

**Minutes of 40<sup>th</sup> meeting of Expert Appraisal Committee for the proposal involving violation of EIA Notification, 2006 to be held on 31st December, 2020**

**Following members were present in the meeting:**

- (i) Dr. Satish R Wate -Chairman
- (ii) Dr. G.V. Subrahmanyam -Member
- (iii) Dr. A.L. Ramanathan -Member
- (iv) Shri K Gowarappan -Member
- (v) Dr. Dilip S. Ramteke -Member
- (vi) Dr. Poonam Kumria -Member
- (vii) Dr. Bharat Jain -Member
- (viii) Dr.Subrata Maity -Member
- (ix) Shri Ashok Agrawal –Member
- (x) Shri Anil Kumar Jha -Member
- (xi) Shri Amardeep Raju-Member Secretary

Dr. Ramana Murthy could not join the meeting

**Day 1: 31st December, 2020**

**Time: 11.00 AM to 05.30 PM**

40.1. Opening remarks of the Chairman

40.2. Confirmation of the minutes of the 38<sup>th</sup> meeting held on **19 November, 2020** at Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi

40.3 Proposal for consideration

**40.3.1. Enhancement of iron ore production from 3.0 MTPA to 6.0 MTPA at Daitri Iron Mine (ML Area 1018.3085 Ha) at Keonjhar and Jaipur District, Odisha by M/s The Odisha Mining Corporation Ltd. - Environmental Clearance**

**Proposal No. IA/OR/MIN/186262/2018 and File No. 23-236/2018-IA.III (V)**

Project proponent along with the Consultant Mecon Limited, Jharkhand, Certificate No. NABET/EIA/1619/RA 0068 made the detailed presentation and inter alia provided the following information to the EAC:

1. The project envisages expansion of Daitari Iron ore mining project through enhancement of production capacity of 3 MTPA to 6 MTPA by M/s Odisha Mining Corporation Limited, located in Harichandanpur tehsil, District Keonjhar&Jajpur, Odisha.
2. Name of the Company, Address Tele No. & E-mail Head of organization :**Address for Correspondence:-** Odisha Mining Corporation Limited  
 OMC House, Post Box No. 34  
 Dist. Khurda, Odisha – 751001  
 Tel: 0674-2377458, Fax: 0674-2391629, 2396889, 2394772  
 Email: envcl.omc@gmail.com  
**Registered Address:-**  
 OMC House, Post Box No. 34  
 Bhubaneswar – 751001, Odisha.
3. If a Joint venture, the names & addresses of the JV partners including their share :- Not Applicable
4. Latitude and Longitude of the project :- Latitude: 21°05'33.09684"N to 21°07'08.80500"N, Longitude : 85°46'01.89300"E to 85°49'17.01804"E
5. Whether the project is in the Critically Polluted Area (CPA): No
6. Cost of the project Rs. 19878.135 Lakhs - *Capital cost for expansion of Daitari iron ore mining project*
7. Employment generated/ to be generated :- 1250
8. Benefits of the project :- It aims to provide additional direct or indirect employment to the local population of the area.
  - The proposed project aims to fulfill its social sustainable responsibility through promoting and maintaining permanent structures as follows:
    - Facility for village school including classroom, toilet construction, ceiling fan/coolers, books for school library etc.
    - Vocational training to be provided to the persons for improving their skills in income generation techniques like stitching, hatchery, plumber, carpenter, blacksmith etc.
    - Formation of self-help groups to develop the saving and helping each other with financial resources instead of going for heavy interest debts.
9. Whether new or expansion project. If expansion:
  - (i) From ..... MT to .....MT : (i) Enhancement of iron ore production from 3 MTPA to 6 MTPA at Daitari Iron Ore Project (M.L. Area: 1018.3085 ha).

- (ii) What is the % of expansion :- Expansion % - 100%
10. If for expansion, whether the application is under 7(ii) of the EIA Notification, 2006.  
Not Applicable.
11. If expansion, please indicate the number and date of the certified Compliance Report of Regional Office of the MoEFCC. :-File No. 101-335/15/EPE dated 21.06.2019
12. No. and Date of the ToR /and revised ToR, if any, letter issued by the MoEFCC (if this is a case for EC) :- **F. No. 23-236/2018-IA.III(V) dated 16.01.2019**
13. No. and Date of the EC and the revised EC letter issued by the MoEF (if this is a case for reconsideration. If so, what specific reconsideration(s) being sought by the proponent) :- Not Applicable
14. If the project was considered in EAC, Pl. give dates of the meeting (s). :- 13<sup>th</sup> Meeting dated 18.09.2018-19.09.2018 – Consideration of ToR
15. Type of Mine: (Opencast/Underground/mixed): Open Cast
16. Capacity of the mine applied for :6 MTPA (Iron ore)
17. ML Area
- (i) As per block allotment 1812.99 ha [794.6815 ha ML land surrendered]
- (ii) As per approved mine plan 1018.3085 ha [**Retained ML Area**]
18. Date of approval of mine plan, mine closure plan, status &date :- Modified Mining Plan along with progressive mine closure plan has been approved by Indian Bureau of Mines for an area of 1018.3085 ha vide letter no. MPM/FM/05-ORI/BHU/2015-16/3906 dated 22.03.2016.Final Mine Closure Plan (FMCP) for the proposed area to be surrendered i.e. 794.6815 ha was approved by IBM vide letter no. 314(3)/2012-MCCM (CZ)/FMCP-6/453 dated 15.03.2013.
19. Date of Board's approval: Approval has been obtained.
20. Date of Ground water clearance and surface water approval.
- NOC to abstract 750 m<sup>3</sup>/day of Ground Water has been obtained from CGWA, Govt. of India vide NOC No. CGWA/NOC/MIN/ORIG/2017/2622 dated 31.05.2017.

- NOC for drawl of 0.081 Cusecs of surface water from Department of Water Resource, Govt. of Odisha has been obtained vide letter no. 7869 dated 04.09.2018.

21. Existing Ground water level in (M)**380 m AMSL**

22. Date of mine closure approval: -Progressive mine closure plan has been approved by Indian Bureau of Mines for an area of 1018.3085 ha vide letter no. MPM/FM/05-ORI/BHU/2015-16/3906 dated 22.03.2016.

23. Any river/Nallah flowing near or adjacent to the proposed mine. If yes, please give details.:Damsalnala flows from east to west along the length of Sukinda valley about 2.5 km (aerial distance) from the ML boundary.

**24. Details of mine lease:-**

<p>1. Date of entering into Original lease deed: <b>* 27.01.1966.</b></p> <p>2. Date of expiry of Original lease deed: <b>26.01.1996</b></p> <p><i>* The Mining Lease for 1812.99 ha</i></p>	<p>2. Date of 1<sup>st</sup> lease renewal: - 21.01.1995 [Date of application for renewal for 1812.99 ha] - 22.05.1997 [Date of revised application for 190.2 ha ML area] - 09.02.2006 [date of subsequent revised application to original ML area of 1812.99 ha] - 08.10.2013 [date of permission from state Govt. for 1018.3085 ha area, rest 794.6815 ha surrendered]</p> <p>2. Whether renewal or <b>Deemed renewal</b></p> <p>3. Date of expiry of 1<sup>st</sup> lease renewal/deemed renewal: 26.01.2017</p>	<p>3. Date of 2<sup>nd</sup> lease renewal:  <b>Valid upto 21.01.2036</b></p>	<p>-</p>
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**25. Geological Reserve:**

- (i) Total geological reserve 187.21 Million Tonnes (as on 01.08.2015)
- (ii) Mineable reserve 154.96 Million Tonnes (as on 01.08.2015)
- (iii) Extractable reserve 154.96 Million Tonnes (as on 01.08.2015)

- (iv) Per cent (%) of extraction            82.77 %
- (v) Range of ground water level        > 130 m bgl
- (vi) Total estimated water requirement: Average water consumption for domestic and industrial use are 750 m<sup>3</sup>/day and 198 m<sup>3</sup>/day respectively
- (vii) Details of intersecting ground water level        The mine working will not intersect ground water table.

