

Ref.: -NSPL/EMD/2020/108

Date: - 16.09.2020

To Member Secretary, Paryavas Bhavan, North Block Sec.19 NAYA RAIPUR Chhatisgarh - 490099.

Subject: Submission of Environmental Statement for the financial year (2019-20) ending 31st March 2020 For DRI, WHR & AFBC based power plant, Steel Melting Shop, Coal Washery, Oxygen plant, Rolling Mill and Producer Gas Plant.

Dear Sir,

Please find enclosed herewith the Environmental Statement for the financial year (2019-20) ending 31st March 2020 duly filled in the form (V) for DRI, WHR & AFBC based Power Plant, Steel Melting shop, Coal Washery, Oxygen plant, Rolling Mill and Producer Gas Plant.

This is for your information and Record please.

Thanking you.

With Regards, For, Nalwa Steel and Power Limited

S.S.Rathi\
Director

DIN No.06986371

Copy to: The Regional Officer

Chhattisgarh Environment Conservation Board

T.V. Tower Road Raigarh (C.G.)

Nalwa Steel And Power Limited

[Corporate identity number (CIN): U74899DL1989PLC035212] P.B. No.7, Gharghoda Road, Taraimal, Raigarh-496001, Chhattisgarh T+91 7762- 304700-9, F+91 7762- 261489-90, Finfo@nalwa.com, Www.nalwa.com

Registered Office 28, Najafgarh Road, New Delhi-110015

FORM - V

Environment Statement for the financial year ending the 31st March 2020

(DRI, WHRB & AFBC Based Power Plant, Coal Washery, Steel Melting Shop, Oxygen plant, Rolling Mill and Producer Gas Plant)

PART - A

(i) Name and address of the owner / Occupier of the industry Operation or process.

Shri S. S. Rathi (Occupier), Nalwa Steel And Power Limited, P.B. No. 7, Gharghoda Road, Taraimal Dist.-Raigarh, (Chhattisgarh) 496001

(ii) Industry category

Large

(iii) Production capacity- Units

Sr. No.	Product	Installed Capacity
01	Sponge Iron	1,98,000 TPA
02	Ingot/ Billet	2,50,000 TPA
03	Washed Coal	13,20,000 TPA
04	WHR based Power	08 MW
05	AFBC based Power	16 MW
06	Oxygen	100 Nm3/ Hour
07	wire rods / re-bar	2,50,000 TPA
08	Producer Gas	12,000 Nm3/Hour

(iv) Year of establishment

2001

(v) Date of the last environment

10.09.2019

Statement submitted.

PART - B

Water and Raw Material Consumption

(1) Water consumption m3/day

Current year 2019-2020

Process

 $286.72 \text{ m}^3/\text{day}$

Cooling Domestic

2169.40 m³/day 245.00 m³/day

Name of products	Water consumption per unit of product output.		
	During the current financial year (2018-19)	During the current financial year (2019-20)	
Sponge Iron	$0.3163 \text{ m}^3/\text{T}$	$0.2734 \text{ m}^3/\text{T}$	
Ingot / Billet	$0.8110 \text{ m}^3/\text{T}$	1.1335 m ³ /T	
Washed Coal	$0.00 \text{ m}^3/\text{T}$	0.00 m ³ /T	
WHRB based Power	0.00623 m ³ /KWH	0.00641 m ³ /KWH	
AFBC based Power		0.00041 III / K W II	
Rolling Mill	$0.4174 \text{ m}^3/\text{T}$	$0.3787 \mathrm{m}^3/\mathrm{T}$	
Oxygen	$0.0054 \text{ m}^3/\text{ Nm}^3$	$0.0098 \text{ m}^3 / \text{Nm}^3$	
Producer Gas	0.00053 m ³ / Nm ³	0.00060 m ³ / Nm ³	



