सत्यमेव जयते

File No: EC/SEIAA/2026-27/5033/2026

State Environment Impact Assessment Authority (SEIAA), Jharkhand

(Constituted as per the provision of EIA Notification, 2006, as amended by the Ministry of Environment, Forest and Climate Change, Government of India)

Dated: **08/10/2026**

To,

ANOOP SRIVASTAVA
Tata Steel Limited
Bombay House, 24 Homy Modi Steet, Fort, MUMBAI, MAHARASHTRA, 400001
tsl.env@tatasteel.com

Subject: Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

This is in reference to your application for Grant of Terms of Reference under the provision of the EIA Notification 2006-regarding in respect of project Sijua Colliery of Tata Steel Limited for expansion in production capacity to 0.60 MTPA Raw Coal over ML Area of 238.66 ha located in Village Sijua and Bhelatand, Tehsil Dhanbad, District Dhanbad, Jharkhand submitted to Ministry vide proposal number SIA/JH/CMIN/577522/2026 dated .

2. The particulars of the proposal are as below:

(i) TOR Identification No.	TO26B0102JH5996656N
(ii) File No.	EC/SEIAA/2026-27/5033/2026
(iii) Clearance Type	Fresh ToR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vi) Name of Project	Sijua Colliery of Tata Steel Limited for expansion in production capacity to 0.60 MTPA Raw Coal over ML Area of 238.66 ha located in Village Sijua and Bhelatand, Tehsil Dhanbad, District Dhanbad, Jharkhand
(vii) Name of Company/Organization	Tata Steel Limited
(viii) Location of Project (District, State)	DHANBAD, JHARKHAND
(ix) Issuing Authority	SEIAA
(x) Applicability of General Conditions	no
(xi) Applicability of Specific Conditions	no

Plot/Survey Khasra Nos.: 113 , 1007 , 984 , 985 , 1082

3. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A and B) were submitted to the Ministry for an appraisal by the SEIAA Appraisal Committee (SEIAA) in the Ministry under the provision of EIA notification 2006 and its subsequent amendments.

4. The above-mentioned proposal has been considered by SEIAA Appraisal Committee of SEIAA in the meeting held on 08/09/2026. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B, Part C EIA, EMP)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.

5. The brief about configuration of plant/equipment, products and byproducts and salient features of the project along with environment settings, as submitted by the Project proponent in Form-1 (Part A, B and C)/EIA & EMP Reports/presented during SEIAA are annexed to this EC as Annexure (1).

6. The SEIAA, in its meeting held on 08/09/2026, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of Terms of Reference under the provision of EIA Notification, 2006 and as amended thereof subject to stipulation of specific and general conditions as detailed in Annexure (2).

7. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the SEIAA Appraisal Committee hereby decided to grant Terms of Reference for instant proposal of M/s. ANOOP SRIVASTAVA under the provisions of EIA Notification, 2006 and as amended thereof.

8. The Ministry reserves the right to stipulate additional conditions, if found necessary.

9. The Terms of Reference to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/ Regulations or Statutes, as applicable, to the project.

10. This issues with the approval of the Competent Authority.

Copy To

1. The Member Secretary, CGWA, 18/11 Jamnagar House Man Singh Road, Central, Delhi, cgwa@nic.in
2. The Member Secretary, CPCB, Central Pollution Control Board Cbd-Cum-Office Complex East Arjun Nagar Delhi – 32, New Delhi, Delhi, mscb.cpcb@nic.in

Annexure 1

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	An EIA-EMP Report shall be prepared for ……MTPA peak rated capacity in a mining lease (ML) area of …..ha based on the generic structure specified in Appendix-III of the EIA Notification, 2006.
1.2	The cover page of the EIA report shall consists of project title with location, applicable schedule of the EIA Notification, 2006, ToR letter No. with date, study period along with EIA consultant & laboratory details with reference of QCI/NABET/NABL accreditation certificate.

2. Introduction About The Project

S. No	Terms of Reference
2.1	Details of the chronology of past EC regarding the project and its implementation status (in case of expansion proposals) shall be provided
2.2	Details of mine plan and mine closure plan approval from Competent Authority should be furnished for green field and expansion projects. Reference of the Vesting Order should also be provided.
2.3	Details regarding project capacity (peak rated capacity in MTPA) and mining lease area (ha), details regarding project proponent and project location (including coalfield / coal block & geographical location), significance/need of the project and coal linkage.

Additional Terms of Reference

N/A

Annexure 2

Details of Products & By-products

Name of the product /By-product	Product / By-product	Existing	Proposed	Total	Unit	Mode of Transport / Transmission
Raw Coal	Raw Coal	452000	148000	600000	Tons per Annum (TPA)	Conveyor Belt

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 / website: www.jseiaa.in

सत्यमेव जयते

Letter No : **EC/SEIAA/2026-27/5033/2026/** Ranchi, Date :

To: **Shri Anoop Srivastava,**
Chief Environment,
M/s Tata Steel Limited,
Office of General Manager,
Jharia Division, Jamadoba,
District : Dhanbad, Jharkhand : 828112.

Sub: Prescribing of ToR to **"Sijua Colliery for expansion in production capacity to 0.60 MTPA Raw Coal of M/s Tata Steel Limited, Village : Sijua and Bhelatand, Tehsil : Putki, Distt. : Dhanbad, Jharkhand (238.66 Ha) (Proposal no.: SIA/JH/CMIN/ 577522/2026) - regarding.**

Ref: Your application no. Nil, dated : 20.08.2026.

Sir,

It is in reference to the project **"Sijua Colliery for expansion in production capacity to 0.60 MTPA Raw Coal of M/s Tata Steel Limited, Village : Sijua and Bhelatand, Tehsil : Putki, Distt. : Dhanbad, Jharkhand (238.66 Ha)"** submitted by you for seeking Terms of Reference (ToR).

This is an expansion project which has been taken for appraisal on 25.08.2026.

