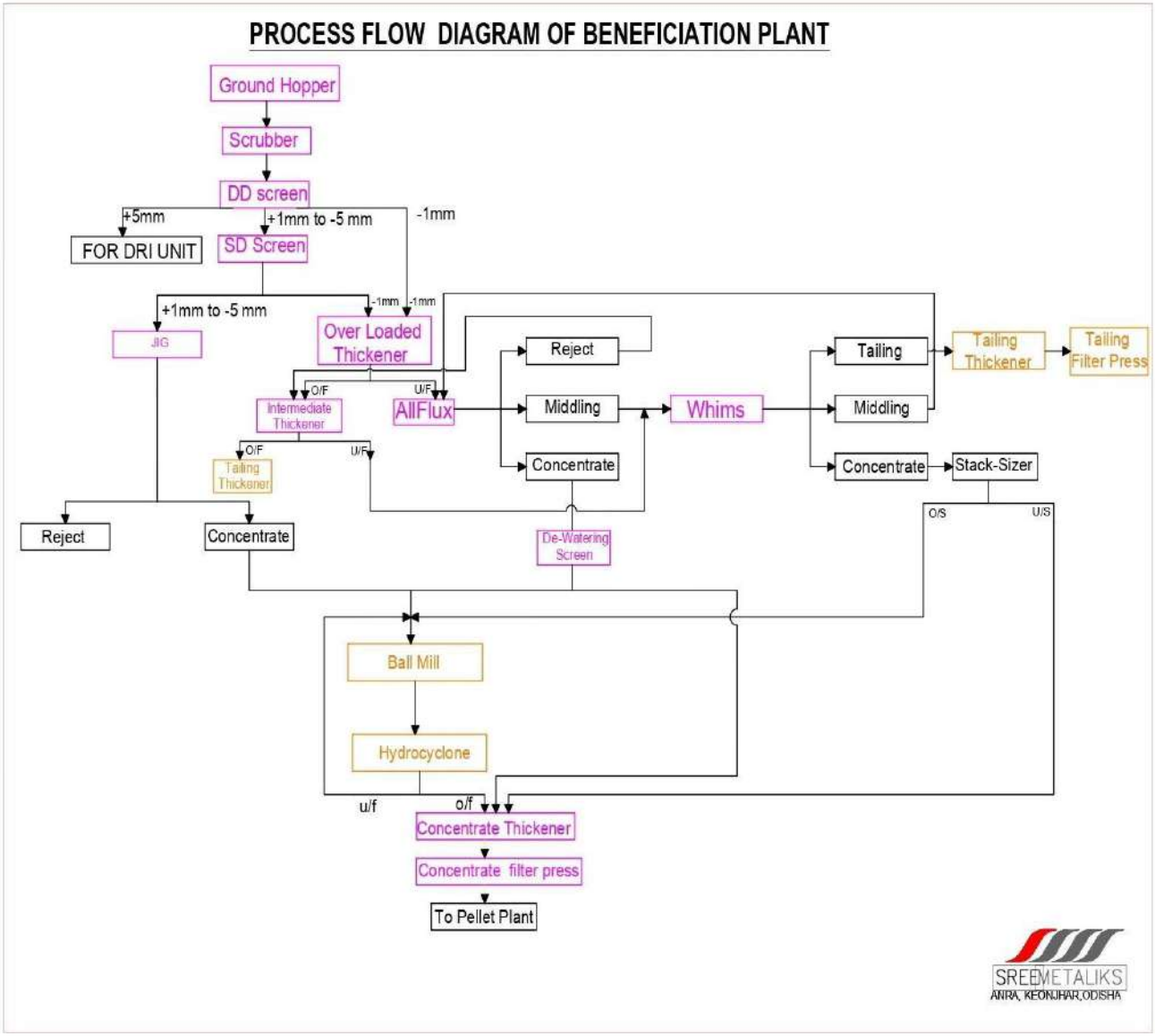
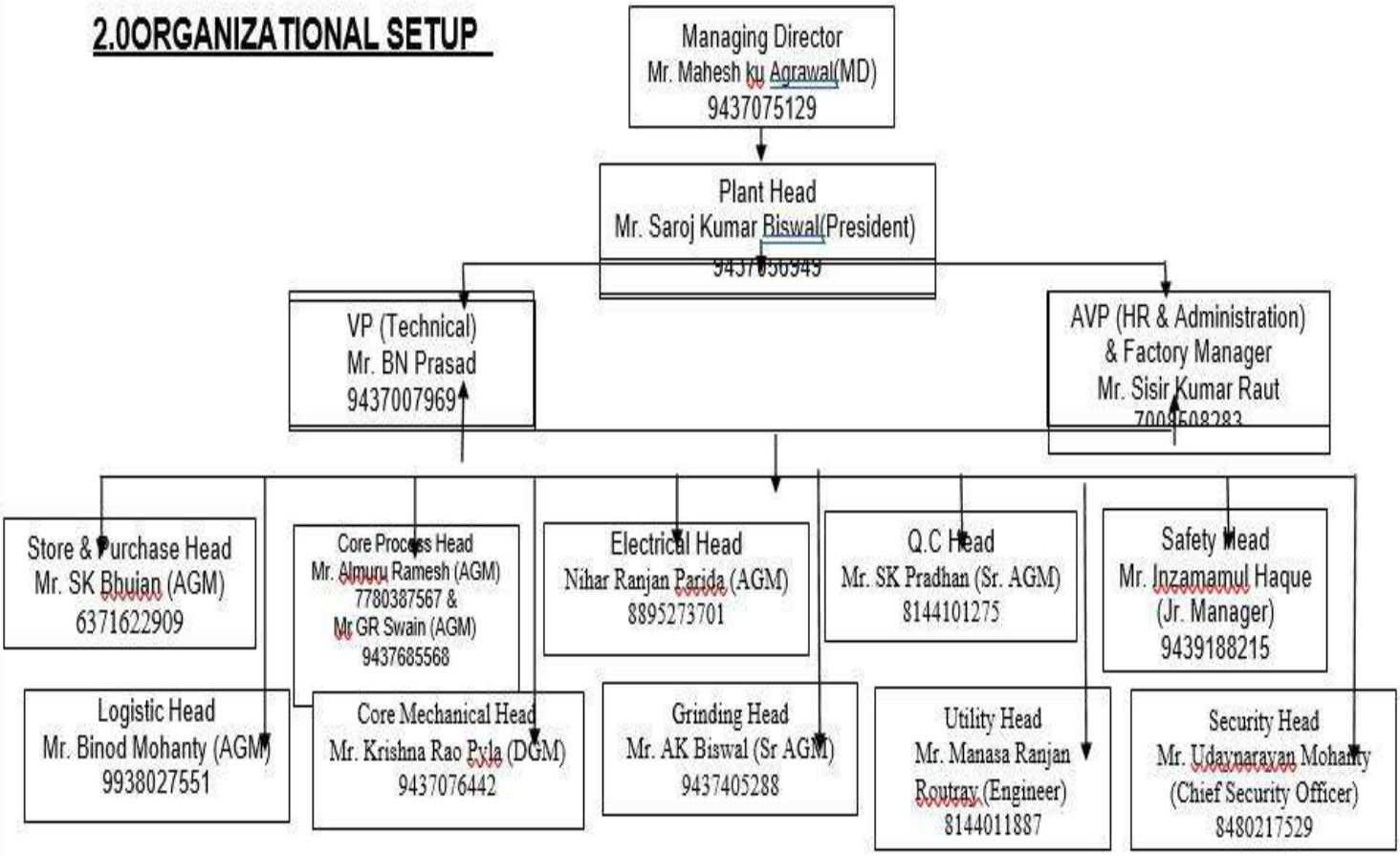

PROCESS FLOW DIAGRAM OF BENEFICIATION PLANT
Ground Hopper
Scrubber
DD screen
+5mm
+1mm to -5 mm
-1mm
FOR DRI UNIT
SD Screen
+1mm to -5 mm
-1mm
-1mm
JIG
Over Loaded Thickener
Reject
Tailing
Tailing Thickener
Tailing Filter Press
O/F
U/F
Intermediate Thickener
AllFlux
Middling
Whims
Middling
O/F
U/F
Tailing Thickener
Concentrate
Concentrate
Stack-Sizer
O/S
U/S
Reject
Concentrate
De-Watering Screen
Ball Mill
Hydrocyclone
u/f
o/f
Concentrate Thickener
Concentrate filter press
To Pellet Plant
SREEMETALIKS
ANRA, KEONJHAR,ODISHA

2.0ORGANIZATIONAL SETUP



3.0 MAN POWER:

The license manpower of the factory is 1000. Maximum number of persons available in the plant at any point of time is as follows;

Sl. No.	Shift	Period	No. of Persons engaged		
			Regular	Contractor	Total
1	A	06.00 to14.00	170	90	260
2	B	14.00 to 22.00	150	80	230
3	C	22.00 to 06.00	162	90	252
4	General	9.00 to 18.00	190	15	205

TOTAL=947

4.0 PRODUCTS

The Plant is designed to produce the following products & by-Products as shown in following table.

SL NO	NAME OF PRODUCT BY - PRODUCTS	CAPACITY OF MAX. STORAGE	QUANTITY OF ONE TIME STORE	STORAGE TYPE	SIZE OF STORAGE AREA L X B X H
1	Pellet	5000 MT	3500 MT	Open Yard	40x160Mtrs

SL NO	NAME OF PRODUCT	CAPACITY OF MAX. STORAGE	QUANTITY ONE TIME STORAGE	STORAGE TYPE	SIZE OF STORAGE AREA L X B X H
	NIL				

5.0 INVENTORY OF RAW MATERIALS

The inventories of raw materials used in the process are listed in the table below.