(2) Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit of ou	
		During the current financial year (2018-19)	During the current financial year (2019-20)
Iron Ore Iron ore Pallet Coal Dolomite Pig Iron (PI + Panthor	Sponge Iron	1.827 T/T 0.000 T/T 0.940 T/T 0.078 T/T	1.715 T/T 0.000 T/T 0.849 T/T 0.063 T/T
shot+PCM fines)- Sponge Iron Scrap CPC Silico Magnise End Cut Skull Plant/slag proc. scrap Mill scale Ferro Magnise	Billet/Ingot	0.0133 T/T 0.361 T/T 0.595 T/T 0.0011 T/T 0.0105 T/T 0.00082 T/T 0.001 T/T 0.002 T/T 0.0102 T/T 0.000 T/T	0.1398 T/T 0.4695 T/T 0.5078 T/T 0.0013 T/T 0.0101 T/T 0.000030 T/T 0.00022 T/T 0.00409 T/T 0.00555 T/T 000.00 T/T
'F' Grade COAL Billets	Washed Coal	0.00 T/T	0.00 T/T
Coal	Wire Rod	1.041 T/T	1.053 T/T
Coal middling Ash Char Coal fines Washery Pond fines F & G grade Coal	Producer Gas Power	0.00057 T/Nm3 0.00 T/KWH 0.000267 T/KWH 0.00 T/KWH 0.00 T/KWH 0.00123 T/KWH	0.00042 T/T 0.00 T/KWH 0.000342 T/KWH 0.000056 T/KWH 0.00 T/KWH 0.00138 T/KWH

PART - C

Pollution discharge to environment per unit of output

Pollutants	discharged (mass/ day)	Concentration of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
Water	Zero discharge	No discharge	No violation Within the prescribed standards
Air (Stack emission)	43.5 kg/day	35.1 mg/Nm3	Dust conc. Variation (-) 29.8 %. No violation of against standard 50 mg/Nm3



PART - D
Hazardous Wastes

(As specified under Hazardous Wastes/ Management and Handling Rules, 1989)

Hazardous waste	Total Quantity (kg)	
	During the current financial year (2018-19)	During the current financial year (2019-20)
Used Oil (Cat. 5.1)	5803.00 LTR	4080.00 LTR
Decanter Tank Tar Sludge (Cat 13.3)	815.00 MT	878.00 MT
SOLD : MOEF Authorized	d Party	070.00 1011
Used Oil (Cat. 5.1)	7040.00 LTR	6160.00 LTR
Decanted Tar Sludge (Cat 13.3)	880.81 MT	789.00 MT

PART - E

SOLID WASTE

Solid waste	Total Quantity	
	During the current financial year (2018-19)	During the current financial year (2019-20)
a. From process		(2019-20)
Char Iron Ore Dust (Fine) Slag Coal Rejects Coal washery fine Mill Scale PGP Ash Kiln Accretion Kiln ABC Dust	45758.00 MT 43983.72 MT 26332.00 MT 000.00 MT 000.00 MT 3889.11 MT 11058.00 MT 1840.00 MT 715.00 MT	34835.24 MT 63023.35 MT 25501.00 MT 000.00 MT 000.00 MT 4141.23 MT 8069.00 MT 1885 MT 765.00 MT
b. From pollution control facility		
DRI –ESP dust Bag filter Dust AFBC - Fly Ash	21648.00 MT 23269.00 MT 29790.00 MT	24734.00 MT 22415.00 MT 45228.00 MT
c. 1. Quantity recycled or reutilized within the unit		
Char Coal Rejects Coal washery fine (dust) Mil Scale Fly Ash PGP Ash	9661.00 MT 000.00 MT 000.00 MT 1942.43 MT 000.00 MT 000.00 MT	16776.00 MT 0.00 MT 0.00 MT 1011.72 MT 000.00 MT 000.00M TT