Project Sector: 1(a) Mining of Minerals (Coal), Category: B1.

Application for Terms of Reference (ToR) for Sijua Colliery (Underground Coal Mine), Capacity 0.60 MTPA within total project area of 238.66 ha.

The proposed project is an expansion of existing Underground Coal Mining Project of Sijua Colliery from to 0.60 MTPA over mine lease area of 238.66 ha located in villages Sijua&Bhelatand, Tehsil Putki, District Dhanbad, Jharkhand by M/s Tata Steel Limited. The Sijua Colliery is owned by M/s Tata Steel Ltd (TSL). Sijua Colliery lies in the Jharia Coalfield, in the Dhanbad district of Jharkhand state. Sijua property was vested in perpetuity to Tata Iron & Steel Co. Ltd. (now TATA STEEL Ltd.) by Sijooah Coal Company in the year 1918, with surfacerights for exploitation of the underground coal reserve from Sijua Coal Company in the year 1918. The block was left out as captive mines of Tata Iron & Steel Co. Ltd. for its existing steel plant in Jamshedpur, Jharkhand, by the Coking Coal Mines Nationalization Act 1971. Sijua Colliery lease area covers 238.66 ha.

1. Sijua Colliery is an existing underground coal mine of Tata Steel Limited since the year 1918.

2. On 27.01.1994, the EIA Notification 1994 was published and it allowed existing mines to operate but expansion of mines required EC. But the meaning of expansion was not defined yet and was later clarified through further notification in 2004.
3. Later in 2004, as per MoEF&CC notification No.J-20012/11/98-IA.II(M) dated 28.10.2004 expansion was defined as:

   "III. Expansion in Production (c) If the annual production of any year from 1994-95 onwards ***exceeds the annual production of 1993-94 or its preceding years*** *(even if approved by IBM), it would constitute expansion."*
4. Going by the above definition, highest annual production of Sijua Colliery during 1993-94 or its preceding years was **0.452 MTPA** in year 1984-85 (certified production figure from Statistical Wing, Coal Controllers Organization vide mail dated August 22, 2022; 11.39 AM - copy attached) and the mines has never exceeded that production any year after 1993-94. So, Sijua Colliery is not an expansion case and as such no EC was required to be taken for existing coal mine.
5. Further, there has been no change in mining technology and mining method or Expansion, modernization or any change in the product mix or raw material mix after 1993-94.
6. The EIA Notification 2006 and amendments thereof mandated Prior Environment Clearance (EC) for mines expansion or lease renewal or *"as under clause 2 (ii) ... Expansion, modernisation or any change in the product mix or raw material mix in existing projects or activities, listed in the Schedule to this notification, resulting in capacity beyond the threshold limits specified for the concerned sector in the said Schedule..."*; We have neither exceeded base level production of 0.45 MT nor lease renewal was required nor any Expansion, modernization or any change in the product mix or raw material mix for the project was taken up. So, EC was not required for Sijua Colliery under EIA Notification 2006 till date.

Highest annual coal production data of Sijua Colliery is mentioned in following table for all 3 phases (prior to 1994, 1994 to 2006 and beyond 2006):

Phase	**Period**	**Highest (max.) Annual Production Achieved**	**Reference Year**
Pre EIA-Notification	1918-19 to 1993-94	0.452 MT (Base Level)	1984-85 (as per CCO records)
Under EIA Notification 1994	1994-95 to 2005-06	0.343 MT (Not exceeded base level of 0.45 MT)	2002-03 (as per CCO records)
Post EIA Notification 2006	2006-07 to	0.345 MT (Not exceeded base level of 0.45 MT)	2010-11 (as per CCO records up to 2021-22).

Phase	Period	Highest (max.) Annual Production Achieved	Reference Year
	2021-22 From 2022-23 to 2025-26	0.25 MT (Not exceeded base level of 0.45 MT)	As per CTO approval by JSPCB.

Presently, the mine is being operated at the annual rated capacity of 0.25 MT as per CTO granted by JSPCB vide Consent Ref No. JSPCB/HO/RNC/CTO-13960863/2022/1798, Issued on 25.12.2022 valid till 31.12.2027.

Considering all above facts, Sijua Colliery was not required to obtain the Environmental Clearance (EC) in past under both EIA Notification 1994 and 2006.

Land Details

Ownership Type	Land Type	Area in ha	Percentage
Land owner by Company	a. Mining Infrastructure b. Colony/Housing c. Afforested Land	4.45 22.24 65.55	1.86 9.31 27.46
Land owned by Private Owner	a. Agriculture b. Village	78.6 16.17	33.21 6.77
Govt. Land	a. Forest b. Road c. River/Drain/Ponds	- 2.93 10.1	- 1.22 4.23
Railway Land	-	38.62	16.18
Total		**238.66**	**100**

Plot and Khata No. of the entire Project Area

Khata No.	Plot No.
1	43
1	44
2	126
3	46
3	66

Khata No.	Plot No.
3	67
3	71
3	119
4	68
5	83

Khata No.	Plot No.
6	90
7	64
8	78
8	79
9	153

Khata No.	Plot No.
9	154
10	117
11	368
13	158
14	157
14	162
16	122
17	241
18	123
19	108/1491
21	121
22	866p
23	144
24	55
24	139/1485
25	326
26	124
27	135
29	57
32	108/1492
33	577
33	578
34	588
34	589
35	358
35	455
35	458
35	459
35	460
35	521
35	532
35	551
35	560
35	562
35	984
35	985
35	1082
35	1085
36	113
37	502
37	503
37	504
37	505
37	512
37	513
37	540

Khata No.	Plot No.
37	541
37	542
37	543
37	903
37	1007
37	1036
37	1060
38	152
39	876
39	924
39	928
39	983p
40	469
41	105/1489
42	795
44	910
45	909
45	1001
45	1002
45	1016
45	1017
45	774p
46	454
47	771p
47	772p
49	927
50	103
51	86
52	907
52	993
52	999
52	1000
52	1009
52	1011
52	1014
52	1018
52	1022
53	516
53	517
53	518
55	145
58	1069
60	93
60	95
61	1471
62	118