**26. Details of Deposits:**

- (i) Depth of ore body 284 m (max.)
- (ii) Grade of ore            Average: 62.20% Fe
- (iii) Stripping ratio        1.33 (waste ) m<sup>3</sup> : tonne (ore)

**27. Method of mining:** Open Cast

**28. Life of mine**        28 years

**29. Whether ambient air quality seasonal data has been monitored. If so, from which season to which season and whether the results are within the prescribed limits.** Not Applicable

**30. Whether the monitoring report of earlier EC from MoEF Regional Office has been obtained, in case the proposal is for expansion.** Yes; Certified Compliance Report was issued in respect of Daitari iron ore mine by Eastern Regional office Bhubaneswar vide letter no. 101-335/15/EPE dated 21.06.2019.

**31. Details of O.B.**

- (i) External OB dumps:            Proposed
- (ii) No. of OB dumps 6 nos. [WD1a, WD1b, WD1c, WD1d, WD2a, WD2b]
- (iii) Area of each dump: [WD1a-32.59 ha, WD1b-30.05 ha, WD1c-34.40 ha, WD1d-36.67 ha, WD2a-33.09 ha, WD2b-7.087 ha]
- (iv) Height of each dump        60 m (6 lifts of 10m each)
- (v) Quantity (in MCm) of OB in each dump [Mcu.m]        [WD1a-12.87,        WD1b-4.3, WD1c-30.27, WD1d-4.24, WD2a-8.68, WD2b-0.33]
- (vi) Year of back filling        After current planned period till end of work
- (vii) No. of OB dumps reclaimed:        Not Applicable.

**32. Details of Internal Dumps:**        None

**33. Utilization potential of wastes -**

- (i) Within the mines        Reclamation of mined out areas by backfilling.
- (ii) Outside mines        -

(iii) Efforts made by proponent To be used for backfilling.

**34. Details of final Mine Voids**

- (i) Area 396.1245 [Afforested]
- (ii) Depth Ultimate pit limit : 510-750 m AMSL;  
Adj. Ground level: 384 m AMSL

**35. Details of Quarry:**

- (i) Total quarry area : 569.556 ha [Conceptual stage]
- (ii) Backfilled quarry area of shall be reclaimed with plantation:173.4261 ha [Conceptual stage].
- (iii) A void of ha at a depth of ..... m which is proposed to be converted into a water body: Nil
- (iv) Green belt created in ha. 0.88 ha

**36. Details of Land usage**

(i) Pre-mining **LANDUSE DETAILS:**

S. No.	Landuse	Within ML area (Ha)
1.	Agriculture land	7.2140
2.	Forest Land	846.39950
3.	Wasteland	155.5360
4.	Grazing Land	0.0000
5.	Surface Water bodies	0.0000
6.	Settlements	8.6790
7.	Other (Specify) <i>Road</i>	0.4800
	<b>Total</b>	<b>1018.3085</b>

(ii) Post- Mining

S. No.	Landuse during mining	Plantation	Water body	Public Use	Undisturbed	Total
1.	External /Internal Dump	280.4721	0	0	0	280.4721
2.	Mineral stack yard	10.3419	0	0	0	10.3419

3.	Excavation	569.5560	0	0	0	569.5560
4.	Roads	0	0	19.2448	0	19.2448
5.	Built up area	20.7148	0	0	0	20.7148
6.	Green belt	106.1173	0	0	0	106.1173
7.	Undisturbed area		0	11.8616	117.0989	11.8616
	<b>Total</b>	<b>987.2021</b>	<b>0.000</b>	<b>31.1064</b>	<b>117.0989</b>	<b>1018.3085</b>

**(iii) Core area**

<b>Particulars</b>	<b>Existing Land use</b>	<b>At the end of Scheme period i.e. Yr 2019-20</b>	<b>Conceptual Stage</b>
Mining	62.7175	63.2371	569.5560
Subgrade Dump	-	-	-
Waste Dumping	-	-	280.4721
Mineral Stacking & Processing	15.0330	14.7127	10.3419
Infrastructure, Plant & Machinery	10.6072	13.3927	20.7148
Roads	7.1154	8.2932	19.2448
Magazine with Safety Zone	91.9580	91.9580	91.9608
Statutory Safety Barrier	11.0661	11.0661	13.2765
Green belt/Rehabilitated area	0.8800	0.8800	0.8800
Tenant & Unauthorised Occupant Land	14.8729	14.8729	11.8616
<b>Total</b>	<b>214.2501</b>	<b>218.4127</b>	<b>1018.3085</b>

37. Details of Forest issues

- (i) Total forest area involved (in ha) for mining lease. 846.3995 ha
- (ii) Total broken forest area. 95.60 ha
- (iii) Status of Forest Clearance and extend of forest land diverted in ha.

**Status of FC within ML:**

Stage-II FC has been accorded for an area of 95.60 ha by MoEF&CC (FC Division) vide letter no. 8-164/97-FC dated 25th/27th January 2005.

Stage-I FC for balance 746.3325 ha forest land involved in the project is under process vide Proposal no. FP/OR/MIN/9112/2015.

**Status of FC outside ML:**The Stage-II Forestry Clearance has been accorded for an area of 249.9685 ha by MoEF&CC (FC Division) vide letter no. 8-02/2013-FC dt. 27.08.2014.

Stage-I FC for 106.016 ha (Daitari Conveyor Corridor proposal) has been accorded by MoEF&CC (which includes 4.467 ha of Daitari ML area) vide no. 8-27/2017-FC dated 27.09.2017.

Stage-I FC for 24.9612 ha (Daitari Transmission Line) has been accorded by ERO, MoEF&CC, Bhubaneswar vide no. 5-ORC 281/2016-BHU dated 19.12.2016.

(iv) Is there any National Park, Eco-sensitive zones, within 10 km radius? If so, give the details. No

(v) Extent of forest land in the project (including safety zone and all types of forest land) (in ha) 846.3995 ha (Rebana RF and Daitari PF); 249.96 ha (Daitari Extension Area); 106.016 ha (Conveyor corridor) and 24.9612 ha for 33 KVA transmission line.

(vi) Total forest land for which Stage-1 FC is available (give area in ha), provide breakup of this area in following format.

Area (in ha)	Stage-I FC issued vide letter no. & date.	Validity period of earlier FC granted.
* 95.60	<b>Stage-I FC:</b> Letter no. 8- 164/97-FC dated 25 <sup>th</sup> August 1998.	Till Lease period.
4.467	<b>Stage-I FC:</b> Letter no. 8-27/2017-FC dated 27.09.2017.	Till Lease period.

**\* Stage-II FC: Letter no. 8- 164/97-FC dated 27<sup>th</sup> January 2005 for 95.60 ha.**

(vii) Balance forest land for which Stage-I FC is not available (give area in ha) 746.3325 ha

(viii) Details of wild life issues involved, if any. If so, whether WL management plan has been prepared; pl. indicates the status. The Site Specific Wildlife Conservation Plan has been prepared and approved by PCCF (WL) & CWLW, Odisha vide letter no. 9569/1WL(C) SSP-382/2012 dt. 2nd December 2013 with a total financial outlay of Rs. 1798.70 Lakhs. OMC has deposited Rs. 1518.35 lakhs (through RTGS mode vide UTR SBINH 14083303067 dt. 22.03.2014) towards the approved activities to be taken up by the DFO, Cuttack Division and DFO, Keonjhar WL Division in the zone of influence (10km radius) to be completed within 10 years of operation.



(ix) Whether Schedule-I species, if yes conservation plan is approved by CWLW? Yes.  
The conservation plan has been approved by PCCF (WL) & CWLW, Odisha vide letter no. 9569/1WL(C) SSP-382/2012 dt. 2nd December 2013.

