

To, The Member Secretary, Jharkhand State Pollution Control Board, T.A. Bhawan, H.E.C. Campus, Dhurwa, Ranchi - 834004 Jharkhand

Ref. No. - JMB/ENV/ESSA/05/ 733 /2021

September 28th, 2021

Sub: Annual Environment Statement in Form V for the FY-21.

Dear Sir,

We are enclosing herewith Annual Environment Statement in Form-V for the FY-21 in respect of 6&7 Pits Colliery of M/s Tata Steel Limited, Jharia Division for your kind perusal.

Kindly acknowledge the receipt of the same.

Thanking you,

Yours faithfully, For Tata Steel Limited

Head (Planning)

Regional Officer, Jharkhand State Pollution Control Board, HIG.-1 Sardar Patel Nagar, CC: Housing Colony, Hirapur, Dhanbad (Jharkhand).

TATA STEEL LIMITED

<u>FORM – V (See rule – 14)</u> Environmental Statement for the financial year ending the 31st March -2021 6&7 Pits Colliery

<u>PART – A</u>

1.Name and address of the owner/ occupier of the : industry/ operation or process	6&7 Pits Colliery
Manager :	Mr. Mayank Shekhar Chief Jamadoba Group
	Tata Steel Ltd., P.O Bhaga
	Dist Dhanbad, Jharkhand-828301
Nominated Owner :	Mr. T.V.Narendran
	CEO&MD, Tata Steel Ltd
	Jamshedpur, Dist- East Singhbhum
	Jharkhand – 831001
2.Industry category: Primary (STC Code) Secondary	
(STC Code)	
3.Production Capacity – Units	0.60 MTPA- Raw Coal
4.Year of Establishment	1918
5.Date of the last environmental statement submitted	28 th September 2020
	(Vide Letter No.
	JMB/ENV/ESSA/05/897/2020)

<u>PART – B</u> Water and Raw Material Consumption

1. Water Consumption M^3 / day .

	Water consumption in 2019-2020	Water consumption in 2020-2021		
Process Not Applicable		Not Applicable		
Industrial	14.47 M ³ /day	20.40 M ³ /day		
Domestic 1730.60 M ³ /day		1642.60 M ³ /day		

Sl. No	Name of the products	Process water consumption per unit of product output.		
		During the current financial year 2019-2020During the current financia year 2020-2021		
1.	Raw Coal	Not Applicable	Not Applicable	

<u>FORM – V (See rule – 14)</u> Environmental Statement for the financial year ending the 31st March -2021 6&7 Pits Colliery

2. <u>Raw Material Consumption</u>

Sl. No	Name of the Raw	Name of the	Raw Materials consumption per unit production output.		
	Material	product	During the current financial year 2019-2020	During the current financial year 2020-2021	
1.	Explosives		0.36 Kg/Tonne	0.20 Kg/Tonne	
2.	Detonators	Raw Coal	0.70 Nos/Tonne	0.39 Nos/Tonne	

*Industries may use codes if disclosing details of raw materials would violate contractual obligation, otherwise all industries have to name the raw materials used.

$\frac{PART - C}{Pollution discharged to environment / unit of output.}$

(Para	meter as pr	escribed in the	conse	nt issued))				
Sl.	Pollution	Quantity of pollutants			Concentration of			-	Percentage of variation
No		discharged (mass/ day)			pol	pollutants in discharges			from prescribed
					(Ma	(Mass/Volume)			standard with reason.
A.	AIR	PM 10 Level	PM 2	2.5 Level	SO	2 Level:	Ν	O2 Level:	
		: 24 Hourly	: 24	Hourly	24	Hourly	2	24 Hourly	Ambient air quality is
		Limit-	L	imit-	Ι	_imit-		Limit-	being measured and all
		$100 \mu g/m^3$	60	$\mu g/m^3$	80)µg/m ³		$80 \mu g/m^3$	values are within limits
		85.55	4	8.09		13.01		13.40	as per NAAQS, 2009.
В.	WATER	Paramete	r	Result	ts	Unit of	f	Limit	
					measu		·e		
		pН		7.8		pН		5.5-9.0	
		Total Suspend	ed	10.0		mg/ltr.		100	The quality of mine
		Solid		10.0		-		100	water is being measured
		Total Dissolve	ed	654.1		mg/ltr.		2100	on monthly basis and all values are within the
		Solid		054.1	-			2100	
		Biological Ox	ygen	3.5		mg/ltr.		30	limits. Average value for FY21 is provided
		Demand		5.5				50	here.
		Chemical Oxy	gen	gen 16.0		mg/ltr.		250	
		Demand		10.0				230	
		Oil & Grease		0.7		mg/ltr.		10	

(Parameter as prescribed in the consent issued)

The colliery does not have any single point source of air pollution. Hence, quantitative estimation of air pollutants discharged in Kg/day cannot be ascertained.