Sl. No.	Raw Materials	Quantity of maximum storage	Quantity of one time storage	Storage Type	Size Of Storage Area L X B X H
1	Iron Ore Fines	5 Lacs MT	3.5 Lacs MT	Open ground	250 Mtrs x 150 Mtrs 200 Mtrs x 200 Mtrs 250 Mtrs x 100Mtrs
2	Coal	1500 MT	1200 MT	Open ground	100 Mtrs x 40 Mtrs
3	Bentonite	250 MT	220 MT	Shed house	60 Mtrs x 50 Mtrs
4	Lime Stone	500 MT	350 MT	Concrete ground	50 Mtrs x 50 mtrs
5	Dolomite	500MT	350 MT	Concrete ground	50 Mtrs x 50 Mtrs
6	Pet Coke	3000 MT	2000MT	Shed house	70 Mtrs x 30 Mtrs

6.0 INVENTORY OF HAZARDOUS SUBSTANCE: -

Sl.No	Name if Hazardous Substances	Quantity of one time storage	Storage Type
1	HSD	20KL	Underground storage tank
2	Transformer Oil	640 L	In the transformer
		2 X 3482 L	In the transformer
3	Process Oil	240 KL	Main Tank-1 (above ground)
		240 KL	Main Tank-2 (above ground)
		15 KL	Kiln Day Tank (above ground)
		06 KL	TG Day Tank (above ground)

6.1 Details of Transformer

Sl. No.	Location	Capacity of Transformer	Transformer Oil Capacity
1	PELLET-1(TR-1)	5.8 MVA	3482 LTR
2	PELLET-1(TR-2)	5.8 MVA	3482 LTR
3	PELLET-1(TR-3)	3 MVA	640 LTR
4	BENEFICIATION(TR1)	3.7 MVA	2000 LTR
5	BENEFICIATION(TR2)	3.7 MVA	2000 LTR
6	BENEFICIATION(TR3)	3 MVA	1800 LTR
7	PELLET-2(TR-1)	3.7 MVA	2000 LTR
8	PELLET-2(TR-2)	3.7 MVA	2000 LTR

7.0 HAZARDOUS SUBSTANCES /GASES PRODUCED /GENERATED DURING THE PROCESS

Sl. No.	Name	Production / Use Detail	Quantity of Storage
1	NIL		

8.0 IDENTIFICATION OF HAZARDS:-

Sl. No.	Probability risk factor of occurrence	Hazard	Impact
1	HSD	Fire ball may occur due to rupture in the Tank and Subsequent release and instantaneous ignition	Fire may propagate to the nearby area
2	Transformer Oil	Fire ball may occur in case of direct contract with flame	Fire may propagate to the nearby area

9.0 IDENTIFICATION OF MOST CREDIBLE HAZARD

Case – 1 Fire Hazard in HSD Storage Tank

HSD is a flammable liquid as per schedule-1, Part-II (b) (v) having flash point of 66^0C and auto ignition temperature of 256^0C and explosive limit of 5-7% volume in air. So, it is susceptible to fire hazard. Whenever HSD catches fire it shall manifest in the form of pool fire. The significant heat flux that spread from the source in case of pool fire in HSD tank is mentioned below.

Significant heat flux experienced at distance due to pool fire on HSD in different season.

Storage details	Significant heat level Kw/m²	Experience at distance in Mtrs.			Indication
		Summer	Rainy	Winter	
HSD 20KL	4.5	6	4.5	5	Causes pain if unable cover the body within 20 seconds. However blistering of the skin (2nd degree burn) is likely caused with no lethality.
	12.5	2.5	4	3	Minimum energy required for melting of plastic
	37.5	1.4	2	2	Sufficient to cause damage to the equipment.

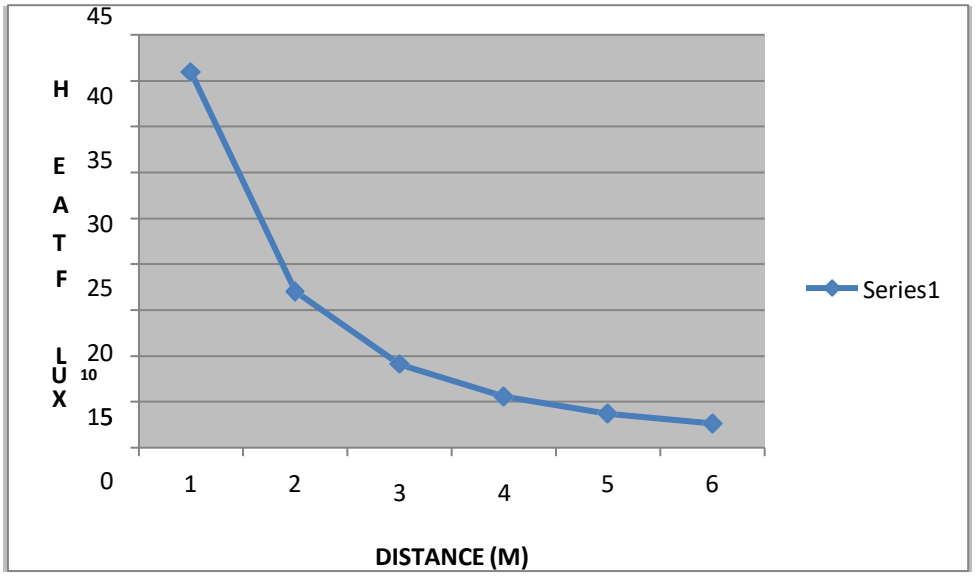
FIRE MODELLING FOR HSD IN STORAGE TANK

INPUT DATA FOR SUMMER SEASON

STORAGE DETAILS		
Type of Storage	:	Under Ground Tank
Capacity	:	20 KL

METEOROLOGICAL DATA	SEASON (Source – IMD Centre, Keonjhar)		
Parameter	**Summer**	Rainy	Winter
Average wind speed Km/Hr	**11.9**	9.6	3
Average wind direction	**SW**	SW	NE
Humidity	**60**	98	76
Average ambient air temperature ^{0}C	**35**	26	10

HEAT FLUX DATA FOR SUMMER SEASON: Software used-ALOHA



SIGNIFICANT "HEAT LEVEL" EXPERIENCED AT DISTANCE

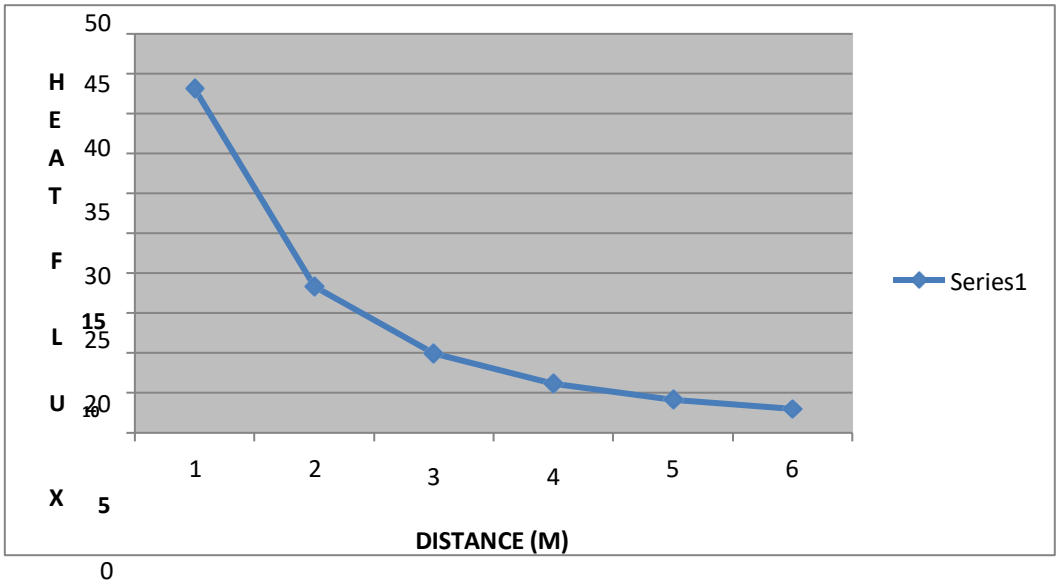
Significant Heat Level Value (KW/M^2)	Distance (M)	Indication
4.5	6	Causes pain if unable to cover the body within 20 seconds. However blistering of the skin (2nd degree burn) is likely caused with no lethality.
12.5	2.5	Minimum energy required for melting of plastic
37.5	1.4	Sufficient to cause damage to the equipment.

INPUT DATA FOR WINTER SEASON

STORAGE DETAILS		
Type of Storage	:	Under Ground Tank
Capacity	:	20KL

METEOROLOGICAL DATA	SEASON (Source – IMD Centre, KEONJHAR)		
Parameter	Summer	Rainy	**Winter**
Average wind speed Km/Hr	11.9	9.6	**3**
Average wind direction	SW	SW	**NE**
Humidity	60	98	**76**
Average ambient air temperature ^{0}C	35	26	**10**

HEAT FLUX DATA FOR WINTER SEASON: Software used-ALOHA



SIGNIFICANT "HEAT LEVEL" EXPERIENCED AT DISTANCE

Significant Heat Level Value (KW/M^2)	Distance (M)	Indication
4.5	5	Causes pain if unable to cover the body within 20 seconds. However blistering of the skin (2nd degree burn) is likely caused with no lethality.
12.5	3	Minimum energy required for melting of plastic
37.5	2	Sufficient to cause damage to the equipment.

Case-2 Fire hazard in transformer oil in transformer

Transformer oil is a flammable liquid as per schedule-1, Part-II (b) (v) having flash point of 144^0C, auto ignition temperature of $>270^0$C and explosive limit of 0.7% volume in air. So, it is susceptible to fire hazard. Whenever Transformer oil catches fire it shall manifest in the form of pool fire. The significant heat flux that spread from the source in case of pool fire in transformer is mentioned below.

Significant heat flux experienced at distance due to fire on transformer containing transformer oil in different season.

Storage details	Significant heat level Kw/m^2	Experience at distance in Mtrs.			Indication
		Summer	Rainy	Winter	
TRANSFORMER OIL 3482 L	4.5	17.9	17.2	15.5	Causes pain if unable cover the body within 20 seconds. However blistering of the skin (2nd degree burn) is likely caused with no lethality.
	12.5	9.8	9.5	8.3	Minimum energy required for melting of plastic
	37.5	3.0	3.8	2.9	Sufficient to cause damage to the equipment.

