



GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED

(A Government of Gujarat Enterprise)

Lignite Project, Umarsar, P.O: S.K.V.Nagar Pin-370601

Tal: Lakhapat, Dist: Kutch (GUJ) E mail: umarsar@gmdcltd.com
PHONE: + (02839) 294414 FAX: + (02839) 294428 CIN:L14100GJ1963SFC001206

GMDC/UMARSAR/ENV/205/2025-26

Date-15/05/2025

To,
The Director(S)
Ministry of Environment & Forest
Forest and Climate Change
Integrated Regional Office, Gandhi Nagar,
A wing-407 & 409, Aranya Bhawan,
Near CH-3 Circle, Sector-10A,
Gandhi Nagar-382010

Subject: Submission Of compliance status Of Environmental Clearance Period : Oct 24 to March 2025.

Respected sir,

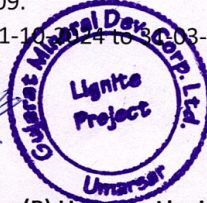
With respect to the subjected matter, Please find attached herewith Half yearly compliance report for the vide EC No. J.11015/575/2017-1A.11(N) , dated 25th June 2009 obtained for Umarsar open Cast Lignite Mine Project(1 MT PA) of GMDC Ltd for the period of October 24 to March 2025.

Name of project: Umarsar Open Cast Lignite Mine Project(1 MTPA). at Village- Umarsar, Taluka-Lakhapat, District-Kutch, Gujarat By Gujarat Mineral Development Corporation Ltd.

MoEFCC Clearance No. & Date : Environmental Clearance (EC) No. J.11015/575/2017IA.II(N), dated June 25th2009.

Period Of Status: 01-10-2024 to 03-2025.

For GMDC Ltd)



I/C General Manager(P) Umarsar Lignite

- Copy to: 1) The IRO, Regional Office, (MoEFCC), Gandhinagar
2) Zonal Office, CPCB, Broda
3) Regional Office Office, Gujarat Pollution Control Board. Bhuj
4) General Manager (Env.), Corporate Office GMDC Ltd.

Encl: 1. Compliance report & annexure



Compliance status of Environmental clearance of Umarsar Mines of
Gujarat Mineral Development Corporation Ltd.

Time Period: October-2024 to March-2025

1. Specific Conditions

1. The project proponent shall obtain the prior approval of the national wildlife board of India before start mining operations

Compliance: Permission has been obtained from The chief wild life warden, Gandhinagar vide letter no. WLP/32/B/7820-25/2012-13 dated 16/03/2013
Attached letter

No: WLP/32/B/7820-25 /2012-13
Office of the
Principal Chief Conservator of Forests
Block No.B/1, Aranya Bhavan,
Ch-3 Circle, Sector-10 A,
Gujarat State, Gandhinagar.
Date: 16 /03/2013.

Sub: Proposal for clearance under Wildlife (Protection) Act – 1972 regarding the project near Sanctuary / National Park.

Proposal is for Umarsar Lignite mining project of GMDC, on 2186.76 ha at a distance of 4.4 km from Narayan Sarovar Sanctuary – Gujarat.

Ref: 1. This office letter no. WLP/32/A/716-17/2011-12 dtd. 06-08-2011
2. The recommendation of Gujarat State Board for Wildlife dtd. 19-07-2011
3. Forest and Environment Department, Government of Gujarat's letter no. VPS-1011-1213-W dtd. 08-09-2011.
4. The recommendation of Standing Committee of National Board for Wildlife circulated vide MoEF, GoI's letter F. No. 6-43/2007/WL-1(27th Meeting) dt. 01-02-2013.

A Proposal for clearance under Wildlife (Protection) Act – 1972 regarding the project near Sanctuary / National Park of Umarsar Lignite Mine project 2186.76 ha at a distance of 4.40 km from Narayan Sarovar Sanctuary Kutch District is received from GMDC.

The proposal was placed before the State Board for Wildlife (SBWL). After detailed discussion in the meeting held on 19-07-2011 the SBWL recommended the proposal with certain conditions.