FORM – V (See rule – 14) Environmental Statement for the financial year ending the 31st March -2021 6&7 Pits Colliery

<u>PART – D</u> Hazardous Wastes (as specified under The Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016)

Sl	Hazardous Waste	Total Quantity		
No		During the current financial year 2019-20	During the current financial year 2020-21	
1.	From process			
	Used Oil	1206 L	837 L	
	Used cap lamp Battery	Nil	Nil	
2.	From pollution control	-	-	
	facility			

PART – E **Solid Wastes**

Sl	Solid Wastes	Total Quantity (Kg.)			
No		During the previous financial year 2019-2020	During the current financial year 2020-2021		
1.	Steel Scrap and other materials (conveyor belt, cable pieces waste) collected from U/G mines.	67.43 Ton	42.36 Ton		
2.	Quantity recycled or reutilized within the unit/ sold/ disposed	All wastes sold to recyclers	All wastes sold to recyclers		

$\underline{PART - F}$

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

Category of Waste	Characteristics	Quantity	Disposal Practice
Solid Waste			
1. Steel Scrap	Solid	42.36 Ton	Steel scrap and other solid wastes,
and other			which is mentioned here sent to
materials			central scrap yard for segregation
			and disposal to vendors.
Hazardous Waste			
1. Used Oil	Used Oil (Liquid)	837 L	Hazardous wastes are disposed off
			to registered recyclers according to
			applicable Hazardous Wastes
			Management Rules.
2. Used Cap	Battery (Solid)	Nill	Battery wastes are sold off to
Lamp Battery			authorized recycler

<u>FORM – V (See rule – 14)</u> Environmental Statement for the financial year ending the 31st March -2021 6&7 Pits Colliery

<u>PART – G</u>

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

S.No.	Environment Management Activity	Expenditure in Lakhs	
1	Stowing activities i.e filling of U/G voids for surface protection and prevention of subsidence	391.59	
2	Fire Control measures (Fire/Isolation Stopping and Nitrogen plant)	81.32	
3	Goaf Filling activities, Drain repairing and maintenance, settling tank maintenance jobs	11.5	
4	Water spraying costs in underground and surface	27.77	
5	Making potable water in Water Treatment Plant & Supply to colonies	100.8	
6	Horticultural activities including green belt development and regular lawn and garden maintenance	18.94	
7	Plantation of saplings and maintenance	3.71	
	Total Cost incurred	635.63	

Total annual expenditure incurred towards environmental protection is Rs. 635.63 lakhs.

Annual raw coal production of the plant during the year is **0.964 lakhs ton**.

So the impact of the pollution abatement measures and environment protection shall be **Rs.659.21 Rs per ton** of raw coal production.

<u> PART – H</u>

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

Jharia Division of Tata Steel Ltd. is committed to improve safety and environment by strictly practicing Environmental Management System of company. Various programs are arranged such as World Environmental day, Annual Flower Show, Green school project, Tata Volunteering week etc. for public awareness. Also, various initiatives for biodiversity enhancement in the region have been taken in FY20 such as Bird Niche Nesting, Development of Butterfly garden, Medicinal Garden, Nursery development of native species, etc. Tree plantation will be continued in the leasehold area. Water pumped out of the mine will continue to be used in washery, stowing and community supply.

FORM - V (See rule -14) Environmental Statement for the financial year ending the 31st March -2021 6&7 Pits Collierv

PART-I

Any other particulars for improving the quality of environment

- 1. We are providing safe drinking water from our water treatment plant & MADA to our employees.
- 2. We are regularly sprinkling water in and around the units to suppress dust.
- 3. We provide dust mask to our employees to prevent exposure to dust in underground mines.
- 4. Our welfare department arranges to clean the domestic garbage from our colonies to provide better environment.
- 5. Regular monitoring of Air Quality & mine water analysis by our separate environment management cell.
- 6. We have already done the tree plantation job and this is a continuous process in company leasehold areas.
- 7. Regular thrust on Environment awareness conducting training classes at P.T.I., Jamadoba.
- 8. We are an IMS certified unit (ISO 9001:2015, 14001:2015 and 45001:2018 certified).

Chief Jamadoba Group

Name of Unit - 6&7 Pits Colliery

Tata Steel Limited