FIRE MODELING FOR TRANSFORMER OIL

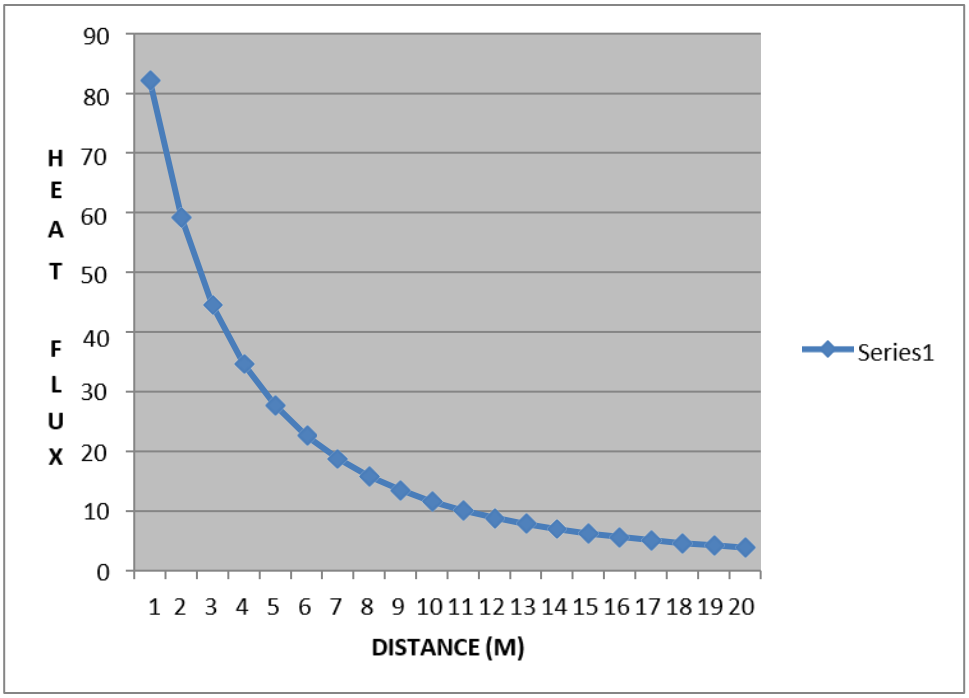
INPUT DATA FOR SUMMER SEASON

STORAGE DETAIL	
Storage type	Inside the transformer
Capacity	3482 L

METEOROLOGICAL DATA	Season (Source – IMD Centre, KEONJHAR)		
Parameter	**Summer**	Rainy	Winter
Average wind speed Km/Hr	**11.9**	9.6	3
Average wind direction	**SW**	SW	NE
Humidity (%)	**60**	98	76
Average ambient air temperature (^{0}C)	**35**	26	10

Heat propagation Curve. Software used-ALOHA

20,000KVA Transformer : Summer Season:



SIGNIFICANT "HEAT LEVEL" EXPERIENCED AT DISTANCE

Significant Heat Level Value (KW/M^2)	Distance (M)	Indication
4.5	17.9	Causes pain if unable to cover the body within 20 seconds. However blistering of the skin (2nd degree burn) is likely caused with no lethality.
12.5	9.8	Minimum energy required for melting of plastic
37.5	3	Sufficient to cause damage to the equipment.

FIRE MODELING FOR TRANSFORMER OIL

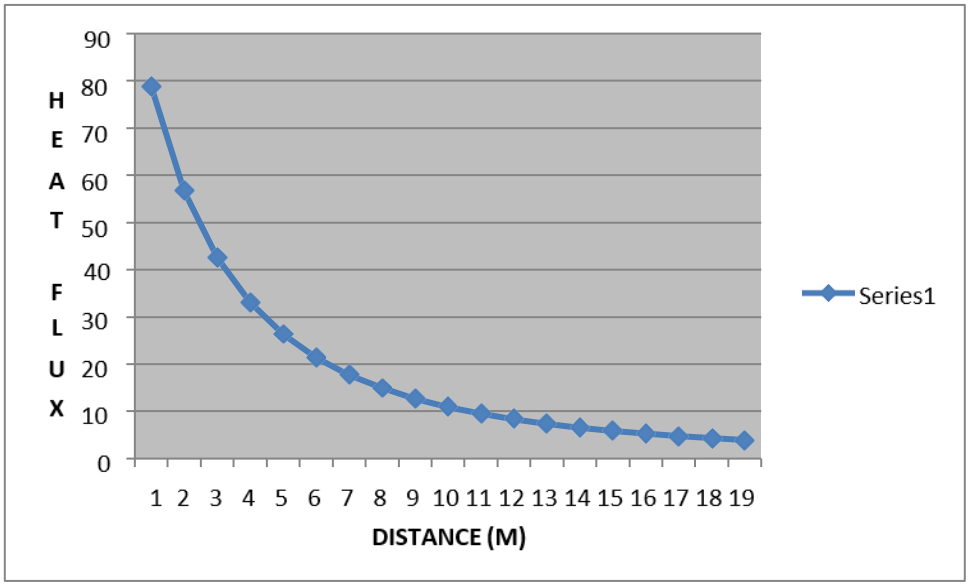
INPUT DATA FOR RAINY SEASON

STORAGE DETAIL	
Storage type	Inside the Transformer
Capacity	3482 L

METEOROLOGICAL DATA	Season (Source – IMD Centre, KEONJHAR)		
Parameter	Summer	**Rainy**	Winter
Average wind speed Km/Hr	11.9	**9.6**	3
Average wind direction	SW	**SW**	NE
Humidity (%)	60	**98**	76
Average ambient air temperature (^{0}C)	35	**26**	10

Heat propagation Curve. Software used-ALOHA:

20,000KVA Transformer:



SIGNIFICANT "HEAT LEVEL" EXPERIENCED AT DISTANCE

Significant Heat Level Value (KW/M^2)	Distance (M)	Indication
4.5	17.2	Causes pain if unable to cover the body within 20 seconds. However blistering of the skin (2nd degree burn) is likely caused with no lethality.
12.5	9.5	Minimum energy required for melting of plastic
37.5	3.8	Sufficient to cause damage to the equipment.

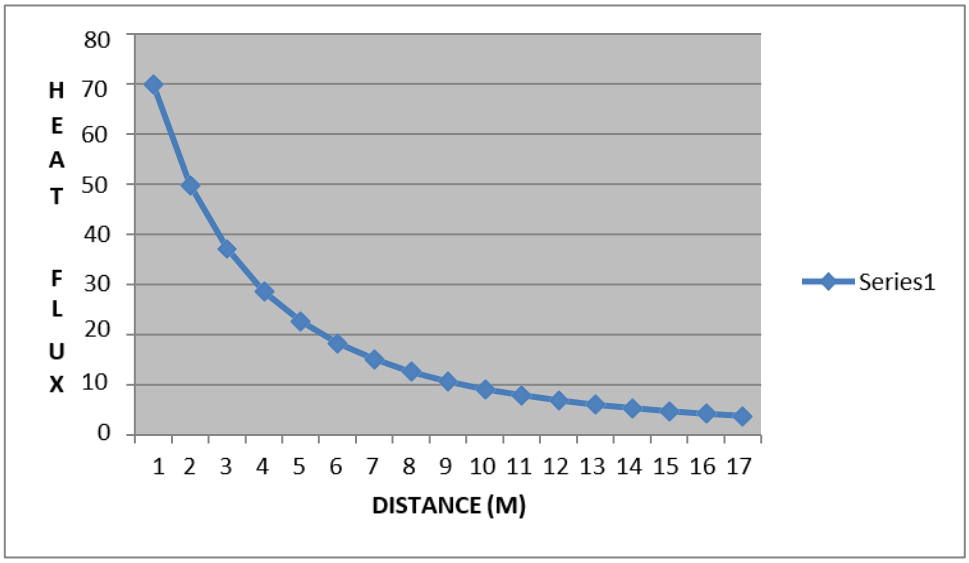
FIRE MODELING FOR TRANSFORMER OIL

INPUT DATA FOR WINTER SEASON

STORAGE DETAIL			
Storage type	Inside the Transformer		
Capacity	3482 L		
METEOROLOGICAL DATA	Season (Source – IMD Centre, KEONJHAR)		
Parameter	Summer	Rainy	**Winter**
Average wind speed Km/Hr	11.9	9.6	**3**
Average wind direction	SW	SW	**NE**
Humidity (%)	60	98	**76**
Average ambient air temperature (^{0}C)	35	26	**10**

Heat propagation Curve. Software used-ALOHA:

20,000KVA Transformer:



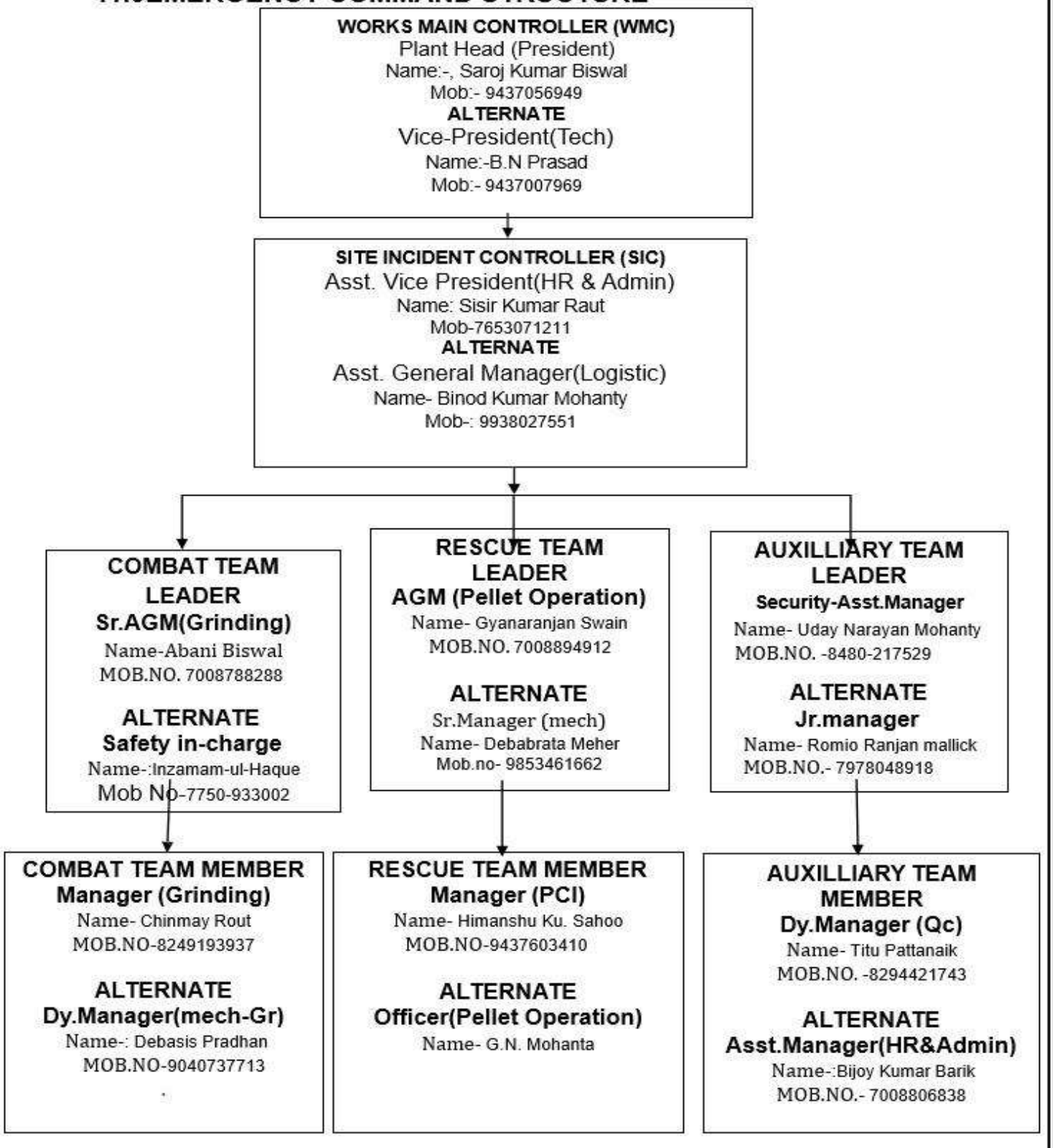
SIGNIFICANT "HEAT LEVEL" EXPERIENCED AT DISTANCE

