ENVIRONMENTAL CLEARANCE

PARIVESH

(Pro-Active and Responsive Facilitation by Interactive, and Virtuous Environmental Single-Window Hub)

Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), JHARKHAND)

To,

The projectofficer
Central Coalfields Limited
CENTRAL COALFIELDS LIMITED, ARGADA AREA
OFFICE OF THE PROJECT OFFICER, POST-ARGADA, -829101

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 SEIAA vide proposal number SIA/JH/CMIN/423471/2023 dated 11 May 2023. The particulars of the environmental clearance granted to the project are as below.

1.	**EC Identification No.**	**EC23B001JH122958**
2.	**File No.**	EC/SEIAA/2023-24/2810/2023
3.	**Project Type**	New
4.	**Category**	B
5.	**Project/Activity including Schedule No.**	1(a) Mining of minerals
6.	**Name of Project**	SIRKA OCP
7.	**Name of Company/Organization**	Central Coalfields Limited
8.	**Location of Project**	JHARKHAND
9.	**TOR Date**	N/A

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

Date: 14/07/2023

(e-signed)
Ashok Kumar, IFS
Member Secretary
SEIAA - (JHARKHAND)

Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH.Please quote identification number in all future correspondence.

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State Level Environment Impact Assessment Authority, Jharkhand
Nursery Complex, Near Dhurwa Bus Stand, P.O+P.S-Dhurwa, Ranchi, Jharkhand-834004
E-mail: msseiaa.jhk@gmail.com/chr-seiaajhr@gov.in
website: www.jseiaa.org

Letter No : **EC/SEIAA/2023-24/2810/2023/** Ranchi, Date : ✓

To: **Shri Raj Kumar HOD (Env.),**
M/s Central Coalfields Limited,
Darbhanga House, P.O. - Ranchi,
District - Ranchi, Pin Code - 834001.

Sub: Environmental Clearance for the project **"Expansion of Sirka OCP (1.0 MTPA) Argada Area of M/s Central Coalfields Limited at Village : Sirka, Tehsil : Ramgarh, District : Ramgarh, Jharkhand (110.94 Ha)", (Proposal No. SIA/JH/CMIN/423471/2023) - regarding.**

Ref: Your application no.- PO(SG)/Sirka/ENVN/23/268, dated – 08.05.2023.

Sir,

It is in reference to the project **"Expansion of Sirka OCP (1.0 MTPA) Argada Area of M/s Central Coalfields Limited at Village : Sirka, Tehsil : Ramgarh, District : Ramgarh, Jharkhand (110.94 Ha)"** submitted by you for seeking prior Environmental Clearances (EC.

This is an expansion project which has been taken for appraisal on 23.05.2023.

The project is a violation case since the project had come in to operation without obtaining prior Environmental Clearance. The project was considered by MoEF&CC. Govt. of India under the notification no. 804(E), dated 14.03.2017 and has approved the violation ToR vide letter no. IA-J-11015/30/2020-IA-II(M), dated 01.02.2021 and amendment in ToR was granted by MoEF&CC. Govt. of India vide letter no. IA-J-11015/30/2020-IA-II(M), dated 28.02.2022. The final EIA / EMP submitted by PP to SEIAA on 08.05.2023 and which was forwarded to SEAC on 18.05.2023.

Sirka OCP is a brownfield opencast coal mining project, located in the South Karanpura coalfields, falling within Sirka village of Ramgarh block, District Ramgarh of Jharkhand. This project is under the administrative control of Argada Area of CCL.

Sirka OCP had been a part of Argada-Sirka Group Mixed Mines, consisting of Sirka OCP, Sirka UGP and Argada UGP. Argada-Sirka Group Mixed Mines had obtained Environmental Clearance vide: J-11015/462/2008-IA.II(M) on 25.09.2014.

Sirka UG and Argada UG have been officially closed after the approval of Board of Directors, CCL in its 440th meeting held on 25.03.2017. Final mine closure activities are being implemented.

The life of Sirka OCP as per the obtained EC was 04 years. However, due to available balance mineable reserve at the end of mine life, a proposal for extension of validity of EC in respect of Sirka OCP (1.0/1.15 MTPA) was submitted to MoEF&CC on 10.04.2019. The proposal was considered on 24.01.2020 where EAC observed the following:

"The EAC, after deliberations observed that in view of the mine life earlier estimated to be of 4 years for one of the mines, environmental clearance dated 25th September 2014 was valid till 25th September 2018 only. There being no amendment so far in the said environmental clearance and the same no more valid as of now ongoing/continuing mining would be seen as violation of the EIA Notification, 2006".

Subsequently, MoEF&CC directed to submit fresh application for Environmental Clearance as per EIA Notification,2006 vide letter no. J-11015/482/2008-IA.II(M) dated 14.10.2020. CCL has submitted Form-I Application of Sirka OCP (1.0 MTPA/ 277.09 Ha) as per EIA Notification, 2006 on 24.12.2020 on Parivesh portal.

Terms of Reference (ToR) has been obtained in respect of Sirka OCP (1.0 MTPA/ 277.09 Ha) under violation category vide MOEFCC Letter: IA-J-11015/30/2020-IA-II (M) Dt. 01.02.2021. Further, CCL has requested amendment in the granted ToR for reduction in the project area from 277.09 Ha to 110.94 Ha, by excluding undiverted forest land. Accordingly, amended Terms of Reference (ToR) has been issued vide MOEF&CC letter: J-11015-/30/2020-IA-II(M) Dt. 28.02.2022.

The project has come into violation due to production in absence of EC in the period 25.09.2018 to 31.03.2019.

Sirka Block is well connected by Rail and road. The nearest Railway station Argada of Eastern Railway on Gomoh–Barkakana–Dehri-on-Sone loopline is about 2 km from the Project. The State Highway No 2 (SH-2) runs South of the project at a distance of around 2 km, which connects Ramgarh (about 16km) in the east and Patratu (about 10km) in the west. The existing road communication connects the block with other adjoining projects and also the office of the GM, Argada Area. The block is about 65km from Ranchi via SH-2. The nearest commercial airport is situated at Ranchi.

