



OFFICE OF THE GENERAL MANAGER
CENTRAL COALFIELDS LIMITED
BARKA-SAYAL AREA

No. P.O./SND/Env./2017/1582

Dated: 21-09-17

To,
The Member Secretary,
Jharkhand State Pollution Control Board
TA Division Building (Ground Floor),
HEC, Dhurwa Ranchi - 834004,

Sub: Submission of Environment Statement for the year 2016-17 of
Saunda -D Colliery, Barka-Sayal Area.

Dear Sir,

Please find enclosed herewith Environment Statement for the year ending April 16 to March 2017 duly filled up in standard format.

Thanking you.

Yours faithfully,

P. N. Singh
Project Officer

Saunda - D Colliery

Copy to:-

- ✓ The General Manager, Barka-Sayal Area
- The Dy.GM/HOD(Environment), Ranchi
- The Regional Officer, JSPCB, Hazaribagh
- Area Environment Engineer, Barka - Sayal Area

*For Receipt
Pl. file with
the Env. Statement
25/09/2017*

A.N.O. (Envt.)
[Signature]
GM (BS)



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**ENVIRONMENTAL
STATEMENT**

OF

SAUNDA 'D' COLLIERY

FOR

2016-17

CENTRAL COALFIELDS LIMITED

ENVIRONMENT DIVISION

CCL, RANCHI

ENVIRONMENTAL STATEMENT

SAUNDA 'D' COLLIERY

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EXECUTIVE SUMMARY

- E.1.0 This Environmental Statement Report has been prepared as per gazette notification no. G.S.R. 329(E) dated 13th March 1992 laid down by Ministry of Environment & Forest. The 'Environmental Audit' has been subsequently renamed to 'Environmental statement' vides MOFE gazette notification no.G.S.R386 (E) dated 22nd April1993.
- E.2.0 Saunda -D Project is operating in Barka Sayal area of Central Coalfields ltd. This project is located in South Karanpura Coalfields, in Hazaribagh District of Jharkhand. The mine was taken over from M/S Bird & Co. Ltd
- E.3.0 Saunda 'D' project comprises of an active underground mine. The total production of the mine in the year 2016-17 from U/G is 0.02831 MTY of coal.
- E.4.0 An integrated EMP of U/G of OC has been made by RI-III of CMPDI in December 1992 and has obtained clearance from the Ministry of Environment and Forest, Govt. of India vide letter no. J-11015/17/93-IA.11 (M) dt. 23.12.93 & G.M (Env. & Forest), CCL, Ranchi, EMP/2155-2206 dt.7.7.95.
- E.5.0 Quarterly environmental monitoring has been carried out regularly by CMPDI for air, water & noise parameters. The results of the four quarters of 2016-17 are enclosed.
- E.5.1 The concentration of SO₂ and NO_x in ambient air in core Zone as well as in buffer zone is well within permissible limits.
- E.5.2 At present, there is no problem of water pollution from the mine. The water quality parameter is found to be within permissible limits.
- E.5.3 The noise level is also within permissible limits.
- E.6.0 The main raw material being used is explosive, diesel & lubricants. The annual consumption of explosives is 15548.60 Kgs and POL 16720 ltrs.

CHAPTER ONE

1.0 Introduction

Saunda 'D' project has an underground mine and a newly started Opencast mine. This is a taken over non-coking coal mine of erstwhile M/S Bird & Co. Ltd. opened on 2nd July 1946.

Saunda-D project is operating in Barka Sayal area of Central Coalfields Ltd. This project is located in South Karanpura Coal fields in Ramgarh, District of Jharkhand. The mine was taken over from M/S Bird & Co. Ltd. Saunda 'D' project comprises of an active underground mine and a newly started opencast mine. The total production of the mine in the year 2014-15 was 0.04975 MTY of coal from u/g and Nil Mm3 of O.B against the production capacity of 0.093 MTY of coal from u/g.

LOCATION

It lies in Barka sayal area of Central Coalfields Ltd. and falls within latitudes 23 39'10"N and 23 40'20" N and longitudes 85 19'30" and 85 20'40" in the survey of India : Topo sheet No. 73E/6. It is located in Patratu Development block of Hazaribagh district in the state Jharkhand and forms a part of south Karanpura Coalfields.

COMMUNICATION

The nearest Railway station is Patratu on Dehri-on-Sone-Barkakana-Gomoh board gauge loop of the Eastern Railway. The state high way from Ranchi to Ramgarh via Patratu and Bhurkunda passes through the Block.

TOPOGRAPHY & GEOLOGY

The area is very gently undulating from RL 381 M in the northern part to RL 342 M at Nakari Nalla in the south east.