Significant Heat Level Value (KW/M^2)	Distance (M)	Indication
4.5	15.5	Causes pain if unable to cover the body within 20 seconds. However blistering of the skin (2nd degree burn) is likely caused with no lethality.
12.5	8.3	Minimum energy required for melting of plastic
37.5	2.9	Sufficient to cause damage to the equipment.

10. PLOT PLAN

Plot plan has been given in annexure which shows the hazard zones, emergency control room, assembly points, and emergency exit route, Iso-risk control & fire hydrant l

11.0EMERGENCY COMMAND STRUCTURE



*12.0 **Role** Of Key Persons Of Emergency Command Structure*

12.1 Works Main Controller (WMC) :-

⇒ On being informed, rush to the scene and take overall charges of thesituation

⇒ Make quick assessment of the situation and decide declaration of emergencyby blowing the siren in appropriate code [**intermittent three times with half minutes interval**]

⇒ Make continuous review and assess the possible developments to determinethe extent of damage to plant and human beings

⇒ Shut-down the plant, if necessary

⇒ Ensure that casualties are receiving adequate attention

⇒ Liaise with the fire services, police services and other statutory authorities

⇒ Extend all sorts of help through mutual aiders to control over the emergency situation.

⇒ Declare closure of the emergency by blowing the siren [**only once long siren for 25 seconds**]

⇒ Issue the authorized statements to the media services

⇒ Report all statutory authorities in the prescribed manner

⇒ Communicate to employees about the mishap, measures taken and giving confidence to employees for avoiding recurrence of the incident by investigation and ordering preventive measures to be implemented.

12.0 Site Incident Controller :-

⇒ On hearing Emergency siren, rush to the scene and take overall charges of the situation

⇒ Make quick assess about the gravity of the situation and appraises Works Main Controller

⇒ Ensure combat & rescue operation is attended.

⇒ Report the development of the situation time to time to Works Main Controller

⇒ Provide the required information to the fire brigade team for fire fighting

⇒ Preserve the evidences for the subsequent inquiries.

12.1 Combat Team Leader :-

⇒ On hearing the emergency siren, rush to the scene with fire fighting teamwith sufficient equipment in the minimum possible time

⇒ Ensure the team members resume their position with appropriateequipment

⇒ Monitor the fire fighting operation to control the situation

⇒ Ensure that the situation is controlled by arresting, spillage, fighting fire, shutting of the valve and equipment by the team.

⇒ Assist the Site Incident Controller till the situation is under control

⇒ On hearing the emergency siren, rush to the scene with fire fighting,equipment's in the minimum possible of time .

⇒ Operate the fire fighting equipment's for controlling the situation.

12.2 Rescue Team Leader :-

⇒ On hearing the emergency siren, rush to the scene with team members in the minimum possible time.

⇒ Keep necessary equipment's of first-aid for preliminary treatment

⇒ Keep the ambulance ready to carry the injury persons to the hospital

⇒ Ensure the proper personal protective equipment's are used for rescueoperation

⇒ Guide the mutual aid partners for their course of action at the site

⇒ Guide the non-essential persons to reach assembly point

12.3 Rescue Team Members :-

⇒ On hearing the emergency siren, rush to the scene with appropriate personal protective equipment's.

⇒ Evacuate the workers from emergency site to assembly points.

⇒ Search the missing person on the roll call basis.

⇒ Rescue the injury persons and arrange for treatment.

12.4 Auxiliary Team Leader :-

⇒ On hearing the emergency siren rush to the scene.

⇒ Intimate statutory authorities over phone

⇒ Intimate nearest Fire Station over phone

⇒ Intimate mutual-aider over phone

⇒ Keeps the first-aid and primary health center staff, equipment ready to takecare of immediate medical needs

⇒ Takes care of victims' family

⇒ Make all arrangement like transport, other needs, arrange finance

⇒ Ensure all casualties are shifted to hospital for medical treatment

⇒ Keep records of casualties and provide information of the matter to WorksMain Controller.

12.5 Auxiliary Team Members :-

⇒ On hearing emergency siren, rush to the scene.

⇒ Provide immediate first-aid treatment to the victims

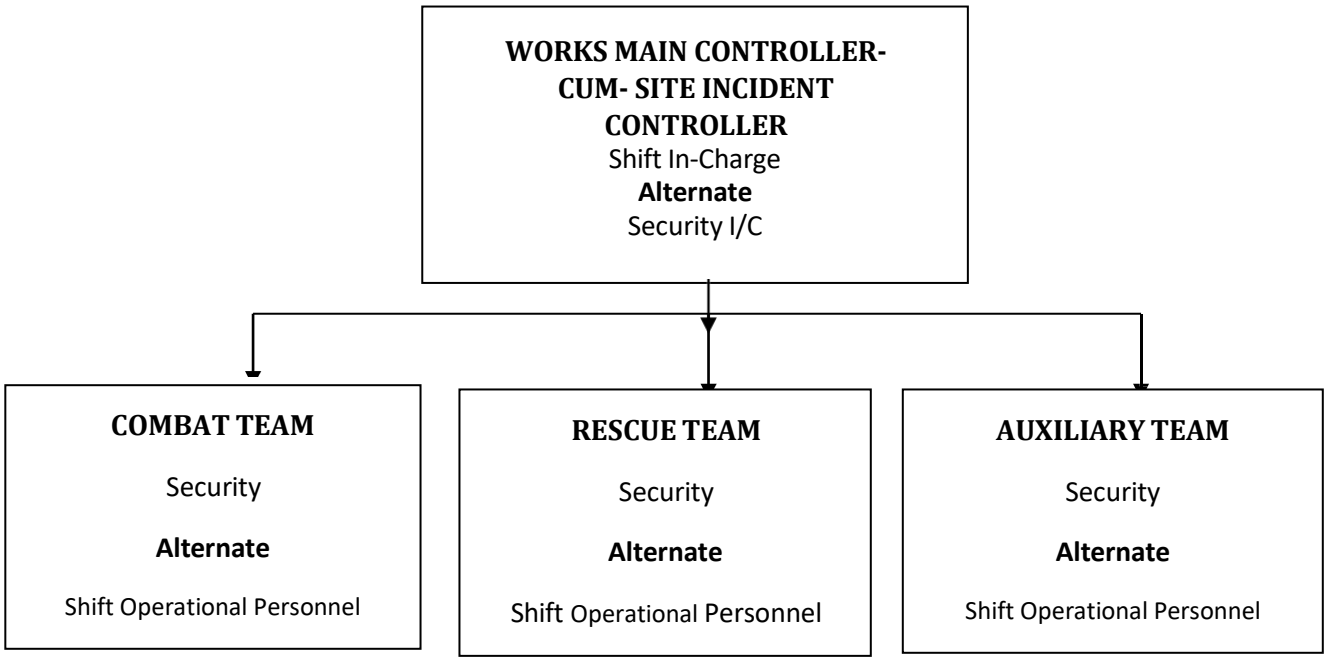
⇒ Ensure ambulance vehicle ready

⇒ Coordinate with combat team, rescue team, statutory authorities and mutual-aid partners

12.9 Emergency Co-Ordinator (S. Safety Officer) :-

He is has role during emergency situation i.e to co-ordinate among all of smooth mitigation of the emergency situation and also to keep co-ordination among the personnel of command structure.

13.0 Silent Hour Command Structure



Role Of Key Persons In Silent Hour Command Structure

- Silent Hour is the time when General Shift people are not available
- During Silent hour, **Shift In charge/ Security In charge shall act as Works Main Controller-cum Site Incidence Controller , till the arrival of the Works Main Controller**
- In case of emergency ,the shift In charge/ the security in-charge informs Works Main Controller, Site Incident Controller, Combat Team Leader, Rescue Team Leader and the Auxiliary Team Leader by telephone or by sending special messenger to their residences.
- On receiving the information the Works Main Controller, Site Incident Controller, Combat Team Leader, Rescue Team Leader and Auxiliary Team Leader shall reach the site at the earliest and take over the overall charges of the situation.
- Thereafter the action plan as well as the role of key persons shall be same as the normal hour execution of Command Structure

14.0 Action Plan for On-Site Emergency Plan:

Step No.	Initiator	Action To Take
1.	The parson noticing the emergency	➢ Inform the Security Gate and the Asst. Supervisor who in turn will inform Works Main Controller immediately regarding the emergency.
2	Works Main Controller (WMC)	➢ Rush to Emergency Site and observe the ongoing activities. ➢ Take stock of the situation in consultation with the Site Incident Controller. ➢ Move to Emergency Control Room. ➢ Take decision on declaration of emergency and ask for emergency wailing siren. ➢ Advise Auxiliary Team Leader to inform the statutory authorities and seek help of mutual aid if required. ➢ Decide on declaration of normalcy of emergency after combating the situation. ➢ Ensure that the emergency operations are recorded chronologically.
3.	Site Incident Controller (SIC)	➢ On receiving Information from the Works Main Controller (WMC) and will rush to Site. ➢ Make quick assess about the gravity of the situation and appraises Works Main Controller ➢ Arrange to evacuate the unwanted persons and call for additional help. ➢ Time to time to pass information to the Works Main Controller (WMC) about the situation at site.
4.	Combat Team Leader (CTL)	➢ To organize for trained personnel equipped with fire fighting appliances and call for fire tender at the place of fire. ➢ To start combating, shutdown equipments and taken steps to extinguish fire with fire fighting facilities. ➢ To find out the root cause of fire and to take necessary action for prevention of fire.