### **38. Costs of the project:**

- (i) Total capital Cost: 198.78135 crore
- (ii) Cost of Production: Rs. 1061.48 /- per tonne
- (iii) Sale Price: Rs. 3966 /- per tonne
- (iv) CSR cost: Approx. Rs. 30 lakhs per year
- (v) R&R Cost: Not Applicable
- (vi) No of PAFs: Not Applicable
- (vii) Cost for implementing EMP: cost: Rs. 130 lakh (approx. including NPV, CA, Mine closure cost and wildlife conservation cost) Recurring Cost: Rs.67 lakh per annum (approx)

### **39. Details of transportation of mineral**

- (i) In pit: Dumpers / Tipper Trucks
- (ii) Surface to siding: The finished products is/will be transported through 3.8 km long downhill closed conveyor belt to the stock pile at Baliparbat, located at a distance of 10 km, and the sized ore from Baliparbat will be dispatched by rail.
- (iii) Siding to loading: Finished ore of CLO (10-40mm) & fines (-10mm) produced through OHP & converged at Baliparbat Stock yard through the belt conveyor shall also be loaded by loaders of 0.91 – 1.5 cu.m capacity & transported through 16 - 25 t tippers to railway siding for wagon loading. Direct loading onto buyer's trucks shall be done at Baliparbat stock yard for outbound sales.
- (iv) Quantity being transported by Road/Rail/conveyer /ropeway Existing: Road:0.5 MTPA; Conveyer 2.5 MTPA (up to Baliparbat)  
Proposed: Road:0.5 MTPA; Conveyer 5.5 MTPA (up to Baliparbat)
- (v) Proposed change in transportation means if any, give details. None

### **40. Details of reclamation:**

- a. Afforestation shall be done covering an area of: ..... ha at the end of mining. This will include: 987.1967 ha
- (i) Reclaimed external OB dump ( in ha) : 280.4751 ha
- (ii) internal dump (in ha) Nil
- (iii) Green belt ( in ha) 0.88 ha
- (iv) Density of tree plantation (in no of plants) 1600 nos./ha
- (v) Void (in ha) at a depth of (in m) which is proposed to be converted into water body Nil;

(vi) Others in ha (such as excavation area along ML boundary, along roads and infrastructure, embankment area and in township located outside the lease etc).

Type of land	Afforestation (Area in ha)
Magazine with safety zone	91.9608
Statutory safety barrier	13.2765
Infrastructure, plant and machinery	20.7148
Mineral stacking and processing	10.3419

- (vii) Agriculture and horticulture Nil  
 (viii) Fisheries Nil  
 (ix) ECO Tourist/recreation spot Nil

**41. Any court case pending. If so, please provide a list with details as annexure.**

Yes; A criminal case [no. 2(C)CC-8/2014] was filed before the Court of J.F.M.C., Jajpur Road against OMC to take cognizance of offence U/s 15 of the Environmental (Protection) Act, 1986 for violation of EIA notification 1994 clause-1 (ii) & III(b) by producing iron ore without obtaining EC from MoEF Govt. of India.

- (i) Environment (Protection) Act As mentioned above.  
 (ii) Air (P&CP) Act Nil  
 (iii) Water (P&CP) Act Nil  
 (iv) MMRD Act Nil  
 (v) Factories Act Nil

(vi) Other land R&R related cases No private land will be acquired for the project. Hence the project does not envisage R&R.

**42. Any violation cases pending, if so, please provide a list with details as annexure. No.**

**43. Give details of actual production vis-à-vis sanctioned capacity since the inception of mine in following format since 1993-94 :**

Environmental Clearance is applied.

Year	EC sanctioned Capacity (in Million tonnes/ year)	Actual production (in Million tonnes/ year)	Excess production beyond EC sanctioned capacity
1993-94	202835	202825	0
1994-95	202835	410257	207422

1995-96	202835	230985	28150
1996-97	202835	258878	56043
1997-98	202835	115054	Nil
1998-99	202835	296766	93931
1999-00	202835	300747	97912
2000-01	202835	283155	80320
2001-02	202835	667891.200	465056.2
2002-03	202835	861073.870	658238.9
2003-04	202835	896980	694145
2004-05	202835	1101048.728	898213.7
2005-06	202835	1343234.582	1140400
2006-07	202835	1917962.630	1715128
2007-08	202835	736548.111	533713.1
2008-09	202835	1593553.469	1390718
2009-10	202835	1652347.540	1449513
2010-11	3000000	787799.820	Nil
2011-12	3000000	1988975.425	Nil
2012-13	3000000	703440.0	Nil
2013-14	3000000	351589.830	Nil
2014-15	3000000	1801704.100	Nil
2015-16	3000000	2999635.0	Nil
2016-17		2824235.0	
2017-18			

44. Date and Place of public hearing:Keonjhar: 01.10.2019 at Mareda Field Near Daitari Gram Panchayat office and Jajpur: 04.10.2019 at Ambatola, Dehudisahi, Chinguripal Gram Panchayat.
45. The designation of officer presided over the PH. ADM Keonjhar ; ADM Jajpur
46. Issues raised during Public Hearing and assurance given along with the financialprovisions, if any, by the project proponent. (Please attach as an annexure in a tabular form.) Given in Annexure 7.1.1, 7.1.2 & 7.2 of EIA/EMP Report
47. Number of representation record in writing from the district and outside of district, please give details. Keonjhar : 419 &Jajpur : 318
48. Name of the EIA consultant who prepared the EIA/EMP report. MECON Limited (A Govt. of India Enterprise), Ranchi – 834002 has been appointed as Accredited Consultant Organisation for carrying out EIA/EMP studies.

49. Whether the consultant has been accredited by the QCI and NABET as per the MoEF OM dated 2nd December, 2009. Yes; Sr. No. 109 in the "List of Accredited Consultant Organisations (Alphabetically) / Rev. 85 Mar.09, 2020.
50. Name of other specialists/consultants involved in making EIA report in collecting data. EC: Shri P Banerjee; FAEs: Dr. M.K.Mukhopadhyay, Dr. S.K.Singh, Dr. S.Bhattacharya, Shri S Adak, Dr. Sumana Chakraborty, Dr. Ashok Kumar, Shri A.K.Mishra, Shri V. Skaria, Shri Anand Bhardwaj, Shri Sunny Budhraj.

**Observations and recommendations of the EAC (violation) in the earlier meeting:**

Proposal was earlier considered in 32<sup>nd</sup> EAC meeting held during 22-23 April, 2020. During the meeting, PP informed to the EAC that the mine was in operation upto Dec. 2009 without prior EC. Credible action initiated as cognizance of offence under Section 15 of the E (P) Act, 1986 against OMC in the Hon'ble Chief Judicial Magistrate, by the said court under Section 15 of the E (P) Act, 1986 on 19.02.2014. DDM, Jajpur vide letter no. 1748/Mines dt.15.09.2017 had raised a demand of Rs. 737,12,42,092/- (Rupees Seven hundred thirty-seven crore twelve lakh forty two thousand ninety-two only) for production of iron ore during 2000-01 to 2010-11 without Environmental Clearance pertaining to Daitari Iron Ore Project. DDM, Jajpur vide letter no. 1991/Mines dt.31.10.2017 had raised a demand of Rs. 17,28,76,661/- (Rupees Seventeen crore twenty eight lakh seventy six thousand six hundred sixty one) only for production of iron ore from 07.01.1998 to 31.03.2011 without Forest Clearance pertaining to Daitari Iron Ore Project. Also, DDM, Jajpur vide letter no. 2000/Mines dt.31.10.2017 had raised a demand of Rs. 36,95,53,235.00/- (Rupees Thirty six crore ninety five lakh fifty three thousand two hundred thirty five) only for production of iron ore during 2000-01 to 2010-11 without CTO/Mining Plan pertaining to Daitari Iron Ore Project. OMC has paid the demand amount in full to the Govt. of Odisha in line with the demand for production without EC & FC raised by DDM, Jajpur, whereas OMC has paid compensation of Rs. 42,55,63,330.00 along with interest on belated payment with respect to excess production without CTO/Mining Plan.