Khata No.	Plot No.
64	317
65	929
66	867p
67	1061
68	462
70	366
70	429
71	131
72	47
73	718
74	444
75	688
75	689
76	322
77	720
78	601
78	603
78	604
78	607
78	609
78	654
78	655
78	656
78	658
78	659
78	660
79	291
80	474
81	783
81	786
82	721
83	618
83	769
83	780
84	642
84	644
84	645
85	240
85	244
85	417
86	1005
87	620
87	637
87	638
87	639
87	729

Khata No.	Plot No.
87	730
87	738
87	751
87	1042
87	1046
87	1051
87	1063
88	468
89	437
89	438
89	439
89	440
89	441
89	442
89	443
89	794
89	912
89	986
89	1076
89	1087
89	1086p
89	797p
90	205
90	206
90	207
90	209
90	210
90	211
90	226
90	796
90	1119
90	1129p
90	1159p
90	1161p
91	904
91	905
91	911
92	496
92	497
92	506
92	507
92	508
92	1111
94	63
96	137
98	717

Khata No.	Plot No.
99	294
100	268
100	292
101	1475
101	1476
103	930
103	931p
103	982p
106	54
107	1038
108	105/1490
110	481
110	482
110	483
110	484
110	487
110	489
110	555
110	556
111	723
112	1034
113	467
114	625
115	486
115	488
116	681
116	881
117	327
118	863
118	865p
119	770
120	515/1494
122	48
122	49
122	51
125	435
125	533
125	534
125	535
125	536
125	537
125	538
125	539
125	789
125	533/1502
127	203

Khata No.	Plot No.
128	293
132	112
133	39
134	1003
134	1010
134	1013
134	1019
136	926
138	719
140	1029
141	585
141	586
141	587
141	592
141	1131
142	80
143	310
144	906
144	1008
144	1024
144	1026
144	1079
144	1081
144	1113p
144	777p
144	792p
145	91
145	92
145	96
145	97
145	98
147	365
152	565
152	566
152	567
152	568
152	569
152	570
152	571
152	621
152	626
152	627
152	628
152	629
152	630
152	631

Khata No.	Plot No.
152	632
152	633
152	634
152	635
152	636
152	640
152	716
152	731
152	732
152	736
152	737
152	739
152	788
152	992
152	1112p
152	773p
153	1033
154	186
155	193
156	433
157	1012
157	1015
157	1023
158	889
159	890
161	456
161	457
163	1077
166	364
168	390
169	219
169	220
169	251
169	253
169	271
169	401
169	402
169	405
169	406
169	407
169	409
169	410
169	411
169	414
169	415
169	416

Khata No.	Plot No.
169	254/1480
171	385
172	367
173	557
173	559
173	733
173	734
173	735
173	988
173	989
173	990
173	991
174	445
174	447
174	449
174	606
174	610
174	611
174	612
174	613
174	614
174	615
174	616
174	617
174	647
174	648
174	649
174	650
174	651
174	652
174	661
174	662
174	663
174	667
174	668
174	669
174	672
174	678
174	679
174	680
174	682
174	683
174	684
174	685
174	686
174	687

Khata No.	Plot No.
174	747
174	762
174	764
174	765
174	766
174	778
174	787
174	882
174	883
174	884
174	885
174	886
174	887
174	998
174	1059
174	1062
174	1110p
176	324
177	329
178	1027
179	100
180	511
180	514
180	515
181	455/1500
182	321
185	1025
185	1145p
186	227
186	228
186	356
186	357
186	452
186	453
187	312
188	76
189	84
190	85
191	141
191	146
193	318/1511
194	270
195	273
196	1028
198	320
199	50

Khata No.	Plot No.
199	52
200	89
205	923
205	925
206	868
206	869
206	870
206	871
206	872
206	873
206	874
206	875
206	877
206	878
206	879
206	880
207	779
208	105
209	155
210	88
211	159
212	156
213	129
215	128
217	1043
218	130
219	1124
219	1126
220	1080
222	434
223	262
224	465
225	276
226	331
227	722
228	308
229	598
230	423
231	325
232	1078
233	323
234	523
234	888
234	994
234	996
234	997

Khata No.	Plot No.
234	1020
234	1021
234	1064
234	1068
234	1070
235	307
236	1006
237	490
237	491
237	492
237	493
237	494
237	495
238	132
239	337/1510
240	519
240	520
241	313
242	413
244	574
246	1136
246	1137
246	1138
246	1139
246	1142
246	1147
246	1140p
247	114
248	61
249	111
250	109
251	263
252	136
253	75
254	1037
254	1039
254	1041
255	360
255	428
255	430
255	431
255	432
255	470
255	472
255	473
255	476

Khata No.	Plot No.
255	477
255	478
255	479
255	480
256	56
256	69
256	70
256	115
256	139
257	102
258	82
259	58
259	59
260	671
260	673
260	674
260	675
260	676
260	677
260	744
260	745
260	746
260	748
260	749
260	750
260	752
260	753
260	757
260	761
260	784
260	785
260	790
260	864
260	891
260	892
260	894
260	895
260	896
260	897
260	899
260	900
260	901
260	995
260	1071
260	1072
260	1073

Khata No.	Plot No.
260	1074
260	1075
260	1088
260	1089
260	775
260	791
261	160
261	161
261	163
261	173
261	174
261	175
261	176
261	180
261	181
261	183
261	184
261	185
261	190
261	192
261	194
261	195
261	196
261	197
261	198
261	199
261	200
261	201
261	202
261	208
261	212
261	213
261	214
261	215
261	216
261	217
261	218
261	222
261	238
261	243
261	245
261	247
261	248
261	249
261	250
261	255