Drainage: The main drainage of in the core area and as well buffer area is controlled by perennial river Damodar.The Damodar River flowsin the southern side of core area (2km buffer) in majority area on the south of the lease hold area of the proposed project through the central part of the total buffer area. Pararu, an ephemeral stream, flows on the eastern side of the project area from north to south to discharge water in Damodar. The other major tributaries of Damodar River present in the buffer zone are northerly flowing Sherbhukl stream, which joins Damodar at around 2.00km in the south of the project. The other streams which flow in the buffer zone are Rauta stream, Meramgarh stream etc. The drainage pattern of the area is mostly dendritic in nature

Mineable Reserve: Proposed capacity of Sirka OCP is 1.0 MTPA. As per the Mining Plan of Sirka OCP, total mineable reserves have been estimated (as on April 2021) as 3.74 MT

corresponding to a volume of OBR of 8.27 Mm3 at an average stripping ratio of 02.21 M3 per tonne. Total estimated life of mine is 5 years.

Power Requirement: A power supply agreement was made on 22.01.1993 between Damodar Valley Corporation and Central Coalfield Limited (A subsidiary of Coal India Limited) to supply electrical energy in bulk to Sirka. CCL (Annexure XXIII).Presently, the mine is receiving power from two nos. of feeders namely 33 kV Giddi feeder and Sirka feeder drawn from Naisarai Sub-station. The feeders feed power to the 5 MVA, 33/11-3.3 kV substation. The power for the proposed (additional to the existing sub-station) 2 x 3.15, 33/6.6 kV substation will be drawn from the existing feeders i.e. 33 kV Giddi feeder and Sirka feeder by tapping arrangement

Water Requirement: The water demand of Sirka OCP is as given below.
Water usage Details
Description Discharge (KL/day)
Domestic Consumption 1930
Industrial Demand 260
Total: 2190 KL/day

Choice of mining method:
The equipment selection process is the most critical part of the project planning. The following selection criteria have been considered for selecting the size and type of the equipment:

- The strike length of the mine
- Annual rate of advance/deepening
- Total volume of overburden and coal to be handled annually
- The individual thickness of coal seam and partings
- The geo-mining condition of the mine
- The type of mining system to be used like Inclined Slicing or Horizontal Slicing.
- The intuitive economics of the mine
- Presence of geological disturbances like faults, Galleries etc.

Based on the above selection criteria and keeping in view of the Geological and Mining parameters of Sirka OCP, Shovel-dumper combination of mining system is most suitable one in the area under consideration. The proposed opencast mine has therefore been designed to be operated by shovel dumper with horizontal slicing method.

Employment Generation: There is a possibility of creation of direct and indirect employment opportunities due to working of this mine. Overall, this will have positive impact on socio-economic profile of the area. CCL will undertake skill development & capacity building programs like vocational training, income generation and entrepreneurship development.

Land Requirement:

The proposed project area of Sirka OCP is 110.94 Ha. The detailed land use break-up during mining is as given below:

Details of land use Area in Ha.

- Quarry 49.36
- Dump 21.88

- Infrastructure. Road and colony 24.94
- Safety Land/Green Belt 14.76

Total Area 110.94 ha

LAND DETAILS:

Lease Area/Project Area: -110.94 Ha.

Anchal Name: Ramgarh, Thana: Ramgarh, Village: Sirka, Thana No.: 136

Sl. No.	Khata No.	Plot No.	Total Area (In Acre)	Area Under 1.0 MTY (In Acre)	Type Of Land
1	2	335(P)	0.74	0.25	TENANCY
2	2	337(P)	5.95	1.04	TENANCY
3	29	341(P)	0.36	0.13	TENANCY
4	29	343(P)	0.20	0.02	TENANCY
5	29	345(P)	1.98	1.59	TENANCY
6	12	346(P)	2.99	2.65	TENANCY
7	15	347	1.09	1.09	TENANCY
8	12	348	0.62	0.62	TENANCY
9	22	349(P)	2.11	1.43	TENANCY
10	11	350(P)	2.03	1.82	TENANCY
11	11	351(P)	0.47	0.34	TENANCY
12	11	352(P)	2.67	2.29	TENANCY
13	31	353(P)	4.25	2.81	TENANCY
14	14	495(P)	2.06	1.34	TENANCY
15	8	496	0.31	0.31	TENANCY
16	5	497(P)	0.98	0.63	TENANCY
17	26	498(P)	0.34	0.09	TENANCY
18	8	549(P)	0.78	0.15	TENANCY
19	18	550	1.61	1.61	TENANCY

20	18	551	0.31	0.31	TENANCY
21	18	552	0.11	0.11	TENANCY
22	18	553	0.48	0.48	TENANCY
23	5	554(P)	1.50	0.56	TENANCY
24	9	566(P)	1.42	0.22	TENANCY
25	9	567(P)	1.55	0.46	TENANCY
26	8	568	1.03	1.03	TENANCY
27	9	569	0.54	0.54	TENANCY
28	9	570	0.33	0.33	TENANCY
29	18	571	0.46	0.46	TENANCY
30	18	572	0.05	0.05	TENANCY
31	18	573	0.56	0.56	TENANCY
32	19	574	1.28	1.28	TENANCY
33	26	575(P)	6.56	5.68	TENANCY
34	31	576	0.46	0.46	TENANCY
35	7	577	0.49	0.49	TENANCY
36	18	579	0.40	0.40	TENANCY
37	18	580	0.31	0.31	TENANCY
38	18	581	0.28	0.28	TENANCY
39	18	582	0.23	0.23	TENANCY
40	4	583	0.13	0.13	TENANCY
41	4	584	0.05	0.05	TENANCY
42	18	585	0.03	0.03	TENANCY
43	18	586	0.04	0.04	TENANCY
44	9	587	0.69	0.69	TENANCY
45	9	588	0.71	0.71	TENANCY
46	19	589	1.00	1.00	TENANCY