EAC observed that the Environment Clearance for Daitari iron ore mining project has been accorded by Ministry of Environment, Forest and Climate Change (MoEFCC) vide letter no. J-11015/1003/2007-IA.II(M) dated 22.09.2010 for a production capacity of 3 MTPA. Further, the aforesaid EC letter was amended w.r.t. "grant of temporary permission of two years for completing the installation of conveyor belts and rail heads in the Daitari Iron Ore Mining Project" vide letter no. 11015/1003/2007-IA.II(M) dated 31.03.2017.

EAC further observed that production capacity after grant of EC was within the EC capacity i.e 3.0 MTPA, however PP has mined beyond 1993-94 base level prior to grant of EC for 3.0 MTPA hence violation of EIA Notification. Accordingly, credible action was initiated as cognizance of offence under Section 15 of the E (P) Act, 1986 against OMC in the Hon'ble Chief Judicial Magistrate, by the said court under Section 15 of the E (P) Act, 1986 on 19.02.2014.

EAC deliberated on the information submitted by the PP (Form 2 Annexure IV, EIA/EMP report, PH etc). After detailed deliberation on the information submitted, *EAC return the proposal in present form* the proposal for want of following information:

1. Total land involved in the project is 1018.3058 H (FL : 846.399 and NFL: 171.90 Ha), however cumulative forest land as per FC granted and under consideration is around 1222.50 Ha instead of 846.399 Ha. Clarification shall be submitted in this regard.
2. NOC dated 31.05.2017 for ground water withdrawal for abstraction of 750 cum/day was valid till 25.05.2019. Revised NOC shall be submitted and also the status of NOC for surface water withdrawal
3. In the column 20, land ownership, total forest land mentioned is 746.335 Ha. Clarify? And land use in 93/94, 09/10 and present and conceptual with classification as per revenue and the impact between 94/95 and 09/10 shall be submitted in tabular form with explanation.
4. Approved Mining Plan to be submitted as the modified mining plan dated 22.02.2016 "Validity shall expire on the day as per the provision of MMDR Act 2015 dated 26.03.2015 or on 31.03.2020, whichever is earlier.
5. Total excavation details in Tonnes including waste, OB, top soil etc shall be submitted and the project caption and requirement of EC shall be for total excavation and hence it shall be mentioned clearly.
6. Ministry vide letter dated 31.06.2017 granted amendment for road transportation and issued direction u/s 5 to OMC to install conveyer belt as well as rail heads as envisaged in the EC letter dated 22.09.2010 within two years. Two years' time as given by the Ministry is already over, justification in this regard shall be submitted.
7. Clarity on Forest clearance to be obtained and already obtained for the Forest land involved in the project. Status of Stage I FC for balance Forest land involved in the project
8. Give detailed clarification about Daitri conveyor corridor proposal (106.016 ha which includes 4.467 Ha of Daitri ML area) is part of this Mining lease area of 1018.3085
9. Submit detailed clarification about daitri extension area (249.96 Ha) and its activities whether covered in this proposal.
10. Reconcile all the land use land cover data submitted in the Form 2 and Annexure IV before and after mining.
11. Base line concentration is mentioned zero in column 10.
12. Impact of transport and handling of waste shall be considered in damage assessment and also the impact of tertiary crushing plant, colony and relevant transport in and out shall be taken into consideration, besides AQUIP table should indicate with and without control measures.
13. Input data considered for all environmental parameters to arrive at the damage assessment cost shall be submitted and the modelling details.
14. In EIA report, Table no.3.8, unit of all the parameters is given in microgram per cubic meter whereas in presentation slides it is given as g/m<sup>3</sup> and the equipment sensitivity is also expressed as g/m<sup>3</sup>
15. Table 3.9 is missing.
16. Table 3.9.9, heavy metals in PM<sub>10</sub>, Metals like As, Ni and Pb as per NAAQS 2009, not given, however it is mentioned in table no 3.8.

17. Concentration levels of PM10 in work zone are shown more. The work zone Air Quality Norms : Proper units should be given
18. Table 3.13, monthly water balance: Units should be given
19. Table 3.15: Results of surface water quality should be revisited.
20. PH varies from 6.72 to 6.9,acidic, proper explanation is required
21. . Iron conc. In SW2 shown more (1.230 mg/lit). Clarify?
22. Estimate faecal coliform in surface water and submit in the report
23. BOD showed 2,1 &2mg/ litre. Clarify?
24. Table 3.17: Iron content in GW3 is shown 5.715mg/litre, reason for this should be given.
25. In texture, percentage distribution of sand, silt and clay is not given. Submit the same in the EIA report.
26. Details of aquatic flora and fauna shall be recorded and submit in the EIA report.
27. Air Quality modelling is done only for PM10. Submit the modelling results for PM<sub>2.5</sub>, SO<sub>2</sub> and NO<sub>x</sub> as well.
28. Summary and Conclusion chapter should be as per the guideline (EIA notification 2006)
29. Plagiarism check list declaration to be submitted by EIA consultant organization
30. Presentation shall be made before EAC on specific ToR recommendation of CSIR-NEERI carrying capacity study and the status.
31. Activity wise detailed EMP cost and recurring cost with time frame to be submitted
32. Submission of latest compliance report from concerned regional office regarding noncompliance of earlier EC conditions
33. Submission of permission from State Govt. regarding mining activity is to be permitted outside the mining lease area -compliance of ToR Point No13 not submitted
34. In slide No 105 Stage-I FC – applied for balance 746.3325 instead of FC Acknowledgement attached ToR Acknowledgement
35. EIA/EMP to be revised and uploaded along with Form 2 application and the earlier EC was for 1812.99 ha and whereas you have asked for EC over an area of 1018 ha and you have also mentioned in your report that you are considering to retain the area of 1812.99 ha - please explain.
36. Damage assessment is arrived at by using EU28 handbook for env costs as arrived in case of CPCB(specific for stone quarry as directed by NGT)and as well as Env.costs in Energy and Transport sectors by The Federal Env. Agency, which is pertinent to power sector and transport sector with respect to European (Germany) conditions for Urban and rural areas wherein the mortality and morbidity rate considered are 55000-110000 Euros.(VOLY)
37. As per 13.11.5 the ecological damage cost worked out is 27.18 lacs for a violated production of about 9.5 mln tonnes of iron ore and by considering damage value due to biodiversity, health, crop ,material separately wherein these costs are based on average env ..costs of air pollution due to power generation from fossil fuel in Germany and does not relate to this activity and the emission rates per tonne of ore production shall be rechecked and revalidated and revised cost shall be submitted. Further for violation qty of 5.6 mln tonne of cu.ore over a period of 25 years the damage cost for Air impact is furnished at 12.07 crores where the same model has been used whereas for a violated total production 9.5 mln tonnes(considering 3.0 mln tonne annual production for emission computation while in the

above referred other mine annual production of 3.21 lac ton is considered.) There is a huge difference in emission rate between these) and the cost arrived at is 27.18 lacs.

38. Water: i) Surface water usage for mining activity @8ltres/ton shall be explained and it cannot so low (water used for plantation is nil and for drilling and dust suppression for a production 10000tpd is very low). water reduction during monsoon is not counted. S Water consumption shall be quantified on annualised basis and the rate for the shall be as per CPCB guideline and further qty of surface water annually and deficiency in management shall be computed for damage as per average annual rainfall for the violation period.

Ground Water: QTY of GW used by about 1000 mine employees for the violation period has not been considered on prorata as per CPCB rates in the absence of NOC during violation period.

39. Ecology and Biodiversity: Total plantation done so far is 9550 trees covering an area of 6.9 ha whereas the safety zone itself is around 12 ha besides other nonforest areas and streams.

The shortfall in providing GB along the boundary (Safety Zone) and plantation in the non mining area like waste lands to comply with the requirement of 33% plantation and atleast 50% of the requisite area plantation in the non forest area should have done considering the number of years operated so far and the damage cost has to consider besides plantation along the water bodies and cost needs to be revised considering the above.