Thereafter, as per directions of Government of India, Ministry of Environment and Forest (Wildlife Division) New Delhi in its order dtd. 15-03-2011 the proposal was placed before the Standing Committee of the National Board for Wildlife and the same was discussed in the meeting held on 12-12-2012 and recommended by Standing Committee of National Board for Wildlife with certain conditions.

Therefore keeping in view the recommendations of the Gujarat State Board for Wildlife, those of Standing Committee of National Board for Wildlife, the undersigned is pleased to convey approval for the use of 2186.76 ha land at Village: Umarsar Ta: Lakhpat Dist: Kutch for Umarsar Lignite Mine of GMDC subject to following conditions:

CONDITIONS:

1. The conditions shown in environment clearance dtd.25/6/2009 and this office letter no:- WLP/32/A/22-24, Dtd.18/4/2009 must be strictly followed. (copy attached)
2. The study / report of environment or according to situation if any additional conditions are added by the office of Chief Wildlife Warden must be binding to the party and they have to follow the terms and condition stipulated by the authority.
3. In future if any act or rule declared for environment / forests and or conservation of Wildlife. Then it must be followed by the party.

[Type text]

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2. **No mineral Transportation shall be undertaken through the sanctuary of area falling within the mine and the sanctuary, which is buffer to the mine along the sanctuary**

Compliance: Agreed. No route for Mineral transportation has been within sanctuary area.

3. **The wildlife conservation plan prepared for conservation of wildlife in the Narayan Sarovar sanctuary shall be implemented in consultation with chief wildlife warden, govt. of Gujarat the funds for the plan shall be maintained in a separate fund of Rs. 129.50 Lacs towards capital costs and 33 Lacs as revenue expenditure. The status of implementation of the various activities there under such as fencing, development of plantation, construction of van talavadis, and other water recharge measures, water holes and ponds, eco-awareness programs for local villagers, shall be regularly submitted to the regional office of the MoEF, Bhopal as a part of compliance report**

Compliance: We have carried out the plantation activity in mine lease area and surrounding also we have. time to time contribute to Forest Department towards NSSL conservation. Eco awareness programme conducted two times in this time periods for local people and employee under the World Environment day & Van Mahotsav celebration. GMDC have allocated 341.33 Lacs funds earlier for Development of Green belt, making biological task force, Barbed wire fencing construction of hawada, check dams, van talavadi and interpretation center for conservation & Development of Narayan Sarovar Sanctuary.

4. **A mine drainage plan with surface drainage design of the mine resulting from surface run off and diversion of rivers Moti, seasonal nalahs and ponds found within the active mining area and for the mine discharge water based on a peak rain fall data shall be prepared and implemented.**

Compliance: The plan has been prepared and incorporated in progressive mine closure plan.

Mine closure plan for Umarsar Lignite Block was approved on 17/10/2006 by the Government of India, Ministry of Coal (MOC), vide letter no. 34011/13-2011 – CPAM dated 25th October 2013.



5. **The plan for diversion and realignment of the nala and modification of the natural surface drainage and design of the diversion canal shall be done in consultation and approval of the concerned state flood and irrigation department. dimension and depth of the nala should be used for reclamation and development of green belt.**

Compliance: The plan for diversion of nala has been prepared and incorporated in progressive mine closure plan. The approval of Nala diversion will be taken before the actual Implementation
The nallah diversion is done and realigned to its original course as per the b time frame stipulated by MoEF.

6. **Topsoil shall be stacked properly with proper slope at earmarked site(s) and shall not be kept active and shall be used for reclamation and development of green belt.**

Compliance : Top soil has been stacked at earmarked placed.

Sr no	Location	Storage Area (in Ha)	Volume (in Lac m ³)	Slope
1	West side	2.77	2.896	28

Top Soil is then utilized in Green belt development and reclamation of mined out area.

181624.06 m³ topsoil has already been used for physical reclamation of area during the reporting periods of OCT 24 to MAR-25.