2. Sold	9	
Char Iron Ore Dust (Fine) Slag(Magnetic) Coal Rejects Coal washery fine (dust) Mil Scale PGP Ash Bag Filter Dust	821.10 MT 28271.78 MT 4391.00 MT 000.00 MT 000.00 MT 3917.32 MT 6344.00 MT 19921.00 MT	000.00 MT 86944.78 MT 7046.73 MT 000.00 MT 000.00 MT 3202.99 MT 6825.00 MT 17137.00 MT
3. Disposed		
Char Slag (Non-magnetic) ESP Dust Bag filter dust Fly Ash PGP Ash Kiln Accretion Kiln ABC Dust	000.00 MT 21941.00 MT 21648.00 MT 000.00 MT 29790.00 MT 7185.00 MT 1840.00 MT 715.00 MT	25165.24 MT 32090.00 MT 24734.00 MT 3560.00 MT 45228.00 MT 1464.00 MT 1885.00 MT 765.00 MT

PART - F

Please specify the characterizations (in term of composition of quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.

Solid wastes are not hazardous category. (Report already submitted to Board - Copy enclosed).

Ash Char obtained from DRI production process which is using in AFBC Boiler for power generation and extra sold to other users.

PART - G

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production.

Upgraded pollution control equipment's like as ESP and bag filters to achieve Particulate matter below 50Mg/Nm3. One bag filter installed at Steel Melting Shop (Make – Neatherman) of discharge limit is below 50 Mg/Nm3 and one bag filter installed at DRI Product Hopper (Make – Neatherman) of discharge limit is below 20 Mg/Nm3 to reduce fugitive emission from the Product Hopper.

All industrial effluent are collected in cooling cum settling tank and recycled to process and road washing work.

Zero liquid discharge has been maintained.

20/

Additional measures / investment proposal for environmental protection including abatement of pollution, prevention of pollution

Coal stored in covered shed as well as RCC flooring in the area. (i)

One No. additional Bag filter installed at Steel melting shop of discharge limit is (ii) below 20Mg/Nm3 (Make - Neatherman) for new 2 X 12 ton Induction Furnace in September 2018.

CAAQMS and CEMS both are installed and data connected with CECB Raipur & (iii) CPCB Delhi on 22nd July 2015. Annual maintenance contract has been provided to third party for regular monitoring maintenance and data transmission.

PART - I

Any other particulars for improving the quality of the environment

- Thick Green Belt developed in the factory campus and surrounding the (i) boundary and nearest village total 2, 38,570 nos. saplings plantation up to 31st March 2020. More than 34% plantation inside the plant premises.
- Good Housekeeping practice has been adopted and also neat & clean (ii)maintained all internal Roads of the plant area are made pucca.
- Three nos. Road sweeping machine and Water tanker provide for fugitive dust (iii) control regularly. In summer season, we hire water tankers for irrigation in the plantation area as well for outside roads and solid waste storage area.
- One Drain Cleaning machine, Two Bobcut m/c and Two no. Tractor provide (iv) for the Maintaining Good Housekeeping regularly basis in plant & colony Area.
- SMS slag are using for road making after crushing (Slag crusher is installed (\vee) inside the plant premises) and non-magnetic fine slag using for the civil construction work also using in the fly ash brick plant as Raw material. Fly Ash are using for Land filling & Brick making.
- At present solid waste is being filled up at own low laying area under guidance (vi) of IIT(ISM), Dhandbad, Jharkhand. Solid waste area covered with soil layer by layer as central government guidelines.
- STP 350-m3/day capacity of Sewage Treatment Plant installed in the Plant (vii) premises for colony and plant domestic waste water treatment. Treated water is being use in irrigation of our greenbelt area in the plant premises.
- Fly ash Bricks Plant 60, 000, 00.00 bricks per Annum Capacity Fly ash Brick (viii) plant is installed for the utilization of fly Ash.
- Three nos Rain water harvesting pond & 3 nos. dead bore well are converted (ix)into harvesting pit.

Mar. Am. 9.2020