40. Wild life conservation expenditure (including solar fencing) which is effective from 2017 and whereas ,during violation years this expenditure has been saved and a min 10% of the annual exp per year should be considered for damage/remediation for violation period.

41. The total damage cost assessed ,sw damage cost being substantial(2.30 cr) and the total damage cost computed in the EIA is about 3.30 cr and correspondingly the Remediation, NRAP and CRAP costs computed by PP is 11.22 cr ,which has no relationship between the two.

42. Further saving in EMP Cost , profit accrual during the violation period , a minimum of 3% of those total saved cost has not been considered in the CRAP .

43. Details of proposed Greenbelt Development Plant with appropriate budget estimate including 5 years maintenance cost to be suitably estimated; Damage Remediation Plan (Table 13.18.1 of EIA) need to detailed out while considering Rs. 4.00L in 30 villages (names of villages, nos of saplings; species to be distributed, etc)

Project Proponent submitted the revised proposal vide dated 08.12.2020 through Parivesh Portal. Accordingly, proposal was taken to the 40<sup>th</sup> EAC meeting for deliberation.

#### **Observation and recommendation of the EAC in the present (40th) meeting:**

Project proponent alongwith the consultant made the detailed presentation on the ToR compliance and on compliance of the information sought in the 32<sup>nd</sup> meeting. EAC observed that PP has now submitted the clarification sought and deficiencies noted in the 32<sup>nd</sup> EAC meeting. EAC noted that total FL involved in the project is 1222.8782 ha (Within ML (including 4.467 ha): 846.3995 ha & Outside ML area (excluding 4.467 ha of Daitari ML: 376.4787 ha). Further, out of total FL in the project, Stage I FC is yet to be obtained for 746.3325 ha. ground water abstraction of 750 m<sup>3</sup>/day has been applied by OMC vide letter no.

CGWA/NOC/MIN/ORIG/2017/2622 dated 25.05.2019. The application is under consideration at CGWA. Mining Plan has been approved vide dated 21.02.2020 and is valid upto 31.03.2025. EAC deliberated on the other information presented by the PP including justification in delay in installation of conveyor belt. EAC observed that PP has now **assessed the damage** for total violation production of **95,09,153 tonnes. PP has submitted that damage cost of Rs 49.21 crores and prepared the RP, NRA and CRAP accordingly.**

The EAC after detailed deliberation on the information submitted by the PP (EIA/EMP report, PH issues, Compliance report, Form 2, Additional information, Annexures etc), recommended the proposal for grant of Environmental Clearance for iron ore production from 3.0 MTPA to 6.0 MTPA at Daitri Iron Mine (ML Area 1018.3085 Ha) at Keonjhar and Jaipur District, Odisha, subject to the compliance of following Specific conditions in addition to all Standard conditions applicable for such projects:

- i. EAC recommended for an amount of **Rs 49.21 crores** towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details of Remediation plan, Natural resource Augmentation plan and Community Resource Augmentation plan with budgetary provision are mention below:

#### **Remediation Plan & Budgetary Provision**

	<b>Activity Proposed</b>	<b>Yr. 1</b>	<b>Yr. 2</b>	<b>Yr. 3</b>	<b>Total</b>
		<b>Lakh</b>	<b>Lakh</b>	<b>Lakh</b>	<b>Lakh</b>
<b>Air &amp; Noise Environment</b>	Additional Health Camps to monitor the pulmonary diseases, ENT, Diabetes and Hypertension health status of nearby villages (10 villages x 4 Camps/Year @ Rs 2.5 lakh for 3 years)	10	10	10	30
	Road Sweeping Machine for the main road carrying mineral nearby villages (3 Machines @ Rs 80 lakh)	24	-	-	24
<b>Total Air Environment</b>		<b>34</b>	<b>10</b>	<b>10</b>	<b>54</b>
<b>Water Environment</b>	Construction of series of check dam (20 nos. @ 80 lakhs) on Kukurangi nalla and its tributaries leading to the Reservoir to ensure clarified water for downstream users of	67	67	32.5	166.5



	Kusai nadi.				
<b>Total Water Environment</b>		<b>67</b>	<b>67</b>	<b>32.5</b>	<b>166.5</b>
<b>Biological Environment (Flora &amp; Fauna)</b>	Plantation in nearby villages along community buildings & barren lands (30 villages); in addition to the plantation scheme proposed in the EIA/EMP report.	10	10	4	24
	Apportioning of fund towards implementation of SSWCP by OMC	226	226	226	678
<b>Total Biological Environment</b>		<b>236</b>	<b>236</b>	<b>230</b>	<b>702</b>
<b>Total Cost</b>		<b>1246</b>	<b>1006</b>	<b>655</b>	<b>2907</b>

#### Natural Resources Augmentation Plan and Budgetary provisions

S.N.	Activity Proposed	Yr. 1	Yr. 2	Yr. 3	Total
		Lakh	Lakh	Lakh	Lakh
1	Drinking Water Facility (Construction of bore wells) in 10 villages (4 borewells per village @ 1.2 lakh)	24	12	12	48
2	Construction of recharge ponds in buffer zone villages for ground water recharge. (5 ponds of size 40m X30m) @ 10 lakhs	48	48	24	120
3	Rainwater Harvesting in township, desilting/ dredging of ponds, wells etc. in nearby villages	24	24	12	60
<b>Total Cost</b>		<b>96</b>	<b>84</b>	<b>48</b>	<b>228</b>

### Community Welfare Augmentation Plan and Budgetary Provisions

S.N.	Activity Proposed	Yr. 1	Yr. 2	Yr. 3	Total
		Lakh	Lakh	Lakh	Lakh
1.	Support for establishment and operation of a Sports Academy (Archery, shooting, swimming, athletics, cycling, boxing & Hockey).	36	36	24	96
2.	Support for establishment of 5 skill development centers for peripheral villages (Talapada, Daitari, Baliparbat, Bareiguda, Tangiriapal, Rasol, Brahmanipal) and corpus for sustainability of educational initiatives. i. Skill Development training on Tailoring & other activities to Women Self Help Group. ii. Construction of additional Class Room at Dalki sahi UP School of village Talapada. iii. Construction of School Boundary for Talapada UP School. iv. Renovation of Compound wall of Daitari Setor-4 Primary school. v. Grant in aid to daitari Public School. vi. Construction of Scholl Building at Bareigoda High Shool. vii Construction of 03	48	36	36	120

	<p>nos. Class room at Brahmanipal, Kushabhadra High School.</p> <p>viii Construction of 03 nos of class room at Saraswati Sishu Mandir at Harichandanpur.</p> <p>ix. Construction of 03 nos of class room at Sri Aurobindo Integral Education Centre at Laxmipur.</p> <p>x. Financial assistance to Kushabhadra High School, Brahmanipal for improvement of quality education.</p> <p>xi. Financial assistance to Babasaheb Ambedkar High School, Bareiguda for improvement of quality education.</p> <p>xii. Construction of additional class room at Daitari Public School.</p>				
3.	<p>Providing study materials, Science Lab equipments , setting up computer lab, text books for school liabrary to Tangiriapal High School, Tangiriapal, Sri Maa Aurobindo Sikshya Kendra, Brahmanipal, Talapada UP School, Bareiguda high School &amp; Talapada Anganwadi Center &amp; support to comunity institution for adult literacy programme in pure tribal dominated areas.</p>	5	-	-	5
4.	<p>Distribution of Community Solid waste</p>	5	5	2	12

	collection bins and construction of compost pit in 10 villages of Daitari region				
5	<ul style="list-style-type: none"> <li>i. Infrastructure Development</li> <li>ii. CC Road Tinipolia to Khajuria Pancham</li> <li>iii. CC Road with culvert Nuasahi to express highway.</li> <li>iv. CC road with culvert from RD Road to Talapada UP School.</li> <li>v. CC Road from Talapada to Hutting Sahi</li> <li>vi. CC Road from Talapada to Gumund Sahi</li> <li>vii. Construction of new Road from Rugudipanga Pradhan Purty House to Kakulia Sahi.</li> <li>viii. Development of road from Panganal School to kakuliasahi.</li> <li>ix. Development road from Gaduan village to Mamulika Sahi.</li> <li>x. Development of road from Mirja Marndi house to Panasijharan sahi at Tangiriapal.</li> <li>xi. Construction of flood protection wall near Tentulipal Hatasahi of Rasol G.P.</li> <li>xii. Development of road from Nuasahi to Burusahi.</li> <li>xiii. Construction of CC Road from Tangiriapal</li> </ul>	348	362	223	933