5.	Rescue Team (RTL)	➢ Rush to Emergency Site through safe route along with the team members and start the rescuing work. ➢ Shift the injured persons to hospital by ambulance after providing necessary first aid. ➢ To inform the Auxiliary Team Leader for necessary help from Mutual Aid Partners.
6.	Auxiliary Team (ATL)	➢ On being directed by Works Main Controller (WMC) inform about the emergency to Statutory Authorities depending upon the situation. ➢ Seek help of Mutual Aid Partners and Coordinate with Mutual Aid Partners to render their service if required. ➢ To take role call to find out the missing persons if any. ➢ Arrange to inform the relatives of Casualties. ➢ Take care of visit of the authorities to the Emergency Site.
7.	Team Members	➢ Each of the team members should follow the instruction of concerned team leader to mitigate the emergency.

1. **ACTIVATION AND CLOSING PROCEDURE FOR ON-SITE EMERGENCY**
2. **Activation Procedure:**

The person notice the incident of fire shall inform about the location and nature of fire to the security gate and concerned shift-in-charge, who in trun shall inform Combat Team Leader (CTL)

Combat Team Leader (CTL) shall inform site incident Controller (SIC) and shall rush to the site immediately. He shall arrange for fire fighting and fisted available at site. He shall arrange to take necessary steps to eliminate the root cause of fire.

Site incident Controller (SIC) on getting information shall inform WMC and reach the site at the earliest. He shall take over the charge and shall direct Rescue Team Leader(RTL) to carry out rescue operations including fire fighting and medical attention. Site incident Controller (SIC) shall Co-Orinate with Combat Team Leader (CML) to eliminate the root cause of Fire.

Works Main Controller (WMC), on arrival at site shall take stock of the situation from Site incident Controller (SIC) and then rush to Emergency Control Room (ECR)to declare emergency on the basis of assessment made by Site incident Controller (SIC). He shall give direction to the security/ Rescue Team Leader(RTL) to activate siren.

20 Second up and 10 Second down for 5 times.(Rhythmical Siren) [For fire Hazard]

20 Second up and 10 Second down for 3 times.(Rhythmical Siren)

[For Toxic Release]

Rescue Team Leader(RTL) shall mobilize firefighting equipment, air breathing apparatus, gas masks, respirators and medical resources to site and shall assist Site incident Controller (SIC).

Chief of Security / Chief of Fire services (Member of Rescue Team) shall Co- Ordinate the safety aspects of emergency rescue team. He shall ensure safety of all working personnel and equipments etc.

Auxiliary Team Leader (ATL) shall take charge emergency Control Room (ECR) shall ensure smooth operation of ECR and shallinform relative of casualties informs Mutual Aid patterns and ensure their arrival at site if required.

Auxiliary Team Leader (ATL) informs statutory authorities and district administration regarding emergency suitable and co-ordinates their visit at site.

Works Main Controller (WMC)co-ordinates and keeps the track of all the

activities ai site and off the site.. He declares the emergency and normalcy after restoration of normal condition and arranges the recoding of the activities in a chronological manner for review of the On-site emergency Plan.

15.0 Closing Procedure

Works Main Controller (WMC) shall declare normalcy after full control of the emergency situation.

Works Main Controller (WMC) shall direct Auxiliary Team Leader (ATL)/Security gate to blow "All clear siren continuously for duration of one minutes"

Information is sent to statutory authorities by chief personnel.
Information is given to police (If required & Local authorizes by ATL)

Analysis of emergency and future precautionary measures shall be taken by this On-Site Emergency Plan Committee consisting of following members: WMC, SIC,ATL,CTL,RTL, Sr. Security Officers and Chief Security.

Review ofOn-Site Emergency (If required) shall be done by the above committee. Revision shall be approved by works main controller (WMC) implementation.

15.1 Important Points Marked on the Plot Plan and their Description.

15.1.1 Assembly

In any Emergency it will be necessary to evacuate people from affected Zone of the zones likely to affected, to a safer place. Safer place are identified and designated as assembly Points. Taking the area and hazard zone into consideration two assembly points have been marked in two area.. Bothe the points are well connected to the plant road and facilities like drinking water, temporary shelter and fisted Aid are available. This has been well markrd in the layout map as well as in the factory area.

15.1.2 Escape Routes :

Escape routes are those that allow reasonable safe passage of persond from the work area to the assemble point during emergency situation. Theseroutes would be different depending on wind direction, Fire and explosion scenario. Escape routes are marked on the drawings as well as the plant site,which will facilitate all for safe evacuation.

ANNEXURE-I

❖ Facilities available at Emergency Control Room

The Emergency control room is a place for which all Emergency managements operation are carried out and co-ordinate, Also it is the place from where all communication will be established, with outside agencies and district authorizes also. It consists of the following items to meet the emergency situation. it remain open for 24 hours under the strict supervision of a responsible person.

Display on Emergency control room on front wall, which should be clearly visible to the passer-by.

(a) Plant General Layout, Clearly marked with hazard zone, Emergency control room, Assemble Points and escape Routes.
(b) List of Working Personnel.
(c) Mobile Telephone Nos. of Emergency Command Structure personnel
(d) Emergency Command Structure
(e) Rhythmical Siren code for different emergency situation.
(f) Relevant Material Safety data sheet.
(g) Emergency control room register.
(h) Firs Aid box with antidotes
(i) Required personal protective equipments with self carrying breathing app.
(j) External Phone P & T

Notes.As a rule, On-Site Emergency Plan shall be reviewed normally once in a year and mock drill is to by conducted half yearly any modification / updating are approved by the Works Main Controller (WMC), Finally it is to be incorporated in the On-Site revised report for due approval of Director of Factories & Boiler's .

❖ Exit Gates :

Exit Gates like main gate, material gate and emergency gate which are well connected by factory roads are marked on the plot plan

❖ Fire Hydrant Line and Source :

Fire Hydrant Line with fire hydrant points and sources of fire water clearly marked on the plot plan.

Firefighting Equipment/ Facilities Available (DCP Type / Foam Type/CO2 Type / Fire Bucket / Fire Tender)

Sl.No	Name of equipment/facility	Location	Number
1	**DCP Type**	DG Room, Electrical, Transformer, Filter press, Ball Mill, TG Burner, Kiln, PGP, Automobile, Mechanical Shift room, PCI	15
2	**Foam Type**	DG Room, HSD Tank, TG Burner, Kiln platform, LDO Tank & PCI	20
3	**CO2**	Electrical, TG Burner, PGP, PCI, Automobile & Bentonite house	7
4	**Fire Bucket**	HSD Tank, Cooler, TG, PCI, PGP, DG Room & Electrical	27
5	**Fire Tender**	NA	NIL

Fire Hydrant System:

- No. of Hydrant monitor point :- 08 (Eight)
- Source of water and capacity-Ground water Supply
- No. of fire engine/pump and capacity-HP-50, IPM -1620

ANNEXURE-II

MUTUAL AID:-

LIST OF MUTUAL AIDDER DURING EMERGENCY				
Sl. No.	**Name & Address of the mutual address**	**Distance from the factory**	**Contact Person with Tel. No.**	**Facilities to be Provided**
1	M/s Ardent Steel Limited, At/Po – Phuljhar, Ps – Nayakote, Dist – Keonjhar, Odisha - 758085	10 K.m	Mr. Dillip Kumar Pany GM (Sales & Logistics) Mob - 8327716189	• Fire Extinguishers • SCABA & Gas Mask • Fire Proximity Suit • Ambulance • Medical Aid

MUTUAL AID AGREEMENT

Between M/s Sree Metaliks Limited, Anra & M/s Ardent Steel Limited, Phuljhar

1.	Name of the factory which will receive Mutual Aid: M/s Sree Metaliks Limited, At - Anra, PO - Upar Baigoda, PS - Nayakote, Dist. - Keonjhar, Odisha - 758085	1.	Name of the factory which will provide Mutual Aid: M/s Ardent Steel Limited, At/PO - Phuljhar, PS - Nayakote, Dist. - Keonjhar, Odisha - 758085
2.	Hazards associated with the factory: Fire due to storage & handling of HSD, Transformer Oil, Coal/Coke, Producer Gas	2.	Hazards associated with the factory: 1. High Speed Diesel 2. Transfer Oil 3. Coal/ Coke 4. Producer Gas
3.	Facilities available: 1. Fire Hydrant Network 2. Fire Extinguishers 3. Ambulance 4. Medical Aid 5. SCABA & Gas Mask 6. Breathing Apparatus 7. Fire Proximity Suit 8. PA System 9. Fire Alarm System	3.	Facilities available 1. Fire Hydrant Network 2. Fire Extinguishers 3. Ambulance 4. Medical Aid 5. SCABA & Gas Mask 6. Breathing Apparatus 7. Fire Proximity Suit 8. PA System 9. Fire Alarm System
4.	Facilities to be provided during emergency: 1. Fire Extinguishers 2. SCABA & Gas Mask 3. Fire Proximity Suit 4. Ambulance 5. Medical Aid	4.	Facilities to be provided during emergency 1. Fire Extinguishers 2. SCABA & Gas Mask 3. Fire Proximity Suit 4. Ambulance 5. Medical Aid
5.	Contact person with designation and Mobile No.: Mr. Sisir Kumar Raut AVP (HR & Admn) Mob:7653071211/ 7008508283 (Factory Manager)	5.	Contact person with designation and Mobile No.: Mr. Dillip Kumar Pany, GM (Sales & Logistics), Mob:8327716189 (Factory Manager)