47	19	590	0.12	0.12	TENANCY
48	9	591	0.02	0.02	TENANCY
49	9	592	0.03	0.03	TENANCY
50	5	594	1.51	1.51	TENANCY
51	5	595	0.10	0.10	TENANCY
52	7	597	0.65	0.65	TENANCY
53	8	598	1.01	1.01	TENANCY
54	8	599	0.03	0.03	TENANCY
55	26	600	0.15	0.15	TENANCY
56	26	601	1.12	1.12	TENANCY
57	26	602	0.01	0.01	TENANCY
58	26	605	0.01	0.01	TENANCY
59	26	606	0.02	0.02	TENANCY
60	26	607	1.92	1.92	TENANCY
61	19	609	1.38	1.38	TENANCY
62	11	610	0.93	0.93	TENANCY
63	7	611	0.68	0.68	TENANCY
64	26	612	1.53	1.53	TENANCY
65	11	613	1.94	1.94	TENANCY
66	29	614	0.85	0.85	TENANCY
67	12	615	1.04	1.04	TENANCY
68	7	616	0.22	0.22	TENANCY
69	11	617	0.20	0.20	TENANCY
70	12	618	0.23	0.23	TENANCY
71	19	619	0.93	0.93	TENANCY
72	3	620	1.42	1.42	TENANCY
73	14	621	0.62	0.62	TENANCY

74	12	622	0.72	0.72	TENANCY
75	12	623	0.02	0.02	TENANCY
76	10	624	0.98	0.98	TENANCY
77	10	625	0.05	0.05	TENANCY
78	31	626	0.04	0.04	TENANCY
79	31	627	0.06	0.06	TENANCY
80	31	628	1.71	1.71	TENANCY
81	27	630	0.69	0.69	TENANCY
82	29	631	0.69	0.69	TENANCY
83	6	632	0.02	0.02	TENANCY
84	6	633	0.82	0.82	TENANCY
85	10	634	0.97	0.97	TENANCY
86	27	635	1.05	1.05	TENANCY
87	15	636	0.85	0.85	TENANCY
88	14	637	1.14	1.14	TENANCY
89	15	638	0.66	0.66	TENANCY
90	10	639	0.67	0.67	TENANCY
91	19	640	0.29	0.29	TENANCY
92	22	641	0.07	0.07	TENANCY
93	22	642	0.05	0.05	TENANCY
94	22	643	0.87	0.87	TENANCY
95	15	644	0.04	0.04	TENANCY
96	15	645	1.00	1.00	TENANCY
97	15	646	0.18	0.18	TENANCY
98	10	647	0.20	0.20	TENANCY
99	12	649	0.44	0.44	TENANCY
100	33	650	0.04	0.04	TENANCY

101	33	651	0.13	0.13	TENANCY
102	11	652	0.42	0.42	TENANCY
103	31	653	0.34	0.34	TENANCY
104	37	654	0.36	0.36	TENANCY
105	29	656	0.09	0.09	TENANCY
106	29	657	0.51	0.51	TENANCY
107	25	658	0.03	0.03	TENANCY
108	25	659	1.88	1.88	TENANCY
109	31	660	1.08	1.08	TENANCY
110	19	662	0.81	0.81	TENANCY
111	7	663	0.22	0.22	TENANCY
112	11	664	2.13	2.13	TENANCY
113	7	665	0.29	0.29	TENANCY
114	11	666	0.04	0.04	TENANCY
115	11	667	0.10	0.10	TENANCY
116	7	669	0.01	0.01	TENANCY
117	27	670	0.03	0.03	TENANCY
118	7	671	0.01	0.01	TENANCY
119	7	672	0.01	0.01	TENANCY
120	7	673	0.05	0.05	TENANCY
121	7	674	0.22	0.22	TENANCY
122	27	675	0.22	0.22	TENANCY
123	21	676	0.26	0.26	TENANCY
124	21	677	0.03	0.03	TENANCY
125	19	678	0.29	0.29	TENANCY
126	3	679	0.34	0.34	TENANCY
127	11	680	1.06	1.06	TENANCY

128	14	681	0.29	0.29	TENANCY
129	11	683	0.74	0.74	TENANCY
130	8	684	0.72	0.72	TENANCY
131	11	685	0.35	0.35	TENANCY
132	19	686	0.54	0.54	TENANCY
133	39	687	0.33	0.33	TENANCY
134	39	688	0.22	0.22	TENANCY
135	14	690	0.14	0.14	TENANCY
136	14	691	0.13	0.13	TENANCY
137	14	692	0.10	0.10	TENANCY
138	14	693	0.31	0.31	TENANCY
139	14	694	0.28	0.28	TENANCY
140	10	695	0.94	0.94	TENANCY
141	11	696	1.42	1.42	TENANCY
142	14	697	1.22	1.22	TENANCY
143	41	698	0.84	0.84	TENANCY
144	41	699	0.03	0.03	TENANCY
145	14	700	0.01	0.01	TENANCY
146	25	703	0.03	0.03	TENANCY
147	3	704	0.03	0.03	TENANCY
148	25	705	0.74	0.74	TENANCY
149	3	706	0.76	0.76	TENANCY
150	32	708	0.01	0.01	TENANCY
151	32	709	0.01	0.01	TENANCY
152	32	710	0.25	0.25	TENANCY
153	2	711	0.04	0.04	TENANCY
154	2	712	0.32	0.32	TENANCY

155	31	713	0.53	0.53	TENANCY
156	38	714	0.26	0.26	TENANCY
157	19	715	0.37	0.37	TENANCY
158	31	716	0.24	0.24	TENANCY
159	31	718	0.12	0.12	TENANCY
160	31	719	0.38	0.38	TENANCY
161	11	721	1.55	1.55	TENANCY
162	2	722	3.03	3.03	TENANCY
163	19	723	2.09	2.09	TENANCY
164	33	725(P)	1.27	0.27	TENANCY
165	2	726(P)	2.84	2.11	TENANCY
166	19	727	0.53	0.53	TENANCY
167	8	729	0.73	0.73	TENANCY
168	2	733	0.02	0.02	TENANCY
169	19	734	1.54	1.54	TENANCY
170	40	735	0.01	0.01	TENANCY
171	40	736	0.17	0.17	TENANCY
172	31	737	0.91	0.91	TENANCY
173	14	739	0.65	0.65	TENANCY
174	38	740	0.56	0.56	TENANCY
175	27	743	1.23	1.23	TENANCY
176	27	744	0.22	0.22	TENANCY
177	7	745	0.15	0.15	TENANCY
178	21	746	3.10	3.10	TENANCY
179	3	748	0.36	0.36	TENANCY
180	15	750	0.74	0.74	TENANCY
181	15	751	0.65	0.65	TENANCY