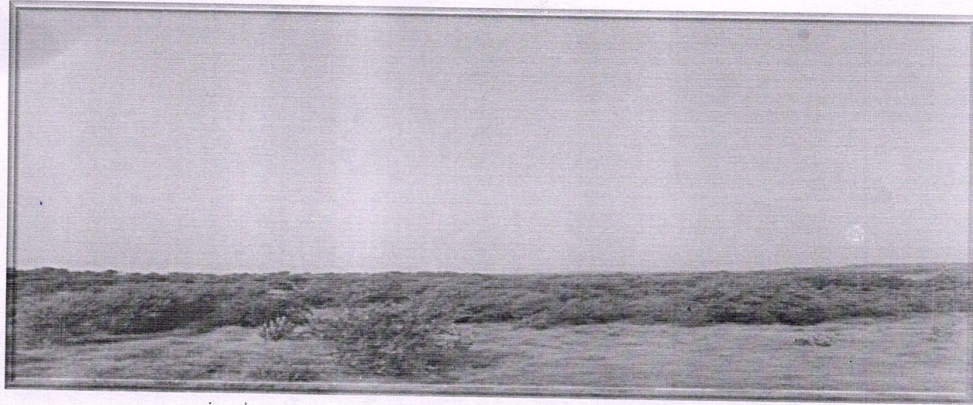
7. OB shall be stacked at earmarked external OB dump site within ML area and shall be a maximum height of 50m only each. The ultimate slope of the dump shall not exceed 2 Monitoring and management of existing reclaimed dump sites shall continue until the vegetation becomes self-compliance status shall be submitted to the ministry of environment & forests and its regional office located at Bhopal on yearly basis.

Compliance: There are 02 external dumps in the present scenario, the details of which is furnished below

Sl no	Dump	Height	Slope
1	West side of mines	50	25°
2	West side of Mine	20	25

Height of each deck of the dump does not exceed 10m & total height is 50 m & Over all slope of dump does not exceed 25° as shown in table above. Backfilling has started in April 2016 and still the Dumping is in progress. Monitoring and management of existing reclaimed dumpsites is being continued until the vegetation becomes self-sustained.

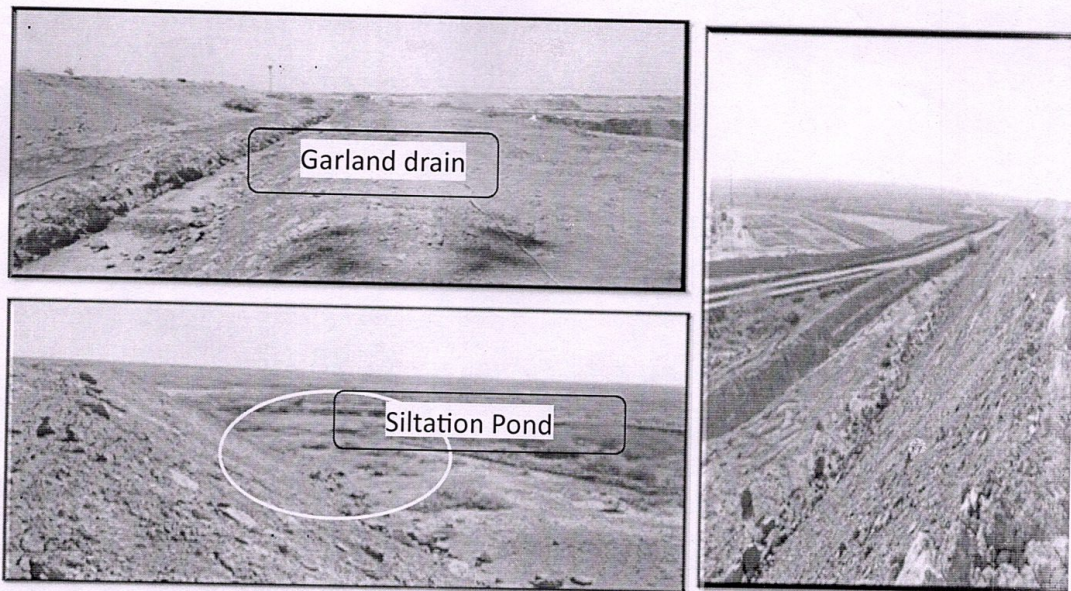




8. **Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. the drains shall be regularly de-silted and maintained properly. Garland drains (size, gradient and length) and sump capacity shall be designed keeping 50% safety over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine site sump capacity shall also provide adequate retention period to allow proper setting of silt material.**

Compliance: We have developed Garland drains and connected all garland drains into pond, the water from pond is utilized for sprinkling in mining area to control dust particle in air and green belt development.

