No. Mines/IOC/DMM/STE/2017/221
Dated: 31 /05/2017

From

Dy. General Manager cum Agent
Dalli Mechanised Mine
PO: Dalli Rajhara
Dist: Balod (CG) -4912 28

To

Member secretary
Chhattisgarh Environmental Conservation Board
Paryavas Bhavan,
North Block Sector-19
Naya Raipur (C.G.) 492002

Sub: Environmental Statement in r/o Dalli Mechanised Mine for the financial year ending 31st March 2017.

Sir,

The Environmental Statement in respect of Dalli Mechanised Mine for the financial year ending 31st March'2017 is enclosed herewith for kind perusal please.

Thanking you,

Yours faithfully
For Steel Authority of India Ltd.
Bhilai Steel Plant

Encl: As above

31.5.17

(Samir Swarup)
Dy. General Manager cum Agent
Dalli Mechanised Mine

Copy to:

01. Regional Officer
Chhattisgarh Environmental Conservation Board
5/32 bungalow, Bhilai, Dist-Durg (CG)
02. DGM (Tech), MHQ Bhilai
03. DGM (Env), MVTC, IOC, Rajhara

FORM – V

(See Rule 14)
(The Environment Protection Rules, 1986)

Environment Statement for the financial year ending the 31st March 2017

PART – A

(i) Name and address of the occupier of the industry operation or process.

Shri Samir Swarup
Dy. General Manager Cum Agent
Dalli Mechanised Mine
PO: Dalli Rajhara
Dist: Durg (CG) 491228

(ii) Production Capacity –Unit : 5.55 MT

(iii) Year of establishment : 12/09/1993

(iv) Date of the last environmental statement submitted : **08/07/2016**

PART-B

Water and Raw material consumption

(1) Water consumption m^3/day

Process	:	5770	M^3/Day Fresh water
		15020	M^3/Day Recycling water
Cooling	:	4620	M^3/Day cooling & dust suppression
Domestic	:	3100	M^3/Day Dalli Mines
		3840	M^3/Day IOC Township
		6940	M^3/Day TOTAL

Name of product	Process water consumption per unit of product output*	
	During the previous financial year	During the current financial year
	(1)	(2)
(1) Iron Ore	0. 63 M^3/Tonne	0.50 M^3/Tonne

***Process water (fresh water) consumption is less due to recycling of water.**

(2) Raw material consumption.

Name of raw materials	Name of products	Consumption of raw material per unit of product output	
		During the previous financial year	During the current financial year
Iron Ore	Iron ore Lump	0.316 T Lump/T ROM	0.369 T Lump/T ROM
	Iron ore Fines	0.484 T Fines/T ROM	0.451 T Fines/T ROM

PART- C

Pollution discharged to environment/ unit of output.
(Parameter as specified in the consent issued)

(1) Pollutants	Quantity of pollutants discharge (mass/day)	Concentrations of pollutants in discharges (mass/volume)	Percentage of variation from prescribed standards with reasons
(a) Water	-	-	-
(b) Air	-	-	-

PART-D

Hazardous wastes

(as specified under Hazardous Waste Management & Handling Rules, 1989)

Hazardous Wastes	Total Quantity (KL)	
	During the previous financial year	During the current financial year
(a) From Process	19.800	15.180
(b) From pollution control facilities	0.000	0.000

PART – E

Solid Wastes

	Total Quantity	
	During the previous financial year	During the current financial year
(a) From Process	1131860Tonnes (waste/overburden) 852720.3Tonnes (slime loss)	946930Tonnes (waste/overburden) 755250.6 Tonnes (slime loss)
(b) From pollution control facilities	-	-
(c) (1) Quantity recycled on reutilized within the unit	-	-
(2) Sold	-	-
(3) Disposed	-	-

PART- F

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

(1) Hazardous Waste The Oil available by the process of changing oil from CSW Plant, Dumper, Transformer and other Vehicles etc. are collected in drums and deposited at Rajhara Disposal Store in drums of 210 Ltr capacity for further transportation to Central Store, Bhilai of Bhilai Steel Plant.

(2) Solid Waste-

(2.1) Waste Rock: Waste rock generated during mining process is dumped in designated dump yard underlain by non-ore bearing area.

(2.2) Slime: Slime/classified tailings generated during washing process are subjected to Radial Settling Thickener (RST) from where slurry is pumped to Hitkasa tailing dam. In Hitkasa tailing dam slurry is settled and the overflow water is recycled for reuse in CSW Plant for ore processing.

PART-G

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

(1) The pollution control measures used in the mine were incorporated in the operating system from the planning stage.

(2) The settled slurry in tailing pond may be utilized in future with improvement in beneficiation technology.

(3) Recovery of iron ore from slime by installation of Fluidised Bed Classifier (FBC) @ 20 Tonnes/hour.

(4) Recycling of overflow water from Hitkasa tailing dam reduces consumption of electricity and fresh water.

PART-H

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

(1) Dalli Mechanised Mine has been accredited with ISO-14001 certificate. All measures are taken for mitigation/ control of pollution as per Environmental Management System adopted by the mine.

PART-I

Any other particulars for improving the quality of the environment.

01. Regular use of water sprinklers on haul roads for dust suppression.
02. Use of dry fogging system in CSW Plant for dust suppression.
03. Check Dams have been constructed in and around Dalli Mechanised Mine to arrest flow of silt, if any, in the downstream area.
04. The desilted material from Hitkasa dam has been stacked for future use. Retaining wall has been constructed around the above dump and garland drain around the dump has also been constructed to prevent the dump from rain water. Terracing of the these desilted material dump has also been carried out.
05. Afforestation has been done in Waste Dump and surrounding areas of Mine.
06. Construction of Oil trap chamber to separate oil from waste water of mobile equipments.
07. Construction of improved oil storage facility to avoid oil leakage in to ground.
08. Use of non electrical shock tube detonator along with surface delay detonator to control ground vibration, fly rock, noise and dust generation.
09. Use of wet drilling system for dust suppression.
10. 6 Nos. of water sprinkling guns have been installed at different fixed locations to suppress the fugitive dust.
11. The Old Ventilation system of the CSW plant which is inoperative has been revived and is working satisfactorily.

31.5.17

(Samir Swarup)
Dy General Manager
Dalli Mechanised Mine