182	22	752	0.56	0.56	TENANCY
183	22	753	0.11	0.11	TENANCY
184	3	755	0.36	0.36	TENANCY
185	22	757	0.08	0.08	TENANCY
186	14	758	0.42	0.42	TENANCY
187	14	759	0.65	0.65	TENANCY
188	14	760	1.54	1.54	TENANCY
189	14	761	0.04	0.04	TENANCY
190	14	762	0.49	0.49	TENANCY
191	14	765	2.85	2.85	TENANCY
192	7	768	1.10	1.10	TENANCY
193	27	770	0.62	0.62	TENANCY
194	32	772	0.28	0.28	TENANCY
195	7	773	0.72	0.72	TENANCY
196	38	775	0.82	0.82	TENANCY
197	11	778	0.93	0.93	TENANCY
198	7	780	0.69	0.69	TENANCY
199	14	782	0.14	0.14	TENANCY
200	14	783	0.79	0.79	TENANCY
201	29	784	1.13	1.13	TENANCY
202	29	786	1.82	1.82	TENANCY
203	25	787	2.23	2.23	TENANCY
204	22	788	0.54	0.54	TENANCY
205	19	789	0.60	0.60	TENANCY
206	19	790	1.02	1.02	TENANCY
207	19	791(P)	2.74	0.86	TENANCY
208	31	797(P)	1.64	0.63	TENANCY

209	25	800(P)	0.79	0.57	TENANCY
210	25	801(P)	0.19	0.04	TENANCY
211	25	805(P)	0.35	0.07	TENANCY
212	10	807	0.26	0.26	TENANCY
213	10	808	0.02	0.02	TENANCY
214	10	810	0.1	0.1	TENANCY
215	25	811	0.23	0.23	TENANCY
216	25	812(P)	0.07	0.06	TENANCY
217	25	813	0.06	0.06	TENANCY
218	25	814(P)	1.18	1.1	TENANCY
219	31	815	0.24	0.24	TENANCY
220	19	817	0.44	0.44	TENANCY
221	19	818	1.00	1.00	TENANCY
222	31	819	0.04	0.04	TENANCY
223	31	822	0.38	0.38	TENANCY
224	31	823	0.01	0.01	TENANCY
225	6	824	0.53	0.53	TENANCY
226	31	825	1.40	1.40	TENANCY
227	19	826	1.63	1.63	TENANCY
228	38	827	0.15	0.15	TENANCY
229	31	828	0.14	0.14	TENANCY
230	31	829	0.39	0.39	TENANCY
231	12	830	0.30	0.30	TENANCY
232	12	831	0.41	0.41	TENANCY
233	12	832	0.03	0.03	TENANCY
234	31	833	0.09	0.09	TENANCY
235	31	834	0.04	0.04	TENANCY

236	31	835	1.36	1.36	TENANCY
237	25	836	1.22	1.22	TENANCY
238	25	837	0.44	0.44	TENANCY
239	6	838	0.53	0.53	TENANCY
240	6	839	0.21	0.21	TENANCY
241	2	840	0.20	0.20	TENANCY
242	2	841	0.41	0.41	TENANCY
243	30	842	0.13	0.13	TENANCY
244	31	843	0.22	0.22	TENANCY
245	30	844	0.13	0.13	TENANCY
246	31	845	0.42	0.42	TENANCY
247	2	847	0.55	0.55	TENANCY
248	10	849(P)	0.23	0.18	TENANCY
249	7	853(P)	1.05	0.67	TENANCY
250	19	857(P)	0.8	0.14	TENANCY
251	29	858(P)	0.53	0.52	TENANCY
252	5	861	1.20	1.20	TENANCY
253	29	862	0.40	0.40	TENANCY
254	29	863	0.02	0.02	TENANCY
255	29	864	0.06	0.06	TENANCY
256	11	865	0.4	0.4	TENANCY
257	7	866	0.03	0.03	TENANCY
258	7	867	0.14	0.14	TENANCY
259	9	868	0.18	0.18	TENANCY
260	9	869	0.21	0.21	TENANCY
261	8	870	0.42	0.42	TENANCY
262	31	871	0.03	0.03	TENANCY

263	26	872	0.44	0.44	TENANCY
264	19	873	0.84	0.84	TENANCY
265	29	874	0.08	0.08	TENANCY
266	11	875	0.82	0.82	TENANCY
267	37	876	0.45	0.45	TENANCY
268	26	877	1.10	1.10	TENANCY
269	19	878	0.11	0.11	TENANCY
270	38	879	0.86	0.86	TENANCY
271	26	880	0.59	0.59	TENANCY
272	29	881	0.79	0.79	TENANCY
273	7	882	1.17	1.17	TENANCY
274	19	883	2.12	2.12	TENANCY
275	26	885	1.09	1.09	TENANCY
276	18	887	0.29	0.29	TENANCY
277	18	888	0.25	0.25	TENANCY
278	11	889	0.18	0.18	TENANCY
279	19	890	0.13	0.13	TENANCY
280	19	891	0.31	0.31	TENANCY
281	18	892	0.29	0.29	TENANCY
282	18	893	0.18	0.18	TENANCY
283	11	894	0.21	0.21	TENANCY
284	9	895	0.04	0.04	TENANCY
285	9	896	0.13	0.13	TENANCY
286	3	897	0.17	0.17	TENANCY
287	3	898	0.11	0.11	TENANCY
288	18	899	0.01	0.01	TENANCY
289	18	900	0.13	0.13	TENANCY