S.n	Garland Drain	Length (in m)	Breadth (in m)	Depth (in m)
1	Garland Drain no.1	3500	2	2
2	Garland Drain no.2	3800	1.5	1.5
3	Garland Drain no.3	4200	1.5	1.5
4	Siltation Pond	250	132	2



9. **Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to catch run off and siltation shall be based on the rainfall data.**

Compliance: As mining activity was started from March 2015 and dumping process is going on at area of earmarked for OB dump site. Further company is agreed to construct retaining wall when it will be necessary

10. **Water sprinkling system shall be provided to check fugitive emissions, haulage roads transfer points.**

Compliance: We have 04 Nos. dedicated sprinkler for sprinkling water round the clock to control the fugitive emission.



11. **All approach roads, major haul roads and roads to village Umarsar being diverted shall be black topped**

Compliance: We have provided Metal with suitable clay on the Road in mining area. Water is also provided by sprinkler system. Road leading to village Umarsar was carpeted with asphalt.

12. **No drilling and blasting shall be carried out.**

Compliance: The mine is with soft strata. Hence no drilling and blasting activity was carried out

13. **A 50 m wide green belt shall be created along the lease boundary using native species. In addition, grassland shall be developed within the core zone in undistributed areas, using native grass species. Area brought under Afforestation shall not be less than 1067 ha which includes reclaimed external OB dump (107 ha), backfilled area (849.45 ha), along ML boundary, along roads, green belts, in undistributed area by planting native species in consultation with the local DFO/Agriculture department. The density of the trees shall be around 2500 plants per ha.**

Compliance: The plantation activity is being carried out in phase manner. Total Plantation 39 Ha as Green belt & 29+5Ha=34Ha. Area reclaimed as biological in Backfilled area with 150900+13500=164400 Nos. Of Plants





14. **A progressive closure plan shall be implemented by reclamation of quarry area of which 849.45 ha shall be backfilled and afforested by planting, native plant species in consultation with the local DFO/Agriculture Department. The density of the tree shall be around 2500 plant per ha. The balance 23.47 has of de-coaled area being converted into a water reservoir shall gently sloped along the upper benches and stabilized and reclaimed with plantation.**

Compliance: The backfilled area is 310.5 ha. Out of it Physical reclaimed 210Ha+4.6Ha=214.6Ha. & Biological reclaimed 29+05=34 Ha. area under plantation & 39Ha as greenbelt development. & also 75 Ha areas are brought under seed ball plantation using 400 kg native species seed.

15. **No mining shall be carried out below 50m depth below ground level. No ground water shall be used for mining operations. Additional water required, if any shall be met by recycling/reuse of the water from the existing activities and from rainwater harvesting measure.**

Compliance: Noted and complied

The mining was not carried out below 50 m depth. Company is not using any ground water for mining activity.

16. **Mine pit water which is high in TDS shall be treated in an RO plant to prescribed limits before discharge into natural water/land. The brine concentrate from the RO plant shall be stored in a concrete lined pit.**

Compliance: We have installed ETP Plant for Mine pit water, after treatment water is being used for sprinkling purposes. And not discharged in natural water body / course.

17. **Regular monitoring of ground water level and quality shall be carried out by establishing a network of existing wells and construction of new piezometers. The monitoring for quality shall be done four times a year in pre-monsoon (May), monsoon (August), post monsoon (November) and winter (January) seasons and for quality (including TDS and add mine water) in May. Date links collected shall be submitted to the Ministry of Environment & Forests and to the Central Pollution Control Board quarterly within one month of monitoring.**

Compliance: Recently we had 03 ground water monitoring station. in surrounding Mines Lease and Results of the Ground water monitoring is as below.