Khata No.	Plot No.
261	267
261	269
261	272
261	279
261	280
261	281
261	282
261	283
261	286
261	287
261	288
261	289
261	290
261	298
261	388
261	389
261	396
261	403
261	404
261	528
261	545
261	546
261	547
261	548
261	549
261	553
262	499
262	500
262	501
264	754
264	756
264	759
264	760
265	665
271	987
273	330
274	475
276	619
276	622
276	690
276	691
276	692
276	767
276	768
276	781
276	782

Khata No.	Plot No.
277	314
278	62
279	1032
280	318
281	106
281	107
282	72
282	74
282	77
283	412
284	394
286	524
286	529
287	572
287	573
287	575
287	576
287	579
287	580
287	581
287	582
287	583
287	1084
288	525
288	526
288	527
288	525/1496
289	522
291	485
292	913
292	915
292	916
292	917
292	918
292	919
292	920
292	921
292	922
293	436
294	311
292	914
298	73
299	1035
299	1045
299	1048
299	1049

Khata No.	Plot No.
299	911/1504
300	558
301	142
302	81
303	264
304	105/1488
305	296
305	297
306	779/1501
308	755
308	758
308	1065
310	45
310	53
311	138
312	386
314	87
315	140
316	104
317	1040
318	120
318	167
318	221
318	223
318	224
318	229
318	231
318	232
318	233
318	236
318	239
318	254
318	277
318	278
318	285
318	299
318	359
318	361
318	451
318	552
318	561
318	563
318	595
318	710
318	1030
318	1031

Khata No.	Plot No.
318	1054
318	1055
318	1056
318	1057
318	1066
318	1067
318	1141
318	1143
318	1146
318	300/1477
321	1
321	2
321	3
321	4
321	5
321	6
321	7
321	8
321	9
321	10
321	11
321	12
321	13
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321	30
321	31
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321	34
321	35
321	36
321	37

Khata No.	Plot No.
321	38
321	40
321	41
321	42
321	110
321	125
321	147
321	148
321	149
321	150
321	151
321	170
321	171
321	177
321	178
321	179
321	182
321	188
321	189
321	191
321	225
321	230
321	234
321	235
321	246
321	252
321	257
321	258
321	259
321	260
321	261
321	265
321	266
321	284
321	302
321	303
321	304
321	305
321	306
321	309
321	315
321	316
321	319
321	328
321	332
321	333

Khata No.	Plot No.
321	334
321	335
321	336
321	337
321	338
321	339
321	340
321	341
321	342
321	344
321	345
321	346
321	347
321	348
321	349
321	350
321	351
321	352
321	353
321	354
321	355
321	362
321	363
321	369
321	370
321	371
321	373
321	374
321	375
321	376
321	377
321	378
321	379
321	380
321	381
321	382
321	383
321	384
321	391
321	392
321	393
321	395
321	397
321	399
321	400
321	418

Khata No.	Plot No.
321	419
321	420
321	421
321	422
321	424
321	426
321	427
321	464
321	466
321	509
321	510
321	530
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321	602
321	605
321	623
321	624
321	641
321	643
321	646
321	653
321	657
321	664
321	666
321	670
321	724
321	727
321	728
321	743
321	763
321	800p
321	1044
321	1047
321	1052
321	1053
321	1058
321	1120
321	1121
321	1122
321	1123

Khata No.	Plot No.
321	1125
321	1127
321	1132
321	1133
321	1134
321	1135
321	1144
321	1128p
321	1155
321	1130p
321	391/1473
321	13/1493
321	252/1497
321	33/1478
321	349/1499
321	42/1486
321	42/1498
321	427/1508
321	43/1487
321	343
321	554
321	564
322	28
322	60
322	94
322	101
322	134
322	164
322	165
322	237
322	242
322	256
322	300
322	301
322	408
322	425
322	463
322	471
322	584
322	596
322	597
322	708
322	725
322	726
322	693
322	694

Khata No.	Plot No.
322	740
322	893
322	902
322	908
322	1118
322	1152
322	167/1483
322	54/1472
323	166
323	168
323	169
323	600
323	350/1512
4	186
7	188
16	193
18	193/940
28	194
29	190
30	173
41	175
41	177
42	156
42	159
42	161
42	192
42	192/941
43	162
43	163
43	164
51	180
65	174
74	189
75	184
80	185
87	170
87	172
87	179
107	191
118	165
123	187
126	153
126	198
126	199
126	200
126	201

Khata No.	Plot No.
126	198/937
129	157
129	158
129	160
129	166
129	168
129	169
129	171
129	176
129	178
129	181
129	183
130	182
130	195
130	193/943
131	154
131	155

Project and Location Details

Sl. No.	Particulars	Details
1	**Project Name**	**Sijua Colliery (0.6 MTPA) – Underground Coal Mine**
2	Project Proponent	Tata Steel Limited
3	Project Activity Area	238.66 ha
4	Forest Land	Nil
5	Non-Forest Land	238.66 ha
6	Project Cost	Rs. 168.805 Crores
7	Mine Life	43 Years
8	Proved Reserves	148.04 Million Tonnes (Base Year April-2018)
9	Indicated Reserves	49.77 Million Tonnes (Base Year April-2018)
10	Inferred Reserves	23.38 Million Tonnes (Base Year April-2018)
11	Mineable Reserves	10.68 Million Tonnes (Base Year April-2018)
12	**Balance**	**9.78 Million Tonnes (as on date)**
13	Employment Potential	920 (440 Permanent + 480 Contract) Persons
14	Water Requirement	Existing: 8,478 KLD Proposed: 13,000 KLD
15	Water Source	Ground water through Mine seepage
16	Power Requirement	11,025 kVA
17	Average Coal Grade	G-6
18	No. of working days	305 days
Environmental Settings		
1	Nearest Highway	NH-32 at 5 km
2	Nearest Railway Station	Sijua Halt – within mine lease Dhanbad Railway station – 11 km
3	Nearest Airport	Durgapur Airport – 114 km SE
4	Nearest Town/City	Dhanbad – 6.65 km
5	Interstate Boundary	None within 10 km radius
6	Nearest Water Body	Damodar River – 6.01 km, S Khudia Nadi - 4.00 km, W Katri Nadi - 1.1 km, W Jarian Nala – Along lease boundary, SE
7	Reserve / Protected Forests	No forest land inside mining lease area. Nearest forest outside mining lease: Topchanchi, RF - 6.8 km, NE.
8	National Park, Wildlife Sanctuary, Biosphere reserves	No National Park, Wildlife Sanctuary or Biosphere reserve within 10 km radius.
9	CPA/SPA as notified by CPCB	No CPA/SPA within 5 km radius.