290	18	901	0.21	0.21	TENANCY
291	18	902	0.16	0.16	TENANCY
292	18	903	0.31	0.31	TENANCY
293	29	904	0.70	0.70	TENANCY
294	12	905	0.54	0.54	TENANCY
295	18	906	0.30	0.30	TENANCY
296	11	907	0.42	0.42	TENANCY
297	18	908	0.63	0.63	TENANCY
298	11	909	0.44	0.44	TENANCY
299	26	910	0.38	0.38	TENANCY
300	38	911	0.33	0.33	TENANCY
301	14	912	0.73	0.73	TENANCY
302	14	913	0.61	0.61	TENANCY
303	3	914	0.53	0.53	TENANCY
304	19	915	1.21	1.21	TENANCY
305	3	916	0.41	0.41	TENANCY
306	9	917	0.05	0.05	TENANCY
307	9	918	0.13	0.13	TENANCY
308	9	919	0.22	0.22	TENANCY
309	26	920	0.52	0.52	TENANCY
310	11	921	0.05	0.05	TENANCY
311	5	922	0.28	0.28	TENANCY
312	5	923	0.60	0.60	TENANCY
313	5	924	0.65	0.65	TENANCY
314	19	925	0.58	0.58	TENANCY
315	8	926	0.31	0.31	TENANCY
316	19	928	0.85	0.85	TENANCY

317	19	929	0.05	0.05	TENANCY
318	11	930	0.03	0.03	TENANCY
319	11	931	0.33	0.33	TENANCY
320	19	932	0.53	0.53	TENANCY
321	11	933	0.33	0.33	TENANCY
322	12	934	0.60	0.60	TENANCY
323	12	935	0.05	0.05	TENANCY
324	19	936	0.13	0.13	TENANCY
325	11	937	0.30	0.30	TENANCY
326	11	938	0.31	0.31	TENANCY
327	12	939	0.53	0.53	TENANCY
328	12	940	0.02	0.02	TENANCY
329	8	941	0.13	0.13	TENANCY
330	19	942	0.43	0.43	TENANCY
331	8	943	0.69	0.69	TENANCY
332	14	944	0.01	0.01	TENANCY
333	14	945	0.07	0.07	TENANCY
334	14	946	0.52	0.52	TENANCY
335	14	948	0.53	0.53	TENANCY
336	14	950	1.19	1.19	TENANCY
337	12	952	1.61	1.61	TENANCY
338	26	953	1.48	1.48	TENANCY
339	19	954	0.83	0.83	TENANCY
340	8	955	0.35	0.35	TENANCY
341	7	956	0.41	0.41	TENANCY
342	5	957	0.33	0.33	TENANCY
343	5	958	2.79	2.79	TENANCY

344	19	959	0.95	0.95	TENANCY
345	18	960	2.59	2.59	TENANCY
346	18	961	1.71	1.71	TENANCY
347	18	962	0.74	0.74	TENANCY
348	18	964	0.59	0.59	TENANCY
349	18	965	2.52	2.52	TENANCY
350	4	966	0.55	0.55	TENANCY
351	5	967	1.21	1.21	TENANCY
352	26	970(P)	8.90	7.70	TENANCY
353	19	971	0.82	0.82	TENANCY
354	26	974(P)	0.67	0.56	TENANCY
355	26	976(P)	0.64	0.11	TENANCY
356	4	978(P)	3.04	0.66	TENANCY
357	19	997(P)	2.78	1.69	TENANCY
358	9	998(P)	3.78	1.79	TENANCY
359	11	1013	0.08	0.08	TENANCY
360	7	1014	0.08	0.08	TENANCY
361	19	1016(P)	1.52	1.39	TENANCY
362	14	1031	0.52	0.52	TENANCY
363	14	1032	0.32	0.32	TENANCY
364	14	1033	0.30	0.30	TENANCY
365	14	1034	0.64	0.64	TENANCY
366	14	1035	0.22	0.22	TENANCY
367	14	1036	0.22	0.22	TENANCY
368	14	1037	0.34	0.34	TENANCY
369	14	1038	0.02	0.02	TENANCY
370	14	1039	0.02	0.02	TENANCY

371	14	1040	0.03	0.03	TENANCY
372	14	1041	0.50	0.50	TENANCY
373	14	1042	0.44	0.44	TENANCY
374	14	1043	0.10	0.10	TENANCY
375	14	1044	1.30	1.30	TENANCY
376	14	1045	0.55	0.55	TENANCY
377	14	1046	0.58	0.58	TENANCY
378	14	1047	0.40	0.40	TENANCY
379	14	1048	0.44	0.44	TENANCY
380	14	1049	0.66	0.66	TENANCY
381	14	1050	0.12	0.12	TENANCY
Total				229.62	acre

VILLAGE	THANA NO.	Sl. No.	KHATA	PLOT	TOTAL AREA (IN ACRE)	Area under 1.0 MTY(IN ACRE)	TYPE OF LAND
SIRKA	136	1	42	648	0.09	0.09	G.M.K
		2	42	682	0.07	0.07	G.M.K
		3	42	707	0.04	0.04	G.M.K
		4	42	717	0.04	0.04	G.M.K
		5	42	720	0.13	0.13	G.M.K
		6	42	730	0.35	0.35	G.M.K
		7	42	731	0.01	0.01	G.M.K
		8	42	732	0.01	0.01	G.M.K
		9	42	738	0.01	0.01	G.M.K
		10	42	741	0.04	0.04	G.M.K
		11	42	742	0.06	0.06	G.M.K
		12	1	747(P)	2.42	1.48	G.M.K
		13	1	749(P)	2.68	1.98	G.M.K
		14	42	754	0.87	0.87	G.M.K
		15	42	756	0.01	0.01	G.M.K
		16	42	763	0.07	0.07	G.M.K
		17	42	764	0.11	0.11	G.M.K
		18	42	766	0.07	0.07	G.M.K