TC-1844

TEST REPORT (WATER)
Buffer Zone - Observation Wells



Royal
Environment Auditing & Consultancy Service
Plot No. 19 & 20, Bldg. 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

Test Report No: 17/2024-26/01/63
 MMSL Order No: GMDC/UMR/ENV/NO/24/8/24/25
 Name of Company: GMDC Limited
 Address: Umarsar, Mysuru District
 Village: Umarsar
 Tal: Lakshmi, Dist: Kutch

Attention: Mr. P. K. Swain
 Date of Sample Receipt: 30/01/2025
 Lab ID: VV/2024-28/01/76 to 82
 Sample Type: Water
 Description: Ground Water
 Sampling Method: IS 3025 (Part 1)

Location of Sample: Buffer Zone of Umarsar Lignite Mines (10 Kms)

Sr. No.	Parameters	Unit	Acceptable Limit	Permissible Limits IS: 3025:2012	Well-1		Well-2		Well-3		Well-4		Test Method
					Lab ID: 76	Lab ID: 77	Lab ID: 78	Lab ID: 79	Lab ID: 80	Lab ID: 81	Lab ID: 82		
1	pH	---	6.5-8.5	No Relaxation	6.9	6.5	6.4	6.4	6.4	6.4	6.4	6.8	IS 3025 Part 11, 2012
2	Electric Conductivity@25°C	µS/cm	---	---	360	840	1998	924	2200	688	2240	688	IS 3025 Part 14, 2012
3	Total Dissolved Solid	mg/l	500	2000	480	420	799	487	1100	1120	1120	1120	IS 3025 Part 14, 2012
4	Total Suspended Solid	mg/l	---	---	14	13	12	10	14	14	14	14	IS 3025 Part 508, 2012
5	Total Hardness	mg/l	75	600	210	220	340	187	386	386	386	386	IS 3025 Part 571, 2012
6	Calcium (as Ca)	mg/l	---	---	36.4	28.4	63	70	89	89	89	89	IS 3025 Part 571, 2012
7	Magnesium	mg/l	30	100	28.9	36.2	96.4	7.0	40.3	44.2	44.2	44.2	IS 3025 Part 481, 2012
8	Alkalinity	mg/l	200	600	180	145	280	210	150	170	170	170	IS 3025 Part 231, 2012
9	Chloride	mg/l	250	1000	50	44.0	530	150	200	200	200	200	IS 3025 Part 421, 2012
10	Sulfate	mg/l	200	400	135	148	208	100	389	389	389	389	IS 3025 Part 421, 2012
11	Fluoride	mg/l	1	1.5	0.14	0.12	0.31	0.27	0.28	0.28	0.28	0.28	IS 3025 Part 421, 2012
12	Nitrate	mg/l	45	No Relaxation	14.6	8.4	13.4	14.7	14.3	10.2	10.2	10.2	APHA 23rd Ed. 4500 NO3-B-2012

Authorised Signatory: *[Signature]*
 Name: P. K. Swain
 Designation: Analyst
 Date: 30/01/2025

Approved by: *[Signature]*
 Name: Anil Wankar
 Designation: Analyst
 Date: 30/01/2025

Reference: The order of the client is to be followed.
 The report is valid for the purpose mentioned in the order. The laboratory is not responsible for the results of the analysis if the sample is not properly preserved or if the sample is not received within the specified time period.



18. **The company shall put up artificial ground water recharge measures such as check dams within and adjoining the lease for augmentation of ground water resource in case monitoring indicates decline in water table. The project authorities shall meet water requirement of nearby village(s) in case line village wells go dry due to dewatering of mine.**

Compliance: We are doing the work of conservation of water with the help of irrigation & agriculture department and self on the demand of villagers. The work of deepening of ponds and construction of check dams in area is being carried out by GMDC under CSR activity.

19. **ETP shall also be provided for workshop, and CHP, effluents shall be treated to conform to prescribed standards, particularly for PH and TDS in case of discharge in to any water course outside the lease.**

Compliance: Wastewater generated from workshop is being discharge through septic tank after the removal of oil & grease. Water is not being discharged into any water course outside the lease.

20. **Land ousts shall be compensated as per norms not below that laid out under the National R& R policy. Activities under CSR for the ten villages in the buffer zone shall be not less than a capital outlay of Rs. 2.0 crores.**

Compliance: GMDC has Implemented National R&R policy for rehabilitation of Umarsar village in buffer zone

21. **For monitoring land use pattern and for post mining land use, a time series of land use maps, based on satellite imagery (on a scale of 1:5000) of the core zone and buffer zone, from the start of the project and end of mine life shall be prepared once in 3 years (for any one particular season which is consistent in the time series) and the report submitted to MoEF and its Regional office at Bhopal.**

Compliance: We have attached the report for monitoring land use pattern and for post mining land use, a time series of (2018-2021). Land use maps, based on satellite imagery (on a scale of 1:5000) of the core zone and buffer zone.