Topography		
1	Minimum elevation	179.60 m AMSL in SE
2	Maximum elevation	197.60 m AMSL in NW

Land Use Planning

Pre-mining land use in 'ha'			Type	Use Land (Proposed)	Land Use (End of life)	Land Use (Post-closure)				
						Agricultural land	Plantation	Water body	Public/ company use	Total
Tenancy	Agricultural	Tata Steel has acquired the operating mine in 1918. Before that period this mine was operational under Sijua Coal Company. Thus, pre-mining land use plan is unavailable.	Excavation Area	Nil	Nil	Nil				
	Township		Backfilled Area							
	Grazing		Excavated void							
	Barren		Without plantation							
	Water bodies		Top soil dump							
	Road		External dump							
	Community		Safety zone/ rationalisation area							
	Un-habitated		Road Diversion							
	Village		Diversion below river/nallah/canal							
Govt Non-forest	Agricultural		Road & Infrastructure Area	26.24	26.24	-	26.24	-	-	26.24
	Township		Garland	Nil	Nil	Nil				

Pre-mining land use in 'ha'		Type	Land Use (Proposed)	Land Use (End of life)	Land Use (Post-closure)				
					Agricultural land	Plantation	Water body	Public/ company use	Total
		drains							
	Grazing/Other	Embankment							
	Road	Green belt							
	Waterbody	Water reservoir near pit/ water body							
	Other	UG entry	0.45	0.45	-	0.45	-	-	0.45
Forest	Reserve	Pit head power plant	Nil	Nil	Nil				
	Protected	Resettlement							
	C-J-B-J	Undisturbed/ Mining right for UG	211.97	211.97	78.6	65.55	10.1	57.72	211.57
Free hold		Others	Nil	Nil	-	-	-	-	Nil
Total			**238.66**	**238.66**	**78.6**	**92.24**	**10.1**	**57.72**	**238.66**

Production Details in MT/year - Base year 2018-19 as per approved mine plan

Year	Total
Y-1	0.25
Y-2	0.31
Y-3	0.31
Y-4	0.31
Y-5	0.31
Y-6	0.31
Y-7	0.31
Y-8	0.32

Y-9	0.32
Y-10	0.34
Y-11	0.34
Y-12	0.36
Y-13	0.40
Y-14	0.60
Y-15	0.60
Y-16	0.40
Y-17	0.31
Y-18	0.30
Y-19	0.30
Y-20	0.30
Y-21	0.25
Y-22	0.25
Y-23	0.25
Y-24	0.20
Y-25	0.20
Y-26	0.18
Y-27	0.17
Y-28	0.17
Y-29	0.16
Y-30	0.15
Y-31	0.15
Y-32	0.14
Y-33	0.13
Y-34	0.13
Y-35	0.13
Y-36	0.13
Y-37	0.13
Y-38	0.13
Y-39	0.13
Y-40	0.13
Y-41	0.13
Y-42	0.13
Y-43	0.12

Equipment Details

Machinery	Specification	Motor power, kW	No. in use	Proposed (Nos.)
Winders				
Winder (2pit,8	735 rpm, 735 rpm,735	55 kW, 130 kW,	4	4

pits,12 pits and 15 pits)	rpm, 735 rpm	130 kW, 130 kW		
In scam Transport				
Direct Haulage System (Material Transportation)	90 kW	90 kW	3	4
	65 kW	60 kW	7	8
End Less Haulage System	37.5 kW	37.5 kW	1	1
Conveyor	900MM	30 kW	18	20
Face Equipment				
Drill machine with panel	Drill dia. 38 mm Voltage 125V	1.1kW	12	20
Face pump (Roto)	GPM:100	7.5 kW	18	22
Auxiliary fan	300m3/min	15kW	12	20
	600m3/min	45kW	2	2
SDL	Bucket Capacity 1.5M3	55kW	9	20
Road Header/CM		160kW	0	1
Chain Conveyor	60TPH	2X13kW	15	26
Other Major Equipment				
HT Pump	Type III	300kW	20	22
MT Pump	Type I	75kW	19	19
Centralized Compressor	900CFM	135kW	2	2

Water Balance - Existing

Status of mine water	**Dry Period (Gallons per day)**	**KLD**	**Monsoon Period (Gallons per day)**	**KLD**
Water Use				
Horticulture	3,07,496	1,164	3,07,496	1,164
Water Treatment Plant	1,23,104	466	1,23,104	466
Stowing (Recirculated)	3,50,556	1,327	3,50,556	1,327
Surface Reservoir (Dust suppression at surface and UG)	45,966	174	45,966	174
Irrigation	14,12,528	5,347	14,12,528	5,347
Pumped out mine water (Total)	**22,39,650**	**8,478**	**22,39,650**	**8,478**

Coordinates Range

Latitudes:

23°46'11.576" N to 23°47'13.838" N

Longitudes:

86°19'12.467" E to 86°20'32.258" E

Mining Details

- Bord & pillar method of mining with hydraulic sand stowing is practiced in Sijua Colliery.
- Similar method is to be followed for extraction of lower seams also.
- For thicker seams, pillar extraction will be in two or three lifts. The final extraction of pillars (depillaring) will be done using sand stowing.
- Depillaring has also been done historically in the X seam and no such subsidence to the extent to cause any damage to surface structure has been observed.
- In Sijua colliery, Shaft protection pillars, JC Railway Line that passes East-West on South side of the property and Sijua Railway station are most important features which need to be protected.
- In all the coal seams as per guideline and approval of DGMS and railway authorities, pillars have been left out under the railway line.
- During working of deeper seams similar protective measures will also be taken to protect the railway property. With special approval of DGMS and railways, few galleries are driven across the protective pillars to make access to the other side of the property which is now adjacent to Bhelatand Amalgamated colliery.
- For protection of villages, roads, DVC line and company facilities, hydraulic stowing is practiced in Sijua colliery.
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- For protection of villages, roads, DVC line and company facilities, hydraulic stowing is practiced in Sijua colliery.