		19	42	767	0.03	0.03	G.M.K
		20	42	769	0.07	0.07	G.M.K
		21	42	771	0.04	0.04	G.M.K
		22	42	774	0.14	0.14	G.M.K
		23	42	776	0.07	0.07	G.M.K
		24	42	777	0.27	0.27	G.M.K
		25	42	779	0.02	0.02	G.M.K
		26	42	781	0.35	0.35	G.M.K
		27	1	792(P)	67.12	8.20	G.M.K
		28	1	799(P)	4.72	0.34	G.M.K
		29	42	785	0.15	0.15	G.M.K
		30	42	803(P)	0.26	0.04	G.M.K
		31	42	806	0.01	0.01	G.M.K
		32	42	809	0.02	0.02	G.M.K
		33	42	816	0.05	0.05	G.M.K
		34	42	820	0.04	0.04	G.M.K
		35	42	821	0.01	0.01	G.M.K
		36	42	846	0.03	0.03	G.M.K
		37	42	848	0.03	0.03	G.M.K
		38	42	856	0.01	0.01	G.M.K
		39	42	859	0.02	0.02	G.M.K
		40	42	860	0.09	0.09	G.M.K
		41	42	886	0.02	0.02	G.M.K
		42	42	927	0.03	0.03	G.M.K
		43	42	947	1.70	1.70	G.M.K
		44	42	949	0.05	0.05	G.M.K
		45	42	968	1.64	1.64	G.M.K
		46	1	969(P)	20.9	18.52	G.M.K
		47	42	972	0.17	0.17	G.M.K
		48	1	973	0.43	0.43	G.M.K
		49	42	975(P)	0.06	0.05	G.M.K
Total						38.08 acre	

Village	Thana No.	Sl. No.	Khata No.	Plot No.	Total Area (In Acre)	Area Under 1.0 MTY(In Acre)	Type Of Land
SIRKA	136	1	43	578(P)	0.76	0.42	G.M.A.
		2	43	593	0.23	0.23	G.M.A
		3	43	596	0.22	0.22	G.M.A

		4	43	603	0.11	0.11	G.M.A
		5	43	604	0.07	0.07	G.M.A
		6	43	608	0.16	0.16	G.M.A
		7	43	629	0.31	0.31	G.M.A
		8	43	655	0.30	0.30	G.M.A
		9	43	661	0.36	0.36	G.M.A
		116	43	668	0.06	0.06	G.M.A
		10	43	689	0.19	0.19	G.M.A
		11	43	701	0.04	0.04	G.M.A
		12	43	702	0.16	0.16	G.M.A
		13	43	724	1.25	1.25	G.M.A
		14	43	728	0.30	0.30	G.M.A
		15	43	884	0.85	0.85	G.M.A
		16	43	951	0.83	0.83	G.M.A
		17	43	963(P)	0.80	0.58	G.M.A
				Total:-		6.44	Acre

Latitude & Longitude of the project :

Latiude	Longitude
23° 38' 31"N to 23° 39' 4.60"N	85° 26' 3.45"E to 85° 26' 58"E

Break up of type of land:-

Type of Land	Area in Ha.
Forest Land and GMJJ	NIL
Non Forest Land	110.94

The coal production from Sirka OCP was as given below: -

Financial Year	Coal Production (MTPA)	OB in Mm3	EC Capacity in MTPA
1993-94	0.611	1.747	-
1994-95	0.535	1.247	-
1995-96	0.310	0.944	-
1996-97	0.300	0.705	-
1997-98	0.363	0.667	-
1998-99	0.369	0.790	-

Financial Year	Coal Production (MTPA)	OB in Mm3	EC Capacity in MTPA
1999-00	0.327	0.554	-
2000-01	0.379	0.657	-
2001-02	0.238	0.584	-
2002-03	0.221	0.553	-
2003-04	0.163	0.422	-
2004-05	0.211	0.621	-
2005-06	0.113	0.734	-
2006-07	0.256	0.677	-
2007-08	0.225	0.802	-
2008-09	0.212	0.611	-
2009-10	0.242	0.740	-
2010-11	0.213	0.543	-
2011-12	0.169	0.581	-
2012-13	0.170	0.609	-
2013-14	0.111	0.865	
2014-15	0.047	1.595	1.00/1.15 MTPA
2015-16	0.088	1.441	1.00/1.15 MTPA
2016-17	0.059	1.000	1.00/1.15 MTPA
2017-18	0.061	0.522	1.00/1.15 MTPA
2018-19	0.167	0.652	1.00/1.15 MTPA (Valid Till 2018-19)
2019-20	0.000		-
2020-21	0.000		-
2021-22	0.000		-

Sirka OCP: **Details of Mineable Reserves and OB Removal:**

SN	Year	Coal Production (in MTPA)	OB Generation (in Mcum)	Stripping Ratio
1	Year 1	0.50	2.01	4.03
2	Year 2	1.00	2.25	2.25
3	Year 3	1.00	2.06	2.06
4	Year 4	1.00	1.56	1.56
5	Year 5	0.24	0.38	1.56
	Total	**3.74**	**8.27**	**2.21**

Capital Expenditure:

S. No.	Finance Head	Unit	Values
1.	Total Capital Investment	Rs. crores	222.82
2.	Cost of Production at 100% production level	Rs. / tonne	1114.49
3.	Average selling price(21-22)	Rs. / tonne	2338.15
4.	Profit/Loss at 100% production level	Rs. / tonne	1223.66

Cost of environmental coast measures will be detailed in EIA EMP report as per requirement and detailed study.

STATUTORY CLEARANCES:

1	LOI/Lease docs	:	Land has been Acquired under Coal Bearing Areas(Acquisition and Development) Act. 1957.
2	CO	:	The CO, Ramgarh vide letter no. 629, dated 11.04.2023 has mentioned the plot no. of the project is not recorded as "Jungle Jhari" in R.S. Khatiyan & Register II.
3	DFO Wild Life	:	DFO, Wildlife Hazaribagh vide letter no. 884, dated 03.05.2023 certified that the proposed project site is outside Eco Sensitive Zone of Hazaribagh Wildlife Sanctuary.
4	DFO Forest Distance	:	DFO, Ramgarh Forest Division vide letter no. 787, dated 29.04.2023 certified that the distance of notified forest is **Zero (0)** meters from project site.
5	Mine Plan Approval	:	Ref No.:- CS/BM/512/2022/95, Dated:- 24.03.2022.
6	Site Inspection / Monitoring Report	:	Site Inspection / Monitoring Report (Argada Sirka Group Mixed Mines) issued by Integrated Regional Office , MoEF&CC, Govt. of India vide letter no. 103-466/PT/913, dated 15.02.2023.
7	Public Hearing	:	JSPCB, Regional Office -cum – Laboratory, Hazaribag vide letter no. 717, dated 25.07.2022 informed that the Public Hearing conducted on 05.07.2022.
5	Previous Environmental Clearance (EC)	:	Previous EC granted by MoEF&CC, Govt. of India vide letter J-11015/462/2008-IA.II(M), dated 25.09.2014 for **Argada Sirka Group Mixed Mines (Argada UG, Sirka OC & Sirka UG) for (1.125 MTPA normative and 1.293 MTPA peak in a total ML area 907.04 ha).**
6	Consent to Operate (CTO)	:	CTO granted by JSPCB vide Ref. no. JSPCB/HO/RNC/CTO/-1378370 /2018/533, dated 18.03.2018.