Signature of Occupier/Manager
Factory Manager
M/s Sree Metaliks Ltd
Anra, Keonjhar
With seal

Signature of Occupier/Manager
For Ardent Steel Ltd.
with seal
(FACTORY MANAGER)

ANNEXURE-III

DETAILS OF TELEPHONE NUMBERS OF KEY PERSONNEL

SL. NO.	Name & Designation of key personnel	Designation as per Emergency command structure	TELEPHONE/CELL NUMBER
1.	Saroj Kumar Biswal PLANT HEAD (President)	Works Main Controller	9437056949
2.	B.N. Prasad Vice -President (Tech.)	Works Main Controller (Alt)	9437007969
3.	Sisir Kumar Raut Asst. Vice President (HR & Admin.)	Site Incident Controller	7653-071211
4.	Binod Kumar Mohanty Asst. General Manager (Logistic)	Site Incident Controller (Alt)	9938027551
5.	Abani Biswal Sr. AGM (Grinding)	Combat Team Leader	7008788288
6.	Inzamam-ul-Haque Safety In-charge	Combat Team Leader (Alt)	7750933002
7.	Gyanaranjan Swain AGM (Pellet Operation)	Rescue Team Leader	7008894912
8.	Debabrata Meher 9853461662	Rescue Team Leader (Alt)	9853461662
9.	Uday Narayan Mohanty Security- Asst. Manager	Auxiliary Team Leader	8480217529
10.	Romio Ranjan mallick Jr. Manager (Automobile)	Auxiliary Team Leader (Alt)	7978048918

DETAILS OF TELEPHONE NUMBERS OF STATUTORY AUTHORITY

SL. NO.	AUTHORITY	TELEPHONE NUMBER (OFFICE)
1.	District Collector	06766 -252298
2.	Addl. District Magistrate	06766 - 255498
3.	District Fire officer	06766 - 254315
4.	Chief District Medical officer	06766 -250770
5.	Nearest Hospital/ Dispensary	9439998941
6.	Nearest Fire station	8018930469
7.	Nearest Police Station	9861303360
8.	Director of Factories & Boilers. Orissa	0674 -2396070
9.	Asst. Director of Factories & Boilers (Area)	06766- 253673

MATERIAL SAFETY DATA SHEET OF HSD

HSD FUEL

Product Use: Fuel

Product Number(s): CPS220122 [See Section 16 for Additional Product Numbers]

Synonyms: 15 S HSDl Fuel 2, Alternative Low Aromatic HSDl (ALAD), Calco LS HSDl 2, Calco ULS DF2, Calco ULS HSD 2, Chevron LS HSD 2, Chevron ULS HSD 2, HSD Fuel Oil, HSD Grade No. 2, HSD No. 2-D S15, HSD No. 2-D S500, HSD No. 2-D S5000, Distillates, straight run, Gas Oil, HS HSD 2, HS Heating Fuel 2, Light HSD Oil Grade No. 2-D,LS HSD 2, LS Heating Fuel 2, Marine HSD, RR HSD Fuel, Texaco HSD, Texaco HSD No. 2, Ultra Low Sulfur HSD 2

Transportation Emergency Response

CHEMTREC: (800) 424-9300 or (703) 527-3887

Product Information

MSDS Requests: (800) 689-3998 Technical Information: (510) 242-5357

SPECIAL NOTES: This MSDS covers all Chevron and Calco non-CARB HSD No. 2 Fuels. Thesulfur content is less than 0.5% (mass). Red dye is added to non-taxable fuel. (MSDS 6894)

SECTION 2 COMPOSITION/ INFORMATION ON INGREDIENTS COMPONENTS CAS NUMBER AMOUNT

HSD Fuel No. 2 68476-34-6 100 %wt/wt

Distillates, hydrodesulfurized, middle 64742-80-9 0 - 100 %wt/wt

Distillates, straight run middle (gas oil, light) 64741-44-2 0 - 100 %wt/wtKerosine 8008-20-6 0 - 25 %wt/wt

Kerosine, hydrodesulfurized 64742-81-0 0 - 25 %wt/wt

Distillates (petroleum), light catalytic cracked 64741-59-9 0 - 50 %wt/wt

Naphthalene 91-20-3 0.02 - 0.2 %wt/wt

Total sulfur None 0 - 0.5 %wt/wt

SECTION 3 HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

- COMBUSTIBLE LIQUID AND VAPOR
- HARMFUL OR FATAL IF SWALLOWED - MAY CAUSE LUNG DAMAGE IF SWALLOWED
- CAUSES SKIN IRRITATION
- MAY CAUSE CANCER BASED ON ANIMAL DATA
- TOXIC TO AQUATIC ORGANISMS

****

IMMEDIATE HEALTH EFFECTS

Eye: Not expected to cause prolonged or significant eye irritation.

Skin: Contact with the skin causes irritation. Skin contact may cause drying or defatting of theskin. Symptoms may include pain, itching, discoloration, swelling, and blistering. Contact with theskin is not expected to cause an allergic skin response. Not expected to be harmful to internalorgans if absorbed through the skin.

Ingestion: Because of its low viscosity, this material can directly enter the lungs, if swallowed, orif subsequently vomited. Once in the lungs it is very difficult to remove and can cause severeinjury or death. May be irritating to mouth, throat, and stomach. Symptoms may include pain,nausea, vomiting, and diarrhea.

Inhalation: Mists of this material may cause respiratory irritation. Symptoms of respiratory irritation may include coughing and difficulty breathing. Breathing this material at concentrationsabove the recommended exposure limits may cause central nervous system effects. Central nervous system effects may include headache, dizziness, nausea, vomiting, weakness, loss ofcoordination, blurred vision, drowsiness, confusion, or disorientation. At extreme exposures,

central nervous system effects may include respiratory depression, tremors or convulsions, lossof consciousness, coma or death.

DELAYED OR OTHER HEALTH EFFECTS:

Cancer: Prolonged or repeated exposure to this material may cause cancer. Whole diesel engineexhaust has been classified as a Group 2A carcinogen (probably carcinogenic to humans) by theInternational Agency for Research on Cancer (IARC). Diesel exhaust particulate has beenclassified as reasonably anticipated to be a human carcinogen in the National ToxicologyProgram's Ninth Report on Carcinogens. The National Institute of Occupational Safety and Health(NIOSH) has recommended that whole diesel exhaust be regarded as potentially causing cancer.

Diesel engine exhaust is known to the State of California to cause cancer. Contains naphthalene,which has been classified as a Group 2B carcinogen (possibly carcinogenic to humans) by theInternational Agency for Research on Cancer (IARC).

SECTION 4 FIRST AID MEASURES

Eye: No specific first aid measures are required. As a precaution, remove contact lenses, if worn,and flush eyes with water.

Skin: Wash skin with water immediately and remove contaminated clothing and shoes. Get medical attention if any symptoms develop. To remove the material from skin, use soap and

water. Discard contaminated clothing and shoes or thoroughly clean before reuse.

Ingestion: If swallowed, get immediate medical attention. Do not induce vomiting. Never giveanything by mouth to an unconscious person.

Inhalation: Move the exposed person to fresh air. If not breathing, give artificial respiration.

Ifbreathing is difficult, give oxygen. Get medical attention if breathing difficulties continue. **Note to Physicians:** Ingestion of this product or subsequent vomiting may result in aspiration oflight hydrocarbon liquid, which may cause pneumonitis.

SECTION 5 FIRE FIGHTING MEASURES FLAMMABLE

PROPERTIES:

Flashpoint: (Pensky-Martens Closed Cup) 52 °C (125 °F) (Min)

Autoignition: 257 °C (494 °F)

Flammability (Explosive) Limits (% by volume in air): Lower: 0.6 Upper: 4.7 EXTINGUISHING MEDIA: Use water fog, foam, dry chemical or carbon dioxide (CO2) toextinguish flames.

PROTECTION OF FIRE FIGHTERS:

Fire Fighting Instructions: For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Combustion Products: Highly dependent on combustion conditions. A complex mixture of

airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, and unidentifiedorganic compounds will be evolved when this material undergoes combustion.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Protective Measures: Eliminate all sources of ignition in the vicinity of the spill or released vapor.

If this material is released into the work area, evacuate the area immediately. Monitor area

With combustible gas indicator.

release toprevent further contamination of soil, surface water or groundwater. Clean up spill as soon aspossible, observing precautions in Exposure Controls/Personal Protection. Use appropriatetechniques such as applying non-combustible absorbent materials or pumping. All equipmentused when handling the product must be grounded. A vapor suppressing foam may be used to reduce vapors. Use clean non-sparking tools to collect absorbed material. Where feasible and appropriate, remove contaminated soil. Place contaminated materials in disposable containers and dispose of in a manner consistent with applicable regulations.

Reporting: Report spills to local authorities and/or the U.S. Coast Guard's National ResponseCenter at (800) 424-8802 as appropriate or required.

SECTION 7 HANDLING AND STORAGE

Precautionary Measures: Liquid evaporates and forms vapor (fumes) which can catch fire and burn with explosive force. Invisible vapor spreads easily and can be set on fire by many sources such as pilot lights, welding equipment, and electrical motors and switches. Fire hazard is greater as liquid temperature rises above 29C (85F). Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe vapor or fumes. Do not breathe mist. Wash thoroughly after handling. Keep out of the reach of children.

Unusual Handling Hazards: WARNING! Do not use as portable heater or appliance fuel. Toxicfumes may accumulate and cause death.
General Handling Information: Avoid contaminating soil or releasing this material into sewageand drainage systems and bodies of water.
Static Hazard: Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary
butmay not, by themselves, be sufficient. Review all operations which have the potential of generating and accumulating an electrostatic charge and/or a flammable atmosphere
(includingtank and container filling, splash filling, tank cleaning, sampling, gauging, switch loading, filtering,mixing, agitation, and vacuum truck operations) and use appropriate
mitigating procedures.
General Storage Information: DO NOT USE OR STORE near heat, sparks, flames, or hot surfaces . USE AND STORE ONLY IN WELL VENTILATED AREA. Keep container closed whennot in use.
Container Warnings: Container is not designed to contain pressure. Do not use pressure to empty container or it may rupture with explosive force. Empty containers retain product residue(solid, liquid, and/or vapor) and can be dangerous. Do not pressurize, cut, weld, braze, solder,drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other sources ofignition. They may explode and cause injury or death. Empty containers should be completelydrained, properly closed, and promptly returned to a drum reconditioner or disposed of properly.
SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION GENERAL CONSIDERATIONS:
Consider the potential hazards of this material (see Section 3), applicable exposure limits, job

activities, and other substances in the work place when designing engineering controls and selecting personal protective equipment. If engineering controls or work practices are not adequate to prevent exposure to harmful levels of this material, the personal protective equipment listed below is recommended. The user should read and understand all instructions and limitations supplied with the equipment since protection is usually provided

for a limited timeor under certain circumstances.