	<p>Gaigotha to Kathua Ghati.</p> <p>xiv. Construction of CC Road from Talapada School to Nuasahi.</p> <p>xv. Construction of guard wall and approach road on Tinipolia chhaka to Pancham.</p> <p>xvi. Construction of CC Road from PWD Road to Kantajhari Sahi.</p> <p>xvii. Construction of CC Road from Talapada School to Nuasahi.</p> <p>xviii. Construction of CC Road from Talapada School to Dumasahi.</p> <p>xix. Construction of Road from Jantia to Tentulipal.</p> <p>xx. Construction of New Bridge Over Chhata building nala at Daitari.</p> <p>xxi. CC Road from Daitari Panchayat Office to 80 Tenament</p>				
5.	Peripheral Development Works				
	<p><u>Irrigation Development:</u></p> <p>i. Construction of Canal from Panganala adi-bandha to Anganwadi Centre.</p> <p>ii. Construction of New Pond for multi purpose at Lepasahi, Daitari</p>	5	5	5	15
	<p><u>Drinking Water:</u></p> <p>i. Drinking water supply from deep well 2 nos. with allied system at Daitari</p>	16	-	-	16

	village.				
	<u>Community Development:</u> i. Construction of 02 nos. club building at Daitari. ii. Construction of 01 no. club build at Baliparbat for RBT adibasi club. iii. Construction of Community Centre & multi purpose hall at Tangiriapal, Daitari, Bareiguda, Talapada & Rasol.	50	50	60	160
	<u>Electrification:</u> i. Electrification of Talapada Village. ii. Installation of street light Rugudipanga to Debihudisahi.	100	100	229	429
	<b>Total Cost</b>	<b>613</b>	<b>594</b>	<b>579</b>	<b>1786</b>

Summary

Sl. No.	Activity Proposed	Total (in Rs. lakh)
1.	<b>Cost of Damage Remediation Plan</b>	<b>2907</b>
2.	<b>Natural Resources Augmentation Plan</b>	<b>228</b>
3.	<b>Community Resources Augmentation Plan</b>	<b>1786</b>
	<b>Total Fund</b>	<b>4921</b>

- ii. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is **Rs 49.21 crores**. Therefore, project proponent shall be required to submit a bank guarantee of an amount of **Rs 49.21 crores** towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.
- iii. Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.

- iv. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- v. Wild life Conservation plan as approved by the Competent Authority shall be implemented.
- vi. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon<sup>ble</sup> Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- vii. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon<sup>ble</sup> Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- viii. Effective dust suppression system shall be adopted at the transportation site and in the other parts of the mining lease to arrest the fugitive dust emission.
- ix. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
- x. The mining lease holder shall, after ceasing mining operations, under take re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to condition which is fit for growth of fodder, flora and fauna etc.
- xi. Stage I FC for the balanced Forest Land (746.3325 ha) shall be submitted prior to grant of EC.
- xii. Periodic ground water analysis for arsenic, iron and other metallic impurities shall be carried out.
- xiii. Dump stability and reclamation shall be done pari passu with mining activity at railway sliding, corridors, avenues, crushers etc. Work of Garland stabilization using plantation around slopes at hills shall also be done.

- xiv. Activities proposed under CER and concerned raised during public hearing shall be made part of EMP as per Ministry's OM dated 30.09.2020 and to be completed within three years.

**40.3.2. Mining of 1003 m<sup>3</sup>/annum of Black Granite in ML Area 166.920 Ha, located at Survey No. 917(Part) & 921(Part), village Mahimandalam, Katpadi Taluk, District Vellore, Tamil Nadu by M/s Tamil Nadu Minerals Limited - Further consideration for Environmental Clearance**

**Proposal No. IA/TN/MIN/112499/2017 and File No. 23-203/2018-IA.III (V)**

The Project Proponent and the accredited Consultant Hubert Enviro Care Systems (P) Ltd, Chennai, made a detailed presentation on the salient features of the project and informed following to the EAC:

TAMIN is operating Black granite quarry at survey No. 917 part and 921 part, Mahimandalam Village, Katpadi Taluk, Vellore District, TamilNadu for the production capacity of 1003 m<sup>3</sup> over an extent of 166.92 Ha. The entire mine lease area of 166.92 Ha. is Govt. Poramboke land. The project site is comes under Toposheet No – 57 P1, 57 P/5, 57 O/4 and 57 O/8 and lies between the GPS coordinates of 13°04'56.04"N to 13°05'32.85"N and 79°12'04.53"E to 79°13'58.55"E. The topography of the lease area is hilly terrain. The elevation of the lease area is varies from 240 m to 340 m above MSL.

The project site is connected through Ramapuram road which is located at a distance of 0.19 km in south direction and which is connecting SH - 124 at a distance of 4.06 km (E). The nearest railway station is Ramapuram railway station about 2.57km (WNW) from the Quarry. Chittoor - Walajapet Road (NH4) is located approximately 4.77Km (SW).

Quarry lease was granted over an extent of 373.36.5 Ha. in SF. No. 917 part and 927 part of Mahimandalam village, Katpadi Taluk, Vellore District, Tamil Nadu for 20 years vide G.O. MS. No. 300 Industries (MME- I) Department, dated 26.06.1991, valid up to 22.11.2001 and subsequently in the year 1998 and 2002, TAMIN has surrendered an extent of 126.36.5 Ha. and 80.08 Ha. respectively, accordingly scheme of mining for 166.92 Ha with production capacity of 1003 m<sup>3</sup> was prepared and submitted commissioner of geology and mining in 2012. By taking into consideration of deemed approval of the above Mining Scheme-I & II under Rule 18(5) of GCDR, 1999, the present Scheme of Mining-III for this area pertaining to the years 2016-2017 to 2020-2021 is prepared and submitted under Rule 18 of GCDR 1999 and approved by Director of Geology and Mining Letter RC. No. 2675/MM4/2020 dated 03.07.2020.

**Salient features of the Project**

**1 Name of the project :** Mahimandalam Black Granite Quarry , over an extent of 166.92.0 Ha. Production Capacity 1003 m<sup>3</sup>/Annum) of Tamil Nadu Minerals Limited.



2. This proposal comes under Category A as the mining lease area is more than 50 Ha. (166.92 Ha.) Project also attracts the General Conditions. (Tamil Nadu-Andhra Pradesh Interstate boundary is adjacent to lease boundary as per topo sheet & as per Google earth AP-TN Interstate is passing adjacent to the lease area).