22. **A final mine closure plan along with details of corpus fund shall be submitted to the ministry of Environment & Forests for approval 5 years in advance of final mine closure for approval. The habitat Restoration plan shall include plan for development of 622 ha for agro- pastoral land use using/reintroducing a mix of native grass and shrub special from the original ecosystem, which are conserved by in-situ and ex-situ method of conservation.**

Compliance: Presently mine is in progressive stage.



2. General Conditions

1. No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forest.

Compliance: We have already submitted the process plan to MOEF and Gujarat pollution control Board at the time of CC&A.

2. No change in the calendar plan including excavation quantum of mineral lignite and waste shall be made.

Compliance: To cater the demand of nearby power plants along with small scale industries of Gujarat, revised mine plan preparation is under active consideration & process.

3. Four ambient air quality monitoring stations shall be established in the core zone as well in the buffer zone for monitoring SPM, RPM, SO₂, NO_x. 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. In addition heavy metals such as Hg, As, Pb, Cd etc shall also be monitored twice in a year.

Compliance: We are monitoring ambient air quality at Six stations. The results of same is attached as **annexure-I**

The image shows two copies of 'CERTIFICATE OF ANALYSIS' from O'GREEN LABORATORIES. The left certificate is for 'Ambient Air Quality' and the right is for 'Water Quality'. Both include sample details, test results, and compliance status.

Ambient Air Quality Certificate (Left):

Sl. No.	Parameter	Results	Unit	Test Method	Compliance
1	Particulate Matter (PM ₁₀)	76.27	µg/m ³	IS 15859 - Part 31	100
2	Particulate Matter (PM _{2.5})	16.91	µg/m ³	IS 15859 - Part 31	100
3	Carbon Monoxide (CO)	15.71	ppm	IS 15859 - Part 31	100
4	Ozone (O ₃)	27.14	ppm	IS 15859 - Part 31	100
5	Carbon Dioxide (CO ₂)	8.87	ppm	IS 15859 - Part 31	100

Water Quality Certificate (Right):

Sl. No.	Parameter	Results	Unit	Test Method	Compliance
1	Particulate Matter (PM ₁₀)	76.27	µg/m ³	IS 15859 - Part 31	100
2	Particulate Matter (PM _{2.5})	16.91	µg/m ³	IS 15859 - Part 31	100
3	Carbon Monoxide (CO)	15.71	ppm	IS 15859 - Part 31	100
4	Ozone (O ₃)	27.14	ppm	IS 15859 - Part 31	100
5	Carbon Dioxide (CO ₂)	8.87	ppm	IS 15859 - Part 31	100



4. Fugitive dust emissions (SPM and RSPM and heavy metals such as HG, Pb, Cr, As etc.) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul roads, wagon, loading, dump trucks (loading and unloading) points shall be provided and properly maintained.

Compliance: We have 04 nos. dedicated sprinkler tanker for spraying water



5. Data on ambient air quality (SPM, RSPM, SO₂, NO_x and heavy metals such as Hg,Pb,Cr,As etc) shall be regularly submitted to the Ministry including its Regional Office at Bhopal and to the State Pollution Control Board and the Central Pollution Control Board once in six months.

Compliance: Data has been Regularly sent with EC compliance and state pollution control board on regular basis. – **Attached As Annexure-I**

6. Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with ear plugs/muffs.

Compliance: Noise is within limit and AC cabin is provided in mining machineries.



7. **Industrial wastewater (workshop and waste water from the mine) shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.**

Compliance: Wastewater generated from workshop is being discharge through septic tank after the removal of oil & grease.

8. **Vehicular emissions shall be kept under control and regularly monitored. Vehicles used for transporting the mineral shall be covered with tarpaulins and optimally loaded.**

Compliance: We have already developed system for covering the every trucks before dispatched and check at out gate. No truck is allowed to pass without it.