ENGINEERING CONTROLS:

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended exposure limits.

PERSONAL PROTECTIVE EQUIPMENT

Eye/Face Protection: No special eye protection is normally required. Where splashing ispossible, wear safety glasses with side shields as a good safety practice.

Skin Protection: Wear protective clothing to prevent skin contact. Selection of protective clothing may include gloves, apron, boots, and complete facial protection depending on operationsconducted.

Suggested materials for protective gloves include: Chlorinated Polyethylene (orChlorosulfonated Polyethylene), Nitrile Rubber, Polyurethane, Viton.

Respiratory Protection: Determine if airborne concentrations are below the recommendedoccupational exposure limits for jurisdiction of use. If airborne concentrations are above theacceptable limits, wear an approved respirator that provides adequate protection from thismaterial, such as: Air-Purifying Respirator for Organic Vapors. When used as a fuel, this materialcan produce carbon monoxide in the exhaust. Determine if airborne concentrations are below theoccupational exposure limit for carbon monoxide. If not, wear an approved positive-pressure airsupplying respirator. Use a positive pressure air-supplying respirator in circumstances where airpurifying respirators may not provide adequate protection.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Attention: the data below are typical values and do not constitute a specification.

Color: Varies depending on specification

Physical State: Liquid Odor: Petroleum odor pH: Not Applicable

Vapor Pressure: 0.04 kPa (Approximate) @ 40 °C (104 °F)

Vapor Density (Air = 1):>1

Boiling Point: 175.6°C (348°F) - 370°C (698°F)

Solubility: Soluble in hydrocarbons; insoluble in water

Freezing Point: Not Applicable

Melting Point: Not Applicable

Specific Gravity: 0.8 - 0.88 @ 15.6°C (60.1°F) (Typical)

Viscosity: 1.9 cSt - 4.1 cSt @ 40°C (104°F)

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Incompatibility With Other Materials: May react with strong acids or strong oxidizing agents,such as chlorates, nitrates, peroxides, etc.

Hazardous Polymerization: Hazardous polymerization will not occur.

Skin Irritation: The skin irritation hazard is based on evaluation of data for similar materials orproduct components.

Skin Sensitization: This material did not cause skin sensitization reactions in a Buehler guineapig test.

Acute Dermal Toxicity: LD50: >5ml/kg (rabbit).

Acute Oral Toxicity: LD50: > 5 ml/kg (rat)

Acute Inhalation Toxicity: 4 hour(s) LC50: > 5mg/l (rat).

SECTION 12 ECOLOGICAL INFORMATION ECOTOXICITY

96 hour(s) LC50: 21-210 mg/l (Salmogairdneri)

48 hour(s) EC50: 20-210 mg/l (Daphnia magna)

72 hour(s) EC50: 2.6-25 mg/l (Raphidocellussubcapitata) This material is expected to be toxic to aquatic organisms.

ENVIRONMENTAL FATE

On release to the environment the lighter components of diesel fuel will generally evaporate butdepending on local environmental conditions (temperature, wind, mixing or wave action,

soil type,etc.) the remainder may become dispersed in the water column or absorbed to soil or sediment.Diesel fuel would not be expected to be readily biodegradable. In a modified

Strum test (OECDmethod 301B) approximately 40% biodegradation was recorded over 28 days. However, it hasbeen shown that most hydrocarbon components of diesel fuel are

degraded in soil in thepresence of oxygen. Under anaerobic conditions, such as in anoxic sediments, rates ofbiodegradation are negligible.

SECTION 13 DISPOSAL CONSIDERATIONS

Use material for its intended purpose or recycle if possible. This material, if it must be discarded,may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) orother State and local regulations. Measurement of certain physical properties and analysis forregulated components may be necessary to make a correct determination. If this material isclassified as a hazardous waste, federal law requires disposal at a licensed hazardous wastedisposal facility.

SECTION 14 TRANSPORT INFORMATION

The description shown may not apply to all shipping situations. Consult 49CFR, or appropriateDangerous Goods Regulations, for additional description requirements (e.g., technical name) andmode-specific or quantity-specific shipping requirements.

DOT Shipping Description: GAS OIL, Combustible Liquid, UN1202,III

IMO/IMDG Shipping Description: GAS OIL,3,UN1202,III, FLASH POINT SEE SECTION 5

ICAO/IATA Shipping Description:

GAS OIL,3,UN1202, III

EPCRA 311/312 CATEGORIES:

MATERIAL SAFETY DATA SHEET DURALIFE®
TRANSFORMER OIL- ALL GRADES

MSDS Number : 12038

1. PRODUCT AND COMPANY IDENTIFICATION Revision Date : 8/09/2010 Product Name : DURALIFE® TRANSFORMER OIL- ALL GRADES
2. HAZARDS IDENTIFICATION :

IMMEDIATE HEALTH EFFECTS :

EYE : Not expected to cause prolonged or significant eye irritation .

SKIN : Contact with the skin is not expected to cause prolonged or significant irritation. Not expected to be harmful to internal organs if absorbed through the skin .

INGESTION : Not expected to be harmful if swallowed .

INHALATION : This product is not expected to pose an inhalation hazard under conditions of normal use . This product has a low vapor pressure and is not expected to present an inhalation hazard at ambient conditions. Caution should be taken to prevent aerosolization or misting of this product. Acute and chronic overexposures generated under unusual conditions may be irritating to the respiratory tract .

3. FIRST AID INFORMATION:

EYE CONTACT : Immediately flush eyes with large amounts of water and continue flushing until irritation subsides. If material is hot, treat for thermal burns and seek immediate medical attention.
SKIN CONTACT : No treatment is necessary under ordinary circumstances. Remove contaminated clothing. Wash contaminated area thoroughly with soap and water. If material is hot, submerge injured area in cold water. If victim is severely burned, remove to a hospital immediately .
INHALATION : This material has a low vapor pressure and is not expected to present an inhalation exposure at ambient conditions. If vapor or mist is generated when the material is heated, and the victim experiences signs of respiratory tract irritation, remove to fresh air .
INGESTION : No treatment is necessary under ordinary circumstances. Do not induce vomiting. This material does not present any known ingestion hazard .

4. FIRE AND EXPLOSION INFORMATION :

Flammable Properties :
Flash Point : > 293 ^{o}F (145 ^{o}C) Test Method : ASTM D 92 (C.O.C.)
Flammable Limits in Air
Upper Percent : NA
Lower Percent : NA
Auto-ignition Temperature : > 270 ^{o}C
Test Method : NA
NFPA Classification : Health: 0 Flammability: 1 Reactivity: 0 Extinguishing
Media : Use dry chemical, foam, or carbon dioxide . Fire Fighting Measures
Special Fire Fighting Procedures and Equipment : Water may be ineffective but can be used to cool containers exposed to heat or flame to prevent vapor pressure buildup and possible container rupture. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid .
Unusual Fire and Explosion Conditions : Dense smoke may be generated while burning. Carbon monoxide, carbon dioxide, and other oxides may be generated as products of combustion .
Hazardous Combustion By-Products : None

5. ACCIDENTAL RELEASE MESURES :

Protective Measures: Eliminate all sources of ignition in vicinity of spilled material. Accidental Release Measures : Stop the source of the leak or release. Clean up releases as soon as possible, observing precautions in Exposure Controls/Personal Protection. Contain liquid to prevent further contamination of soil, surface water or ground-water. Clean up small spills using appropriate techniques such as sorbent materials or pumping. Where feasible and appropriate , remove contaminated soil.

6. HANDLING AND STORAGE INFORMATION :

Handling : Fire extinguishers should be kept readily available.
STORAGE : Do not transfer to unmarked containers. Store in closed containers away from heat, sparks, open flame, or oxidizing materials. See also additional information section below .

Empty Container Warnings

DRUMS : Empty drums should be completely drained, properly bunged and promptly returned to a reconditioned drum, or properly disposed. Empty containers retain product residue and can be dangerous .

PLASTIC : Do not reuse this container. Empty container may retain product residues .

7. EXPOSURE CONTROLS/PERSONAL PROTECTION :

Exposure Limits and Guidelines : This product does not contain any components with OSHA or ACGIH exposure limits .

Personal Protective Equipment

EYE/FACE PROTECTION : No special eye protection is normally required. Where splashing is possible, wear safety glasses with side shields as good safety practice .
SKIN PROTECTION : No skin protection is required for single, short duration exposures. For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc..) over parts of the body subject to exposure. If handling hot material, use insulated protective clothing (boots, gloves, aprons, etc..). Launder soiled clothes. Properly dispose of contaminated leather articles including shoes, which cannot be decontaminated .
RESPIRATORY PROTECTION : Respiratory protection is not required under conditions of normal use. If vapor or mist is generated when the material is heated or handle, use an organic vapor respirator with a dust and mist filter. All respirators must be NIOSH certified. Do not use compressed oxygen in hydrocarbon atmospheres .
PERSONAL HYGIENE : Always wash hands and face with soap and water before eating, drinking, or smoking. Consumption of food and beverage should be avoided in work areas where this product is present .
ENGINEERING CONTROL/WORK PRACTICES : Use in a well-ventilated area. If user operations generate an oil mist, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below the recommended mineral oil mist exposure limits .