3 If a Joint venture, the names & addresses of the JV partners including their share: Nil

4 Latitude and Longitude of the project : 13°4'53.86"N to 13° 5'27.78"N , 79°12'0.63"E to 79°13'54.09"E

5 Whether the project is in the Critically Polluted Area (CPA): No

6 Cost of the project: Rs. 100 Lakhs

7 Whether new or expansion project. If expansion: No, Existing Quarry.

8 If for expansion, whether the application is under 7(ii) of the EIA Notification, 2006.: Yes. Applied for seeking environmental clearance

9 Whether new or expansion project. If expansion :- Existing Quarry. Not Applicable

10. No. and Date of the ToR /and revised ToR, if any, letter issued by the MoEF (if this is a case for EC)

S. No	Year	Activity	Reference
1	13.04.2015	EC Application (before 14 <sup>th</sup> March 2017 violation notification)	IA/TN/MIN/27398/2015
2	01.05.2015	EC Application acceptance by MS	Acceptance letter
3	15.05.2015	Proposal Considered in 33 <sup>rd</sup> EAC Meeting	33 <sup>rd</sup> EAC Agenda
4	05.06.2015	ToR Issued by MoEF&CC	J-11015/131/2015- IA-11(M)
5	Dec-2015 to Feb 2016	Baseline studies	--
6	02.12.2016	Public Hearing	Public Hearing proceedings
7	06.09.2017	EC Application as per 14 <sup>th</sup> March 2017 violation notification)	IA/TN/MIN/67985/2017
8	01.08.2018	Proposal considered in 11 <sup>th</sup> EAC meeting proposal involving in Violation	11 <sup>th</sup> EAC Agenda No 11.4.7
9	12.08.2018	Project is deferred in 11 <sup>th</sup> EAC meeting & Additional details are sought by MS	Additional details submission in portal

10	10.10.2018	Additional details sought furnished & uploaded at MoEF&CC Portal	Acceptance mail received from MS on Nov 16 <sup>th</sup> 2018
11	29.11.2018	Proposal considered in 15 <sup>th</sup> EAC meeting proposal involving in Violation	15 <sup>th</sup> EAC Agenda No. 15.5.5
12	15.01.2019	Terms of Reference under Violation Category with Exemption of Public Hearing & One season baseline studies	No. 23-203/2018-IA.III(V)
13	Dec-2018 to Feb 2019	Base Line Studies(One Season)	--
14	26.07.2019	Final EIA submitted	IA/TN/MIN/112499/2017
15	14.08.2019	File returned to proponent due to EDS	Incorporated all the EDS in EIA and will submit for Appraisal
16	11.09.2020	EDS uploaded	-
17	22.09.2020	Proposal considered during 36 <sup>th</sup> EAC meeting	-
18	07.12.2020	Additional Details Sought report is submitted	PP received mail for uploading confirmation
19	31.12.2020	Proposal considered in 40 <sup>th</sup> EAC Meeting	40 <sup>th</sup> EAC Meeting Agenda (40.3.2)

**11 No. and Date of the EC and the revised EC letter issued by the MoEF (if this is a case for reconsideration. If so, what specific reconsideration(s) being sought by the proponent):** Not Applicable

**12 If the project was considered in EAC, Pl. give dates of the meeting (s).**

1. ToR Presentation Agenda No. 33<sup>rd</sup> meeting of the reconstituted expert appraisal committee (non-coal mining), scheduled during 15<sup>th</sup> may, 2015. Agenda No. 2.31.
2. Proposal Considered in 11<sup>th</sup> EAC meeting proposal involving in Violation category. 11<sup>th</sup> EAC Agenda No 11.4.7 on 01.08.2018.
3. Proposal considered in 15<sup>th</sup> EAC meeting proposal involving in Violation. 15<sup>th</sup> EAC Agenda No. 15.5.5 (Terms of Reference under Violation Category with Exemption of Public Hearing & One season baseline studies vide letter No. No. 23-203/2018-IA.III (V) dated 15.01.2019).

4. Proposal considered during 36<sup>th</sup> EAC meeting held on 22.09.2020 for EC appraisal, Proposal deferred due to additional details sought.
5. Now, Proposal considered in 40<sup>th</sup> EAC Meeting to be held on 31.12.2020.

**13. Type of Mine: (Open cast/Underground/mixed):** Opencast Semi- Mechanized Method

**14. Capacity of the mine applied for** 1003 m<sup>3</sup> per annum

**15. ML Area**

**(i) As per block allotment Lease area** over an extent of 166.92 Ha.

**(ii) As per approved mine plan**

Land Use Pattern of the lease area:

S. No	Particulars	Extent in Ha	End of Mine Life
1	Mine Pit area	8.86	53.0
2	Road	1.46	4.06
3	Afforestation	1.00	21.75
4	Office Building	0.75	-
5	Existing Waste Dump	5.0	2.25
6	Proposed Waste Dump	3.11	72.84
7	Unmined area	146.74	13.02
<b>Total Mine Lease area</b>		<b>166.92</b>	<b>166.92</b>

**16 Date of approval of mine plan, mine closure plan, status & date**

1. Mining Plan: approved by Director of Geology and Mining Letter RC. No. 14624/MM2/2001 dated 16.11.2001 valid up to 2006.
2. Scheme of mining-I vide Letter No. 8301/ML3/2007 dated.17.04.2007(deemed to approved)
3. Scheme of Mining-II Letter No.2366/ML2/2012, dated. 21.02.2012. (deemed to approved)
4. Scheme of mining III is submitted vide Letter No 2366/ML3/2016, dated. 13.05.2016 period: 2016-17 to 2020-21 and Approved by Director of Geology and Mining Letter RC. No. 2675/MM4/2020 dated 03.07.2020.

**17 Date of Board's approval:** Mining Plan approval on 16.11.2001

**18 Date of Ground water clearance and surface water approval.:** Not Applicable

**19 Existing Ground water level in (M):** The thickness of weathered zone varies from less than a meter to about 15 m in the area depending on the topography. Potential aquifer zones are also developed in these rocks by fractures persisting to depths, particularly along lineaments and their inter sections. The depth of dug wells in crystalline formations varies from 8 – 19.5 m BGL. Fracture zones have been encountered in the well down to a depth of 116 m bgl in the borehole drilled by CGWB. The thickness of alluvium along the course of Palar River ranges from 8 – 12 m.

**20 Date of mine closure approval:** Scheme of mining III is submitted vide Letter No 2366/ML3/2016, dated. 13.05.2016 period: 2016-17 to 2020-21 and Approved by Director of Geology and Mining Letter RC. No. 2675/MM4/2020 dated 03.07.2020.

**21 Any river/Nallah flowing near or adjacent to the proposed mine. If yes, please give details.:** The nearest river is Ponnai River is about  $\approx$ 4.18 km towards E direction

**Details of mine lease:-**

<p><b>1. Date of entering into Original lease deed.</b> Quarry lease was granted over an extent of 373.36.5 Ha. In SF. No. 917 &amp; 927 of Mahimandalam village, Walajah Taluk, (Now Katpadi Taluk), Vellore District, Tamil Nadu for 10 years vide G.O. Ms. No. 300 Industries Department, Dated 26.06.1991.</p> <p><b>2. Date of expiry of original lease deed: 22.11.2001</b></p>	<p><b>1. Date of 1<sup>st</sup> lease Renewal:</b> Subsequently TAMIN filed the renewal lease application for the remaining extent of 247.0 ha. (373.36.5 – 126.36.5 = 247.0 ha.) For 20 years vide letter date on 17.11.2000 &amp; 28.03.2001. The Mining Plan was approved by Director of Geology and Mining Letter RC. No. 14624/MM2/2001, Dated 16.11.2001.</p> <p><b>2. Whether renewal or deemed renewal: Nil</b></p> <p><b>3. Date of expiry of 1<sup>st</sup> lease renewal/deemed Renewal: Nil</b></p>
<p><b>1. 2<sup>nd</sup> Lease approval</b> Further, TAMIN once again requested the government to reduce the lease area by an extent of 80.08.0 ha. from 247.0 ha. (247.0 – 80.08 = 166.92 ha.) and the government have accepted and granted renewal lease for 166.92 ha. Vide G.O. 3D No. 45 Industries (MME 1) Department, Dated 20.11.2002 for 20 years</p>	<p><b>1. Date of Expiry of 2<sup>nd</sup> Lease: 22.11.2022</b></p>

**I. TECHNICAL DETAILS**

**22. Geological Reserve:**

- (i) Total geological reserve- 86, 14,000m<sup>3</sup>
- (ii) Mineable reserve- 84, 19,563 m<sup>3</sup>
- (iii) Extractable reserve- 84, 19,563 m<sup>3</sup>
- (iv) Percent (%) of extraction–97.7 % (Total Geological Vs Mineable Reserves)
- (v) Range of ground water level–

The thickness of weathered zone varies from less than a meter to about 15 m in the area depending on the topography. Potential aquifer zones are also developed in these rocks by fractures persisting to depths, particularly along lineaments and their inter sections.