Baseline data collection

1st March 2025 to 31st May 2025 (Pre-Monsoon) period

AAQ Parameters at 9 locations	PM10: 55.2 to 85.5 µg/m3 PM2.5: 23.8 to 47.8 µg/m3 SO2: 14.6 to 26.5 µg/m3 NOx: 22.8 to 38.9 µg/m3 CO: 0.35 to 0.96 mg/m3
Groundwater quality at 8 locations	pH – 7.1 to 7.9 Alkalinity – 234 to 268 mg/L Chloride – 80 to 128.5 mg/L Total Hardness – 245 to 275 mg/L TDS – 382 to 430 mg/L
Surface water quality at 12 locations	Color – 8 to 22 Hazen pH – 6.8 to 7.9 DO – 4.1 to 5.0 mg/L BOD – 3.8 to 24 mg/L COD – 30.5 to 80 mg/L
Noise levels at 8 locations	44.5 to 52.2 dB(A) for daytime and 35.4 to 44.5 dB(A) for night time
Soil quality at 8 locations	pH – 4.90 to 7.9 Porosity – 46.4 to 52.4% Available N –138 to 188 mg/kg Phosphorous as P – 14.5 to 20.4 mg/kg Available K – 120 to 146 mg/kg Electrical Conductivity – 0.49 to 0.85 µs/cm

STATUTORY CLEARANCES

1	Land Document	:	The Sijua Colliery is owned by M/s Tata Steel Ltd (TSL). Sijua Colliery lies in the Jharia Coalfield, in the Dhanbad district of Jharkhand state. Sijua property was vested in perpetuity to Tata

			Iron & Steel Co. Ltd. (now TATA STEEL Ltd.) by Sijooah Coal Company in the year 1918, with surface rights for exploitation of the underground coal reserve from Sijua Coal Company in the year 1918. The block was left out as captive mines of Tata Iron & Steel Co. Ltd. for its existing steel plant in Jamshedpur, Jharkhand, by the Coking Coal Mines Nationalization Act 1971.
2	CO	:	The CO, Putki (Dhanbad) vide letter no. 446, dated 17.04.2025 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 Division, Hazaribag vide letter no. 1547, dated 11.08.2026 certified that the proposed project site is outside Eco Sensitive Zone of Parasnath & Topchanchi Wildlife Sanctuary.
4	DFO Territorial	:	Divisional Forest Officer, Dhanbad Forest Division vide letter no. 1835, dated 30.07.2026 certified that the distance of reserved / protected forest is 2500 meters approx. from proposed project site.
5	Mine Plan Approval	:	Mining Plan along with Progressive Mine Closure Plan (PMCP) for Sijua Colliery has been approved by Under Secretary, Ministry of Coal, Govt. of India vide letter no. 13016/1/2014-PCA, dated 12.03.2019.
6	Consent to Operate (CTO)	:	CTO issued by JSPCB vide Ref. No. JSPCB/HO/RNC/CTO-13960863/2022/1798, dated 25.12.2022 valid up to 31.12.2027.
7	CGWA	:	No Objection Certificate (NOC) for withdrawal of water has been obtained from CGWA vide No. CGWA/NOC/MIN/REN/2024 /9654, dated 18.06.2024 valid up to 20.10.2025.
8	Production figure	:	Certified Production Figures by Coal Controller Organisation vide email dated 22.08.2022.

SEAC, Jharkhand has suggested the ToRs in its **134th** meeting held on **23rd, 24th, 25th, 26th and 27th August, 2026** for undertaking detailed EIA / EMP study and SEIAA, Jharkhand has approved the ToRs in its **134th** meeting held on **08th, 09th & 10th September, 2026.** The SEAC has recommended following project specific conditions:-

Specific Conditions:

i. **The directions proscribed and prescribed in the Office Memorandum No. FC-11/119/2020-FC, Dated : 17th May, 2022 of MoEF&CC shall be strictly adhered to.**

ii. **In compliance of OM no. F.No. IA3-22/3/2024-IA.III (E-241594) dated 24.07.2024 of MoEF&CC, Govt. of India plantation of saplings shall be carried out in the earmarked green belt area as the part of tree plantation campaign "*Ek Ped Ma Ke Naam*" and the details of the same shall be uploaded in the MeriLiFE Portal (https://merilife.nic.in). 10% of the total green belt proposed shall be allocated under this clause.**

iii. **Study to be carried out regarding the stowing material used to ensure that it meets all the safety norms of DGMS.**

The TORs prescribed for undertaking detailed EIA study are as follows:

1. The EIA Report shall be prepared for ..... MTPA rated capacity in an ML / project area of ..... ha based on the generic structure specified in Appendix III of the EIA Notification, 2006.
2. An EIA-EMP Report would be prepared for ..... MTPA rated capacity to cover the impacts and management plan for the project specific activities on the environment of the region, and the environmental quality encompassing air, water, land, biotic community, etc. through collection of data and information, generation of data on impacts including prediction modeling for ..... MTPA of coal production based on approved project/Mining Plan for ..... MTPA . Baseline data collection can be for any season except monsoon.
3. A map specifying locations of the State, District and Project location should be provided.
4. A Study area map of the core zone and 10 km area of the buffer zone (1: 50,000 scale) clearly delineating the major topographical features such as the land use, surface drainage pattern including rivers/streams/nullahs/canals, locations of human habitations, major constructions including railways, roads, pipelines, major industries/mines and other polluting sources. In case of ecologically sensitive areas such as Biosphere Reserves/National Parks/WL Sanctuaries/ Elephant Reserves, forests (Reserved/Protected), migratory corridors of fauna, and areas where endangered fauna and plants of medicinal and economic importance found in the 15 km study area should be given.
5. Land use map (1: 50,000 scale) based on a recent satellite imagery of the study area may also be provided with explanatory note on the land use.
6. Map showing the core zone delineating the agricultural land (irrigated and un-irrigated, uncultivable land as defined in the revenue records, forest areas (as per records), along with other physical features such as water bodies, etc should be furnished.
7. A contour map showing the area drainage of the core zone and 25 km of the study area (where the water courses of the core zone ultimately join the major rivers/streams outside the lease/project area) should also be clearly indicated in the separate map.
8. A detailed Site plan of the mine showing the proposed break-up of the land for mining operations such as the quarry area, OB dumps, green belt, safety zone, buildings, infrastructure, CHP, ETP, Stockyard, township/colony (within and adjacent to the ML), undisturbed area -if any, and landscape features such as existing roads, drains/natural

water bodies to be left undisturbed along with any natural drainage adjoining the lease /project areas, and modification thereoff in terms of construction of embankments/bunds, proposed diversion/re-channelling of the water courses, etc., approach roads, major haul roads, etc should be indicated.

9. In case of any proposed diversion of nallah/canal/river, the proposed route of diversion /modification of drainage and their realignment, construction of embankment etc. should also be shown on the map as per the approval of Irrigation and Flood Control Department of the concerned state.
10. Similarly if the project involves diversion of any road/railway line passing through the ML/project area, the proposed route of diversion and its realignment should be shown in the map.
11. Break up of lease/project area as per different land uses and their stage of acquisition should be provided.
    Land use details for opencast project should be given as per the following table :

S. N.	Land use	Within ML area	Outside ML area	Total
1.	Agricultural land			
2.	Forest land			
3.	Wasteland			
4.	Grazing land			
5.	Surface water bodies			
6.	Settlements			
7.	Others (specify)			

12. Break-up of lease/project area as per mining operations should be provided.
13. Impact of changes in the land use due to the project, if much of the land being acquired is predominantly agricultural land/forestland/grazing land.
14. One-season (non-monsoon) primary baseline data on environmental quality - air (PM10, PM2.5, SOx, NOx and heavy metals such as Hg, Pb, Cr, As, etc), noise, water (surface and groundwater), soil - along with one-season met data coinciding with the same season for AAQ collection period should be provided.
15. Map of the study area (1: 50, 000 scale) (core and buffer zone clearly delineating the location of various sampling stations superimposed with location of habitats, other industries/mines, polluting sources should be provided. The number and location of the stations in both core and buffer zones should be selected on the basis of size of lease/project area, the proposed impacts in the downwind (air)/downstream (surface water)/groundwater regime (based on flow). One station should be in the upwind/upstream/non-impact/non-polluting area as a control station. The monitoring should be as per CPCB guidelines and parameters for water testing for both ground water and surface water as per ISI standards and CPCB classification wherever applicable. Values should be provided based on desirable limits.

16. Study on the existing flora and fauna in the study area (10km) should be carried out by an institution of relevant discipline. The list of flora and fauna duly authenticated separately for the core and study area and a statement clearly specifying whether the study area forms a part of the migratory corridor of any endangered fauna should be given. If the study area has endangered flora fauna and, or if the area is occasionally visited or used as a habitat by Schedule-I fauna, or if the project falls within 15 km of an ecologically sensitive area, or used as a migratory corridor then a Comprehensive Conservation Plan should be prepared and submitted with EIA-EMP Report; and comments from the CWLW of the State Govt. should also be obtained and furnished.
17. Details of mineral reserves, geological status of the study area and the seams to be worked, ultimate working depth and progressive stage-wise working scheme until the end of mine life should be provided on the basis of the approved rated capacity and calendar plans of production from the approved Mining Plan. Geological maps and sections should be included.
18. Details of mining methods, technology, equipment to be used, etc., rationale for selection of specified technology and equipment proposed to be used vis-à-vis the potential impacts should be provided.
19. Impact of mining on hydrology, modification of natural drainage, diversion and channeling of the existing rivers/water courses flowing though the ML and adjoining the lease/project and the impact on the existing users and impacts of mining operations thereon.
20. Detailed water balance along with flow chart should be provided. The break-up of water requirement for the various mine operations should be given separately.
21. Source of water for use in mine, sanction of the competent authority in the State Govt. and impacts vis-à-vis the competing users should be given.
22. Impact of mining and water abstraction use in mine on the hydrogeology and groundwater regime within the core zone and 10 km buffer zone including long-term monitoring measures should be provided. Details of rainwater harvesting and measures for recharge of groundwater should be reflected in case there is a declining trend of groundwater availability and/or if the area falls within dark/grey zone.
23. Impact of blasting, noise and vibrations should be given.
24. Impacts of mining on the AAQ and predictions based on modeling using the ISCST-3 (Revised) or latest model should be provided.
25. Impacts of mineral transportation within the mining area and outside the lease/project along with flow-chart indicating the specific areas generating fugitive emissions should be provided. Impacts of transportation, handling, transfer of mineral and waste on air quality, generation of effluents from workshop, management plan for maintenance of HEMM, machinery, equipment should be given. Details of various facilities such as rest areas and canteen for workers and effluents/pollution load emanating from these activities should also be provided.