Nakari nalla skirts around the Southern and Eastern border of Saunda 'D' colliery and provides immediate drainage outlet of a large area including Saunda 'D' into Damodar River. The HFL of Nakari -Nala as recorded is 344.33m. The upper group of eight seams, Saunda to lower Balkudra was suitable to opencast mining and economical compared to U/G mining. It was thus envisaged to carry out opencast mining within the existing Saunda'D' colliery leasehold to improve the overall economy of the project. As such a new opencast mine was started in 1994-95.

MINING METHOD

At present, only underground working is in operation by Board & Pillar method. Development working is in progress. So there is no ecological impact on surface due to mining.

ENVIRONMENTAL STATEMENT

PART-A

(I) Name and address of the project:

Name : Saunda -D Colliery
Address:
Place : Saunda-D Colliery
Distt : Ramgarh
State : Jharkhand
Phone : 06553-89334

(II) Industry category : Primary
(III) Production capacity : 0.093 MT
(IV) Date of last Environmental Statement Report submitted : Sept 2016

PART-B

WATER AND RAW MATERIAL CONSUMPTION

(I) Water Consumption (CUM/D) : 160
Mining : Nil
(a) Haul Road Dust Suppression: Nil
(b) Workshop :
(c) Firefighting :
(d) Others (Service buildings etc.): 20
Domestic : 140
Agriculture Nil

Name of product	Water consumption per unit of product Cum/t of coal	
	2015-16	2016-17
Coal	1.07	2.06

(II) RAW MATERIAL CONSUMPTION:

Name of raw Material	Consumption of Raw Material (Per unit of coal produced)	
	2015-16	2016-17
POL (Lts/t)	0.41	0.59
Explosives (Kg/t)	0.50	0.55

PART-C
POLLUTION GENERATED

Pollutants	Quantity of Pollutants Generated	% of variations from prescribed standards with reasons
<u>Water</u>		
(a) Discharge from mine	2430 M ³ /day	The water quality from the project is being monitored regularly and placed as Annexure - I (a-d)
(b) Workshop Effluent	-----	Nil
(c) Domestic discharge	40 M ³ /day	Not Applicable
<u>Air</u>		
The SPM, SO ₂ and NO _x are generated from coal mining project	The concentration of air pollutants is measurable.	The Ambient air quality monitoring is being carried out by CMPDI. The results indicate that the pollutants are under prescribed limit.
<u>Noise</u>		
	The noise level is measureable	The noise level in the project is within tolerance limits.

PART-D

HAZARDOUS WASTE

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

The project does not produce and/or release any hazardous waste which is governed by Hazardous Waste Management and Handling Rules, 1989.

PART-E

SOLID WASTES

	Total quantity of solid waste generated (M m ³)	
	2015-16	2016-17
(a) From process		
(i) Top soil	NIL	NIL
(ii) O.B.	NIL	NIL
(b) From pollution control facilities	NIL	NIL
(c) Quantity recycled or reutilized.	Not applicable	

PART-F

Please specify the characteristics (in terms of concentration and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes

1.0 Characteristics of Hazardous And Solid Waste And Their Disposal Practice

Hazardous wastes are not being produced or released either from mining operation or pollution control facilities. Opencast working is not in operation .

Disposal Practice

(i) Top Soil

No top soil was produced during the year 2016-17

(ii) External Dumps

There is no opencast operation in Saunda D project at present. So OB generation from the project is NIL.

PART-G

Impact of pollution control measures on conservation of natural resources and consequently on cost of production

To carry out mining in an eco-friendly manner following measures have been implemented /being implemented.

1.0 Anti Air pollution Measures

During the year 2016-17 there was no problem regarding Air Pollution. For all the other three quarters the SPM value was found to be within prescribed limits.

Following measures were under taken for control of Air pollution.

- a. Regular monitoring for SO₂,NO_x & SPM was carried out.
- b. Spraying of water is also being carried out.

2.0 Anti water pollution measures

During the year 2016-17 the mine water was analyzed and there was no problem regarding water pollution. The following measures are being implemented:

The waste water generated is being treated with bleaching powder & Alum.

3.0 Anti Noise Pollution Measures

At present there is no noise pollution being generated in this area. The noise values are within the prescribed limits.(Annexure-III)

4.0 Disposal of waste

No top soil is being generated at present. However, the solid waste generated in the project is the Over Burden. The O.B is not generated.

PART-H

Additional Investment Proposal For Environmental Protection Including Abatement Of Pollution

The project will continue to carry regular environmental monitoring for air, water and noise pollutants. In the year 2011 afforestation work was carried out on about 8.50 Ha of land. Further, additional investment for environmental protection and pollution abatement in the project under consideration.

PART-I

Any other particulars in respect of environmental production and abatement of pollution

- 1.0 The following actions shall be taken at the earliest for the up gradation of environment in the project:
 - (i) Suggestions made by different statutory agencies shall be implemented from time to time in the project.
 - (ii) More afforestation work shall be carried out.