9. **Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in Consultation with the State Pollution Control Board.**

Compliance: All the sampling and analysis of air and noise is being carried out through consultant

10. **Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of the workers shall be undertaken periodically to observe any contraction due to dust and to take corrective measures, if needed.**

Compliance: Workers used PPE. And awareness has been Provided on job & VTC center. Health surveillance has been carried out time to time

11. **A separate environmental management cell with suitable qualified personnel shall be set up under the control of a Senior Executive, who will report directly to the Head of the company.**

Compliance: Separate Environmental cell is established, and which is report to head of the projects. Further there is Environmental Cell at corporate level.

12. **The funds earmarked for environmental protection measures shall be kept in separate account and shall not be diverted for other purpose.**



Year-wise expenditure shall be reported to this Ministry and its Regional Office at Bhopal.

Compliance: We have kept separate budget provision for environment protection measure every year. The provision for year 2024-25 is 209.75 lacs. The Mine closure expenses for OCT. 24- MAR.25. period of 2024-25 is 84 lacs.

- 13. The Regional Office of this Ministry located at Bhopal shall monitor compliance of the stipulated conditions. The project authorities shall extend full co-operation to the officer(s) of the Regional Office by furnishing the requisite data/information/monitoring reports.**

Compliance: Noted with esteem

- 14. A copy of the EC will be marked to concerned Panchayat /local NGO, if any, from whom any suggestion/representation has been received while processing the proposal**

Compliance: Complied

- 15. State Pollution Control Board shall display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/Tehsildar's Office for 30 days.**

Compliance: Complied



16. The project authorities shall advertise at least in two local newspapers widely circulated around the project, one of which shall be in the vernacular language of the locality concerned within seven days of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and may also be seen at the website of the ministry of Environment & Forests at <http://envfor.nic.in>. The compliance status shall also be uploaded by the project authorities in their website and regularly updated at least once in six months so as to bring the same in the public domain. The monitoring data of Env. Quality (air, water, noise and soil) shall also be displayed at the entrance of the project premises and mines office and in corporate office and also on the company's website.

Compliance: Complied

For, GMDC LTD,

Prepared By,
I/c, Am (Env.)

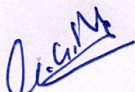


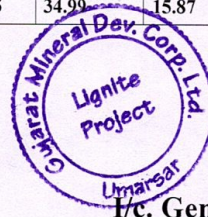
P.C. General Manager(P)

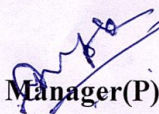
Umarsar Lignite Mine



Annexure-I { Ambient Air Monitoring, Umarsar lignite Mines}							
OCTOBER 2024 TO MACH 2025			Parameters				
Sr. No	Location	Month	PM10	PM2.5	SO2	N02	CO mg/m3
1.	Nr. Time Office	APR	71.60	38.74	18.40	30.31	0.46
2.	Nr. Dispatch Weight Bridge	APR	76.37	39.99	17.71	28.58	0.49
3.	Nr. WadhGhat Weight Bridge	APR	68.0	35.4	14.4	25.9	0.50
4.	Nr. Umarsar School	APR	69.4	34.6	14.2	23.5	0.29
5.	Nr. Time Office	MAY	66.3	35.4	15.2	25.1	0.35
6.	Nr. Dispatch Weight Bridge	MAY	73.1	38.7	16.7	28.8	0.45
7.	Nr. WadhGhat Weight Bridge	MAY	68.0	35.4	14.4	25.9	0.50
8.	Nr. Umarsar School	MAY	69.4	34.6	14.2	23.5	0.29
9.	Nr. Dispatch Weight Bridge	JUNE	75.82	37.49	18.43	31.08	0.50
10.	Nr. WadhGhat Area	JUNE	71.32	35.41	18.12	31.08	0.49
11.	Nr. Umarsar School	JUNE	68.28	32.91	18.12	25.64	0.42
12.	Nr. Time Office	JUNE	73.31	36.24	20.03	33.67	0.48
13.	Nr. Dispatch Weight Bridge	JULY	75.82	37.49	18.43	31.08	0.50
14.	Nr. Weight Bridge	JULY	58.55	29.16	11.00	24.38	0.40
15.	Nr. Umarsar School	JULY	52.88	26.24	9.43	17.96	0.35
16.	Nr. Time Office	JULY	55.42	27.91	10.12	20.21	0.38
17.	Nr. WadhGhat Area	JULY	57.34	28.33	10.12	23.38	0.39
18.	Nr. Weight Bridge	AUG	60.56	30.41	12.21	25.18	0.42
19.	Nr. Umarsar School	AUG	51.30	25.83	10.22	18.56	0.37
20.	Nr. Time Office	AUG	53.62	26.24	10.01	21.17	0.40
21.	Nr. WadhGhat Area	AUG	59.01	29.58	10.83	23.86	0.41
22.	Nr. WadhGhat Area	SEPT	67.28	33.74	17.28	24.78	0.41
23.	Nr. Umarsar School	SEPT	60.20	32.08	14.73	28.74	0.51
24.	Nr. Time Office	SEPT	65.18	30.41	13.35	21.71	0.40
25.	Nr. Weight Bridge	SEPT	66.85	34.99	15.87	25.04	0.51