26. Effort be made to reduce/eliminate road transport of coal inside and outside mine and for mechanized loading of coal through CHP / Silo entirely wagons and into trucks / tippers.
27. Details of waste OB and topsoil generated as per the approved calendar programme, and their management shown in figures as well explanatory notes tables giving progressive development and mine closure plan, green belt development, backfilling programme and conceptual post mining land use should be given. OB dump heights and terracing based on slope stability studies with a max of 28o angle as the ultimate slope should be given. Sections of final dumps (both longitudinal and cross section) with relation to the adjacent area should be shown.
28. Efforts be made for maximizing progressive internal dumping of O.B., sequential mining, external dump on coal bearing area and later rehandling into the mine void.--to reduce land degradation.
29. Impact of change in land use from mining operations and wether the land can be restored to agriculture use post mining.
30. Progressive Green belt and Ecological restoration /afforestation plan (both in text, figures and in the tabular form as per the format of MOEF&CC given below) and selection of species (native) based on original survey/land use should be given.
31. Conceptual Final Mine Closure Plan and post mining land use and restoration of land/habitat to the status of pre- mining should be provided. A Plan for the ecological restoration of the mined out area and post mining land use should be prepared with detailed cost provisions. Impact and management of wastes and issues of rehandling (wherever applicable) and backfilling and progressive mine closure and reclamation should be detailed.

Table 3 : Post-Mining land use pattern of ML / Project area (ha)

Land use during mining	Land use (ha)				
External OB dump	Plantation	Water body	Public use	Undisturbed	Total
Top soil dump					
Excavation					
Roads					
Built up area					
Green belt					
Undisturbed area					
	Total				

32. Flow chart of water balance should be provided. Treatment of effluents from workshop, township, domestic wastewater, mine water discharge, etc. should be provided. Details of STP in colony and ETP in mine should be given. Recycling of water to the max. possible extent should be accorded ?.

33. Occupational health issues. Baseline data on the health of the population in the impact zone and measures for occupational health and safety of the personnel and manpower in the mine should be given.

34. Risk Assessment and Disaster Preparedness and Management Plan should be provided.

35. Integration of the Environmental Management Plan with measures for minimizing use of natural resources - water, land, energy, etc. should be carried out.

36. Cost of EMP (capital and recurring) should be included in the project cost and for progressive and final mine closure plan.

37. Details of R&R. Detailed project specific R&R Plan with data on the existing socio-economic status of the population (including tribals, SC/ST, BPL families) found in the study area and broad plan for resettlement of the displaced population, site for the resettlement colony, alternate livelihood concerns/employment for the displaced people, civic and housing amenities being offered, etc and costs along with the schedule of the implementation of the R&R Plan should be given.

38. CSR Plan along with details of villages and specific budgetary provisions (capital and recurring) for specific activities over the life of the project should be given.

39. Corporate Environment Responsibility:

    a) The Company must have a well laid down Environment Policy approved by the Board of Directors.
    b) The Environment Policy must prescribe for standard operating process/procedures to bring into focus any infringements/deviation/violation of the environmental or forest norms/conditions.
    c) The hierarchical system or Administrative Order of the company to deal with environmental issues and for ensuring compliance with the environmental clearance conditions must be furnished.
    d) To have proper checks and balances, the company should have a well laid down system of reporting of non-compliances/violations of environmental norms to the Board of Directors of the company and/or shareholders or stakeholders at large

40. Details on Public Hearing should cover the information relating to notices issued in the newspaper, proceedings/minutes of public hearing, the points raised by the general public and commitments made by the proponent and the action proposed with budgets in suitable time frame. These details should be presented in a tabular form. If the Public Hearing is in the regional language, an authenticated English Translation of the same should be provided.

41. In built mechanism of self-monitoring of compliance of environmental regulations should be indicated.

42. Status of any litigations/ court cases filed/pending on the project should be provided.

43. Submission of sample test analysis of Characteristics of coal: This should include details on grade of coal and other characteristics such as ash content, S and heavy metals including levels of Hg, As, Pb, Cr etc.

44. Copy of clearances/approvals such as Forestry clearances, Mining Plan Approval, mine closer plan approval. NOC from Flood and Irrigation Dept. (if req.), etc. wherever applicable.

Details on the Forest Clearance should be given as per the format given :

Total ML / Project area (ha)	Total forest land (ha)	Date of FC	Extent of forest land	Balance area for which FC is yet to be obtained	Status of application for diversion of forest land

45. Besides the above, the below mentioned general points should also be followed:-

a) A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.

b) All documents may be properly referenced with index and continuous page numbering.

c) Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.

d) Where the documents provided are in a language other than English, an English translation should be provided.

e) The Questionnaire for environmental appraisal of mining projects as prescribed by the Ministry shall also be filled and submitted.

f) Approved mine plan along with copy of the approval letter for the proposed capacity should also be submitted.

g) While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013 /41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.

h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the F.R for securing the TOR) should be brought to the attention of SEIAA, Jharkhand with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH process again with the revised documentation.

The EIA report should also include

1. surface plan of the area indicating Contours of main topographic features, drainage and mining area.

2. geological maps and sections and
3. sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

After preparing the draft EIA (as per the generic structure prescribed in Appendix- III of the EIA Notification, 2006) covering the above mentioned issues, the proponent will get the public hearing conducted and take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

46. The Prescribed ToRs is valid as per O.M. F. No. IA3-22/10/2022-IA.III[E177258], dated 08.06.2022 of MoEF&CC, Govt. of India.

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

Memo No : **EC/SEIAA/2026-27/5033/2026/** 176 Ranchi, Date : 16·09·2026

Copy to:

1. Member Secretary, Jharkhand State Pollution Control Board, Ranchi for information and necessary action.
2. Regional Office, Ministry of Environment, Forest and Climate Change, Govt. of India, 2nd Floor, Jharkhand State Housing Board (HQ), Harmu Chowk, Ranchi, Jharkhand – 834002.
3. Member Secretary, SEAC, Jharkhand, Ranchi for information and necessary action.

16/9/26
Member Secretary
State Level Environment Impact
Assessment Authority, Jharkhand.

Signature Not Verified
Digitally Signed by : Smt Smitha Pankaj
Member Secretary, SEIAA
Date: 09/10/2026