On the basis of above the State Level Expert Appraisal Committee (SEAC), Jharkhand recommends the amount proposed in the final EIA report i.e. Rs. 1,10,00,000 towards remediation plan and natural & community resource augmentation plan to be spent within a period 03 years. The details of summary of Natural resource and Environmental / Ecological Damage assessment with budgetary provision for expenditure under the below mention head for remediation :-

Sl. No.	Particular	Activity Proposed	Total Amount (in ₹)
1	Water Environment	Construction & installation of RO Plants (1 nos.) for supply of treated drinking water at Ward 15	15.00.000
2		Changing of Water supply pipe line in Munda Patti (Sirka) and Badka Tand	20.00.000
Total Water Environment (in ₹)			**35,00,000**
3	Ecology	Distribution of 20.000 fruit bearing Saplings like Amla, Guava, Mango, Lichi etc. to nearby villagers	2.00.000
Total Ecological Environment (in ₹)			**2,00,000**
4	Air & Noise Environment	Health Camps to monitor the respiratory and health status in nearby villages	3.00.000
Total Air Environment (in ₹)			**3,00,000**
5	Land Environment	Setting up waste collection bins at community level at 15 locations in nearby villages in the buffer zone	3.00.000
Total Land Environment (in ₹)			**3,00,000**
6	Socio-Economic	Additional Skill development training programme to the unemployed youth	8.00.000
7		PCC road, Bediya Tola, from Chotu Bediya house to Paras Mahato house	45.00.000
Total Socio-Economic Environment (in ₹)			**53,00,000**
Total Fund for Damage Remediation Measures (in Rs.)			**96,00,000**

Table Proposed budgetary provisions for Natural and Community Resource Augmentation Plan

Sl. No.	Particular	Activity Proposed	Total
1	Natural Resource Augmentation	Total 03 nos. of Rainwater Harvesting cum Groundwater recharge structures to be installed on rooftop of public buildings: Rajkiya Madhya Vidhalay, Sirka; Nav Prathmik Vidhalay, Chanak Basti and Anganbadi Kendra, Kauwabera	3.00.000

2	**Community Resource Augmentation**	Providing solar lanterns to the nearby villagers and households in nearby villages (500 Nos Approx.)	6.00.000
3		Providing smart classes at SVM Sirka, Rajkiya Madhya Vidyalay, Sirka	5.00.000
Total cost of Natural & Community Resource Augmentation Measures (in Rs)			**14,00,000**

Grand Total = Rs 96,00,000.0 + Rs 14,00,000.0 = Rs 1,10,00,000 (Rupees One Crore Ten Lakhs Only

I. Total budgetary provision with respect to remediation plan and natural and community resource augmentation plan is Rs. **1,10,00,000**.

II. Therefore, PAs shall be required to submit a bank guarantee of an amount of Rs. **1,10,00,000** towards implementation of remediation plan and natural and community resource augmentation plan with the Jharkhand State Pollution Control Board.

On the basis of 104th Minutes of Meeting of SEAC, the project Authority has submitted the Bank Guarantee to Jharkhand State Pollution Control Board, Ranchi, and the evidence of the same has been submitted to SEIAA, Jharkhand on **08.07.2023** bearing Bank Guarantee No. : **0089NDLG00020024** dated : **07.07.2023 valid up** to **05.07.2028**.

III. The bank guarantee shall be released after successful completion of remediation plan, duly recommended by the SEAC, Regional Office – MoEF & CC, Govt. of India and its approval from Regulatory authority(SEIAA). Remediation plan shall be completed in 03 years with the consultation of Local / Urban Bodies / State Govt. Deptt.

IV. Approval / permission from CGWA shall be obtained before drawing ground water for the project activities, if applicable. Jharkhand State Pollution Control Board shall not issue Consent to Operate (CTO) until the PAs obtains such permission.

V. PAs shall take other necessary clearances / permissions under various act and rules if any, from the respective authorities / departments.

VI. STP of adequate capacity shall be established within the project premises.

VII. Energy conservation measures adhering to part of ECBC norms shall be complied with.

VIII. The penalty of **Rupees 57,56,910.57** being 1% of total capital investment and **Rs. 8,17,609.40** being 0.25% of the total turnover of the project incurred during violation period (**Capital Investment Rs. 57,56,91,056.95 & Turnover Rs. 32,70,43,761.52)** shall be submitted to Jharkhand State Pollution Control Board in the form of demand draft.

On the basis of 104th Minutes of Meeting of SEAC, the project Authority has also submitted the penalty amount to Jharkhand State Pollution Control Board, Ranchi, and the evidence of the same has been submitted to SEIAA, Jharkhand on **08.07.2023** bearing **demand draft** no. : **961187** dated : **06.07.2023**

IX. Action will be taken for the violation by the Jharkhand State Pollution Control Board under the provision of section 19 the Environment (Protection) Act, 1986.

The PAs have submitted the above required documents.

X. Jharkhand State Pollution Control Board and project Authorities will **ensure** that the amount of Bank Guarantee shall not be released/lapsed **till the completion** of remediation plan, natural and community resource augmentation plan as directed by MoEF & CC vide O.M. No. **F.No.22-21/2020-IA.III**, dated **07th July, 2021**. In case of non compliance of the said directions/conditions, the Environmental Clearance issued will be deemed to be cancelled with immediate effect.