8. PHYSICAL AND CHEMICAL PROPERTIES:

Appearance : Bright Yellow Pour Point : < -40 oF (- 40 oC) Odor : Petroleum – mild Solubility in Water : Negligible in water Physical State : Liquid Vapor Pressure : < 0.1 mm Hg

Boiling Point : > 482 oF (250 oC) Vapor Density (air=1) : NA

Melting Point : -59.8 oF(-51 oC) pH : NA

Specific Gravity : < 1 Viscosity @ 40 oC : 12 c St m

9. STABILITY AND REACTIVITY INFORMATION: Chemical Stability : Stable

Condition to Avoid : High heat and open flames

Incompatible Materials to Avoid: May react with strong oxidizing agents

10. TOXICOLOGICAL INFORMATION:
Primary Eye Irritation: NA Primary Skin
Irritation: NA Acute Dermal Toxicity: NA
Subacute Dermal Toxicity : NA Dermal
Sensitization : NA Inhalation Toxicity : NA

Oral Toxicity: NA
Mulagenicity : NA

11. DISPOSAL INFORMATION:
Regulatory Information : All disposals must comply with federal, state, and local regulations. The material, if spilled or discarded, may be a regulated waste. Refer to state and local regulations. Department of Transportation (DOT) regulations may apply for transporting this material when spilled

Waste Disposal Methods : Waste material may be landfilled or incinerated at an approved facility. Materials should be recycled if possible .

12. TRANSPORTATION INFORMATION :
Highway / Rail (Bulk) : Not Regulated Highway / Rail
(Non-Bulk) : Not Regulated

The DOT description is provided to assist in the proper shipping classification of this

product and may not be suitable for all shipping descriptions .Health and Environmental Label Language

CAUTION : Contains Petroleum Lubricant. Repeated skin contact can cause skin disorders.

ATTENTION : Used motor oil is a possible skin cancer hazard based on animal data.

Repeated

exposure to oil mist in excess of the OSHA limit (5mg/m3) can result in accumulation of oil droplets in pulmonary tissue .

PRECAUTIONARY MEASURES : Avoid excessive & prolonged skin contact. Wash thoroughly after handling. Avoid generation and inhalation of oil mists .

INSTRUCTIONS IN CASE OF FIRE OR SPILL : In case of fire, use water spray, foam, dry

chemical or carbon dioxide. Water spray may be ineffective, but can be used to cool containers. In case of spill, do not use water, soak up with absorbent material.

Annexure-34

SREE METALIKS LIMITED

SREE METALIKS

SML House, Main Road, Barbil, Odisha, India, Pin: 758035
Ph: 06767275585, Fax: 06767276219
E Mail Id : info@sreemetaliks.com,
Visit Us At: www.sreemetaliks.com

PURCHASE ORDER

DIVISION : PELLET

PO NO : 130009 — PO DATE : 22.06.23
INDENT NO. : — INDENT DATE :
QUOTATION NO : SlAna/014/2022-23 — QUOTATION DATE : 22.06.23

M/s. GEMS PROJECTS PVT.LTD.
1236/2, Lajpat Nagar, Near Lala Lajpat Rai School,
Pundag, Argora, Ranchi, Jharkhand- 834004

GST NO : 21AADCG3518M1ZR
Contact Person : MR. D K SWAIN
Fax :
Mobile No. 91-9431115961, 91-9504307800
E Mail id :

G.S.T. NO 21AAECS1828F1ZS
PAN AAECS1828F
Corporate identity no / Foreign company registration number
U26938WB1995plc075633 Dated : 28.06.17

Please supply the following items strictly conforming to the specification mentioned hereunder and as per terms and conditions given below

Sl No	Item code	Item Description	Sub Dept	Unit	Quantity	Rate	Grs Amt	Dis %	Dis Amt	Net Amount
1		CAAQMS i.e PM 10 & PM 2.5, SO2 Analyzer, NO2 Analyzer & CO Analyzer with its complete accessories.	CORE	LOT	1	4,061,560.00	4,061,560.00	0%	-	4,061,560.00
									TOTAL	4,061,560.00
									ROUNDED OFF	-
									TOTAL	4,061,560.00

Rs. In Words: FORTY LAKH SIXTY ONE THOUSAND FIVE HUNDRED SIXTY ONLY.

1. PRICE BASIS	EX RANCHI
2. DELIVERY	WITHIN 04 WEEKS
3. PACKING & FORWARDING	INCLUSIVE
4. GST	ACTUAL @ 18%
5. FREIGHT CHARGES	EXTRA AT ACTUAL
6. LOADING	INCLUSIVE
Payment Mode:	CHEQUE/RTGS
INSPECTION :	AT OUR SITE BY RESPECTIVE DEPT.

DISPATCH INSTRUCTION / BILLING ADDRESS	SPECIAL INSTRUCTION
Material is to be dispatched through Rail/Road directly to our works on freight paid/ to pay basis on following address SREE METALIKS LTD. ANRA, KEONJHAR, ODISHA - 758085	1. All Challans with supplies should bear our order reference,full description of item, item code 2. Rejection on acount of quality, specification, delivery will be on you're A/c.Reject materials must be collected from our works immediately on receipt of Rejection Advice

SPECIAL TERMS & CONDITIONS

1. Transit Insurance: To be covered by you/us,please inform dispatch particular by mail immediately.
2. Guarantee: The goods supplied shall stand guaranteed against defective design, manufacture, raw material, poor work manship & performance for a period of minimum 12 months from the date of supply. The supplier shall undertake to rectify all such defects by repairing/replacing all such parts/equipment found defective, free of cost during guarantee period.
3. Penalty: If delivery is delayed over a reasonable period a penalty of 0.5 % subject to max. of 5% per week be imposed.
4. The supplier is expected to scrutinize the purchase order immediately on receipt thereof.No objection regarding errors & omission, if any, shall not be entertained after the expiry of 10 days from the date of the receipt of the order.
5. Goods should be packed well to ensure adequate protection until delivery at our destination. You Shall be held responsible for any breakage or damage during transit due to defective or insufficient packing.
6. Please do not demand 'C' from while retaining the documents, as 'C' forms will be issued only after completion of each financial quarter.
7. Kind send us your order acceptance letter within a week on receipt of this purchase order.
8. All weights & measurements recorded by our store on receipt of the goods at destination will be treated as final.
9. The compay reserves the right to cancel this order at any time without assigning any reason but with sufficient notice to the supplier.
10. Any disputes are subject to Keonjhar,orissa jurisdiction.
11. Please Provide Test / Guarranty Certificate.

PURCHASE — DEPT. HOD

For SREE METALIKS LIMITED
AUTHORISED SIGNATORY
Authorised Signatory

SREE METALIKS LIMITED

SREE METALIKS

SML House, Main Road, Barbil, Odisha, India, Pin: 758035
Ph: 06767275585, Fax: 06767276219
E Mail Id : info@sreemetaliks.com,
Web Link At: www.sreemetaliks.com

PURCHASE ORDER

DIVISION : PELLET	PO NO : 130010	PO DATE : 26.08.23
	INDENT NO. :	INDENT DATE :
	QUOTATION NO : SI/Ana/016/2022-23	QUOTATION DATE : 26.08.23

M/s. GEMS PROJECTS PVT.LTD.
1236/2, Lajpat Nagar, Near Lala Lajpat Rai School,
Purulay, Argora, Ranchi, Jharkhand - 834004

GST NO: 21AADCG3518M1ZR
Contact Person : MR. D K SWAIN
Phone No.
Fax :
Mobile No. 91-8431115961, 91-9934007900
E Mail Id :

G.S.T. NO 21AAECS1828F1ZS

PAN AAECS1828F

Corporate identity no./ Foreign company registration number
U26930WB1995plc075633 Dated - 28.06.17

Please supply the following items strictly conforming to the specification mentioned hereunder and as per terms and conditions given below

Sl No	Item code	Item Description	Sub Dept	Unit	Quantity	Rate	Gro Amt	Dis %	Dis Amt	Net Amount	Delivery D
1		CAAQMS i.e PM 10 & PM 2.5, SO2 Analyzer, NO2 Analyzer & CO Analyzer with its complete accessories.	CORE	LOT	1	4,061,560.00	4,061,560.00	0%	-	4,061,560.00	
									TOTAL	4,061,560.00	

		TOTAL 4,061,560.00
Rs. In Words:	FORTY LAKH SIXTY ONE THOUSAND FIVE HUNDRED SIXTY ONLY.	
1. PRICE BASIS	EX RANCHI	
2. DELIVERY	WITHIN 04 WEEKS	
3. PACKING & FORWARDING	INCLUSIVE	
4. GST	ACTUAL @ 18%	
5. FREIGHT CHARGES	EXTRA AT ACTUAL	
6. LOADING	INCLUSIVE	
Payment Terms: Payment Mode: INSPECTION :	10.0 LACS AS ADVANCE & BALANCE AGAINST PI BEFORE DISPATCH. CHEQUE/RTGS AT OUR SITE BY RESPECTIVE DEPT.	

DISPATCH INSTRUCTION / BILLING ADDRESS	SPECIAL INSTRUCTION
Material is to be dispatched through Rail/Road directly to our works on freight paid/ to pay basis on following address SREE METALIKS LTD. ANRA, KEONJHAR, ODISHA - 758035	1. All Challans with supplies should bear our order reference,full description of item, item code 2. Rejection on account of quality, specification, delivery will be on you're A/c.Reject materials must be collected from our works immediately on receipt of Rejection Advice.

SPECIAL TERMS & CONDITIONS

1. Transit Insurance: To be covered by you/us please inform dispatch particular by mail immediately.
2. Guarantee: The goods supplied shall stand guaranteed against defective design, manufacture, raw material, poor work manship & performance for a period of minimum 12 months from the date of supply. The supplier shall undertake to rectify all such defects by repairing/replacing all such parts/equipment found defective,
3. Penalty: If delivery is delayed over a reasonable period a penalty of 0.5 % subject to max. of 5% per week be imposed.
4. The supplier is expected to scrutinize the purchase order immediately on receipt thereof.No objection regarding errors & omission, if any, shall not be entertained after the expiry of 10 days from the date of the receipt of the order.
5. Goods should be packed well to ensure adequate protection until delivery at our destination. You Shall be held responsible for any breakage or damage during transit, due to defective or insufficient packing.
6. Please do not demand 'C' from while retaining the documents, as 'C' forms will be issued only after completion of each financial quarter.
7. Kind send us your order acceptance letter within a week on receipt of this purchase order.
8. All weights & measurements recorded by our store on receipt of the goods at destination will be treated as final.
9. The company reserves the right to cancel this order at any time without assigning any reason but with sufficient notice to the supplier.
10. Any disputes are subject to Keonjhar,orissa jurisdiction
11. Please Provide Test / Guarranty Certificate.

Remarks :

For SREE METALIKS LIMITED

PURCHASE | DEPT. HOD | AUTHORISED SIGNATORY

Authorised Signatory