I/c, Am (Env.)




I/c. General Manager(P)
Umarsar Lignite Mine



Annexure-II {Ground Water Analysis Results of Umarsar From Oct.- 24 TO March.-25					
			Month of December-24		
			WELL 6	GW Pizometer 1	BW 4
Location			Dhareshi Village	Mines	Mines
Coordinates			23° 42' 09.0" 68° 51' 12.5"	23°44'12.7", 68°48'53.3"	23.44'57.2" 68°.49'24.7"
Water Level(mbg)			3.6	21.3	5.8
Sl. No	Parameters	Unit			
1.	pH at 25 ° c		7.6	7.61	7.55
2.	Total Dissolved Solids(TDS)	mg/L	2898	2883	2705
3.	Total Suspended Solids(TSS)	mg/L	17	16	14
4.	Alkalinity•	mg/L	363	377	390
5.	Chloride	mg/L	675.0	795.0	659.0
6.	Calcium as Ca.	mg/L	405	471	390
7.	Magnesium as Mg	mg/L	89.6	76.8	72.9
8.	Sulphate	mg/L	385.6	386.9	398.2
9.	Nitrate	mg/L	22.0	23.50	27.90
10.	iron	mg/L	0.425	0.320	0.350
11.	floride	mg/L	0.40	0.47	0.39
12.	phosphate	mg/L	0.30	0..46	0.45
13.	Total Hardness	mg/L	1380	1489	1274
14.	Cadmium (As Cd)	mg/L	BQL(QL=0.0 02)	BQL(QL=0.0 02)	BQL(QL-01 02)
15.	Arsenic (As As)	mg/L	BQL(QL=0.0 05)	BQL(QL=0.0 05)	BQL(QL-0.005) 05)
16.	Zinc (AS zn)	mg/L	BQL(QL=0.0 2)	BQL(QL=0.0 2)	BQL(QL-0.028) 2)
17.	Leäd (As Pb)	mg/L	BQL(QL=0.0 05)	BQL(QL=0.0 05)	BQL(QL-0.005) 05)
18.	Nickie (As Ni)	mg/L	BQL(QL=0.0 1)	BQL(QL=0.0 1)	BQL(QL-0.01) 1)
19.	Total Chromium (As Cr)	mg/L	BQL(QL=0.0 2)	BQL(QL=0.0 2)	BQL(QL-0.02) 2)
20.	Mercury (As Hg)	mg/L	BQL(QL=0.0 005)	BQL(QL=0.0 005)	BQL(OL-0.0005) 005)
21.	Manganese (As Mn)	mg/L	BQL(QL=0.0 5)	BQL(QL=0.0 5)	BQL(QL-0.05) 5)
22.	Berylium (As Be)*	mg/L	BQL(QL=0.0 2)	BQL(QL=0.0 2)	BQL(QL-0.02) 2)
23.	Selenium (As Se)*	mg/L	BQL(QL=0.0 05)	BQL(QL=0.0 05)	BQL(QL-0.005) 05)
24.	Cobalt (As Co)	mg/L	BQL(QL=0.0 2)	BQL(QL=0.0 2)	BQL(QL-0.02) 2)
25.	Barium(As Ba)	Mg/L	BQL(QL=0.0 2)	BQL(QL=0.0 2)	BQL(QL-0.02 2)

I/c, Am (Env.)

I/c. General Manager(P)

Umarsar Lignite Mine