State Level Environment Level Impact Assessment Authority (SEIAA), Jharkhand in its **105th** meeting held on **28th & 29th May, 2023** discussed the project proposal along with recommendations made by SEAC in its **104th** meeting held on **22nd, 23rd, 24th, 25th and 26th May, 2023** and decided to grant EC to the project

On the basis of recommendation of SEAC and decision of SEIAA to grant of EC, Environmental Clearance is hereby issued to the **"Expansion of Sirka OCP (1.0 MTPA) Argada Area of M/s Central Coalfields Limited at Village : Sirka, Tehsil : Ramgarh, District : Ramgarh, Jharkhand (110.94 Ha)"** alongwith the following specific conditions as recommended by SEAC:-

I. Specific Conditions:

i. This Environmental Clearance is valid subject to the following condition below –
That this project has-
   a. Obtained all legal rights to operate at concerned place.
   b. Complied with all existing concerned laws of the land and
   c. Complied with the decisions of SEIAA on the issue of Environmental Clearance till date.

ii. Copy of the approved Site Specific Wildlife Conservation Plan (SSWCP) is to be submitted to SEIAA/SEAC immediately after its approval by the competent authority.

iii. The Project Authorities must ensure Offset of conventional energy requirement of not less than 2% by installation of solar panel. Overall conservation of not less than 20% is to be ensured by use of efficient energy measures.

iv. No mining/activity shall be undertaken in the forest land or deemed forest without obtaining requisite prior forestry clearance.

v. This Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India, Hon'ble High Court, Hon'ble NGT, MoEF & CC and any other Court of Law, if any, as may be applicable to this project.

vi. Environmental clearance is subject to obtaining prior clearance from forestry and Wildlife angle including clearance from standing committee of NBWL, as may be applicable to this project (in case any fauna occurs / is found in the Project area or if

the area involves forest land or Wildlife habitat i.e. core zone of elephant/tiger reserve etc. and or located with in 10 km. of protected area).

vii. The project proponent may apply simultaneously for forest and NBWL clearance, in order to complete the formalities without undue delay, which till process on their respective merits, no rights will vest in or accrue to them unless all clearance are obtained.

II. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1980, in case of the diversion of forest land for non-forest purpose involved in the project.

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area).

iv. In the writ petition (Civil) no. 202/1995, T.N. Godaverman Thirumulpad vs union of India and ors. the Hon'ble Supreme Court passed an order dated 03.06.2022 " National Park or Wildlife Sanctuary must have an ESZ of minimum 01 km in which the activities prescribed and prescribed in the guidelines of 09th February, 2011 shall be strictly adhered to".

v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.

vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.

vii. Solid waste/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016 as amended from time to time.

viii. It shall be mandatory for the project management to submit six (06) monthly compliance report in respect of the stipulated prior environmental clearance terms and conditions in hard copies and soft copies to the regulatory authority concerned Regional Office of MoEF & CC at Ranchi and Jharkhand State Pollution Control Board (J.S.P.C.B.), Ranchi/SEIAA/CPCB.

ix. Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

x. The SEIAA, Jharkhand or any other competent Authority may alter modify the above conditions or stipulate any further condition in the interest of Environment Protection.

III. Air quality monitoring and preservation:

i. Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM10, PM2.5, S02 and NOx. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.

ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.

iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water / mist sprinkling / rain gun etc shall be carried out in critical areas prone to air pollution (with higher values of PM10/PM2.5) such as haul road, loading/ unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.

iv. The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.

v. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.

vi. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.

vii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

IV. Water quality monitoring and preservation:

i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.

ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-1A.II (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.

iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change / Regional Office.

v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.

vi. Catch and or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilised for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check

run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.

vii. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).

viii. Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP / STP needs to be provided.

ix. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose *viz.* watering the mine area, roads, green belt development *etc.* The drains shall be regularly desilted particularly after monsoon and maintained properly.

x. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining PlaniEIA/EMP report and with due approval of the concerned State/GoI Authority. The construction of embankment to prevent any danger against inrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.

xi. The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

V. Noise and Vibration monitoring and prevention

i. Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs / muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

ii. Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.

iii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

VI. Mining Plan:

i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.

ii. Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).

iii. No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980

iv. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

VII. Land Reclamation:

i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change (MOEF&CC) from time to time shall be submitted to MOEFCC/Regional Office (RO).

ii. The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural /forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.

iii. The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining" / "post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.

iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

v. Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept

unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.

vi. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VIII. Green Belt:

i. The project proponent shall take all precautionary measures during rmnmg operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.

ii. Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach! coal transportation roads..

IX. Public hearing and Human health issues:

i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six- monthly basis.

ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.

iii. Personnel (including outsoured employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing.

Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.

v. The project proponent shall follow the mitigation measures provided in this Ministry'S OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area.

X. Corporate Environment Responsibility:

i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental/forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.

iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry / Regional Office along with the Six Monthly Compliance Report.

v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

XI. Miscellaneous:

i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

iv. The project proponent shall monitor the criteria pollutants level namely; PM_{10}, SO_2, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.

viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.

ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

xii. Concealing factual data or submission of false / fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

xvii. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

xviii. The Prescribed EC is valid as per Notification no. S.O. 1807(E) dated 12.04.2022 of MoEF&CC, Govt. of India.

Sd/-
Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Memo No : **EC/SEIAA/2023-24/2810/2023/** 187 Ranchi, Date : 12/07/2023

Copy to:

1. Additional Chief Secretary, Department of Forests, Environment & Climate Change, Govt. of Jharkhand.
2. Deputy Commissioner, District - Ramgarh, Jharkhand.
3. Divisional Forest Officer, Ramgarh Forest Division, Ramgarh, Jharkhand.
4. Divisional Forest Officer, Wildlife Division, Hazaribagh, Jharkhand.
5. Director IA Division, Monitoring Cell, MoEF and Climate Change, Indira Paryavaran Bhavan, Jorbag Road, Aliganj, New Delhi – 110003.
6. Integrated Regional Office, Ranchi, Ministry of Environment, Forest and Climate Change, 2nd Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi, Jharkhand – 834002.

7. Member Secretary, Jharkhand State Pollution Control Board, Ranchi.
8. Secretary, Jharkhand State Expert Appraisal Committee, Ranchi.
9. Website.
10. Guard file.

12/07/2023

Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Signature Not Verified
Digitally signed by Shri Ashok Kumar, IFS
Member Secretary
Date: 7/14/2023 3:49:30 PM