The depth of dug wells in crystalline formations varies form 8 – 19.5 m BGL. Fracture zones have been encountered in the well down to a depth of 116 m BGL in the borehole drilled by CGWB. The thickness of alluvium along the course of Palar River ranges from 8 – 12 m.

- (vi) Total estimated water requirement–12.0KLD

**(vii) Details of intersecting ground water level:**

Maximum proposed mine depth – 25 m above Ground level. Due to less tranmissivity, hydraulic discontinuity, occurrence of saturated water table mostly beyond 116m, no intersection of ground water table is envisaged.

**23. Details of Deposits:**

- i. Depth of over body -25m AGL
- ii. Grade of ore - Black Granite
- iii. Stripping ratio - 1:1.03

**24. Method of mining:** -OpenCast Semi-Mechanized Mining Technique.

**25. Life of mine:**20years (Considering the present proved mineable reserves, up to 25m depth above ground level)

**26. Whether ambient air quality seasonal data has been monitored. If so, from which season to which season and whether the results are within the prescribed limits:**Monitoring was carried out during Post Monsoon season (December 2018 to February 2019). All monitored values were found to be well within the prescribed limits.

**27. Whether the monitoring report of earlier EC from MoEF Regional Office has been obtained, in case the proposal is for expansion–** No

**28. Details of O.B**

- (i) External OB dumps : Nil

- (ii) No of OB dumps : Single
- (iii) Area of dump area : 75.09 Ha. (Within the lease area)
- (iv) Height of each dump : -- 5m
- (v) Quantity (in MCm) of OB in each dump: --
- (vi) Year of back filling : -- No back filling
- (vii) No. of OB dumps reclaimed : -- Nil
- (viii) If garland drains and settlement facility for runoff created: - Nil
- (ix) Whether runoff water being utilized: -- Yes

**29. Details of Internal Dumps:**

- (i) Number of internal dumps : Nil
- (ii) Area of each dump : 5.0 Ha
- (iii) Height of each dump : 5m height and the angle of slope of dumps will be at 45<sup>0</sup> from horizontal.
- (iv) Quantity of wastes generation : 150419m<sup>3</sup>Proposed during SOM-III: 2016-2017 to 2020-2021) No backfilling envisaged now.

**30. Utilization potential of wastes -:**

- (i) Within the mines : 75.09 Ha.
- (ii) Outside mines : Nil
- (iii) Efforts made by proponent : Nil

The existing dump area is 5.0 Ha. & proposed waste dump area in the beginning of scheme III is 3.11 Ha. and during end of the life of the mine is 75.09 Ha. The unsold blocks are kept within the boundary on the country rock area. The dumps will be maintained not exceeding 5m height and the angle of slope of dumps will be at 45<sup>0</sup> from horizontal.

**31. Details of final Mine Voids**

- (i) Area : 166.92 Ha
- (ii) Depth : 25m AGL (from the top of the hill)

**32. Details of Quarry:**

- (i) Total quarry area : 166.92 Ha
- (ii) Backfilled quarry area of : No back filling
- (iv) Green belt created in ha.- : 21.75Ha.

**33. Details of Land usage**

S. No.	Land Use	Within ML Area (Ha)	Outside ML Area (Ha)	Total (Ha)
1.	Agriculture land	Nil	Nil	Nil
2.	Forestland	Nil	Nil	Nil
3.	Wasteland	Nil	Nil	Nil
4.	Grazing Land	Nil	Nil	Nil
5.	Surface water bodies	Nil	Nil	Nil
6.	Settlements	Nil	Nil	Nil
7.	Other (Government Poramboke land)	166.92	Nil	166.92
	<b>TOTAL</b>	166.92	Nil	

(i) **Pre-mining** : Government Poramboke

(ii) **Post-Mining** : It is proposed not to close the mine & backfill at the expiry of 20 years. Hence, the life of the mine may extend further and as such, mine closure is not planned now.

(iii) **Core area** : Present area 8.86 Ha and 53.0 Ha by end of Quarry life

**34. Details of Forest issues:**

**Nil**

Whether schedule -I species, if yes conservation plan is approved by CWLW?: *Nil*

**35. Costs of the project:**

i. **Total capital Cost** : Rs. 100 lakhs

ii. **Cost of Production** : Dispatched directly to the beneficiation plant.

iii. **Sale Price** : Not considered

iv. **CER cost** : Rs. 2.0 Lakhs ( Since it is a violation project 2% of the project cost is considered for CER.

v. **R&R Cost** : Nil (Government Poramboke & Patta lands owned by TAMIN)

vi. **No of PAFs** : Nil

vii. **Cost for implementing EMP**: 20.45 Lakhs (18.0 Lakhs Capital and 2.45 Lakhs for Recurring cost)

**36. Details of villages/habitation in mine lease area-**

(i) Inside the lease: Nil

(ii) Surrender by lease:

S. No.	Name of the Villages	Approximate distance & direction from project site	Population (Census 2011)
1	Bodinattam village (in m)	56 (S)	200
2	Ammavaripalli( in Km)	1.35 (SE)	1000
3	Perumalkuppam ( in Km)	1.89 (NE)	1300
4	Vallimalai ( in Km)	3.7 (NE)	1000

(iii) Extent of cropland acquired/ being acquired in ha: *Nil*

**37. Details of transportation of mineral**

- (i) In pit: By Tippers  
(ii) Surface to siding: Not Applicable  
(iii) Siding to loading: Not Applicable  
(iv) Quantity being transported by Road/Rail/conveyer /ropeway – 100% by road  
(v) Proposed change in transportation means if any, give details - Not Applicable

**38. Details of reclamation:**

- a. Afforestation shall be done covering an area of **21.75 Ha** at the end of mining.  
(i) Reclaimed external OB dump (in ha): **Nil**  
(ii) Internal dump (in ha) :**Nil**  
(iii) Green belt (in ha) :**21.75 Ha.**  
(iv) Density of tree plantation (in no of plants):**32625**  
(v) Void (in ha) at a depth of (inm) which is proposed to be converted into waterBody:**Nil**  
(vi) Others in ha (such as excavation area along ML boundary, along roads and Infrastructure, embankment area and in township located outside the lease etc):**Nil**  
(vii) Agriculture and horticulture:**Nil**  
(viii) Fisheries:**Nil**  
(ix) ECO Tourist/recreation spot: **Nil**

**III. LEGAL ISSUES - : Not applicable**

**39. Any court case pending. If so, please provide a list with details as annexure.**

- (i). Environment (Protection) Act : Nil  
(ii). Air (P&CP) Act : Nil



- (iii). Water (P&CP) Act : Nil
- (iv). MMRD Act : Nil
- (v). The Factories Act : Nil
- (vi). other land R&R related cases : Nil

40. Any violation cases pending. If so, please provide a list with details as annexure  
Not applicable

41. Give details of actual production vis-à-vis sanctioned capacity since the inception of mine in following format or since 1993-94 as applicable:

Year	EC sanctioned capacity (MTPA)	Actual production	Excess production beyond the EC (MTPA) sanctioned capacity
	Quarry is in operations without EC from 1995-96 to 2016-17, Now the proposal is applied for getting Environmental Clearance and year wise production since year 1995 is given below		

Year wise production details since year 1995 for Black granite are shown below in tones:

Year	Proposed	Actual
	ROM	ROM
1995-1996	0	643
1996-1997	0	0
1997-1998	0	5183
1998-1999	0	13078
1999-2000	0	17266
2000-2001	0	12993
2001-2002	37590	15977
2002-2003	36432	25985
2003-2004	37944	18128
2004-2005	37080	13489
2005-2006	37944	15301
2006-2007	26880	16733
2007-2008	26640	15333
2008-2009	26640	8200
2009-2010	26880	23433
2010-2011	26880	39933
2011-2012	33435	24267

2012-2013	33301	29133
2013-2014	33419	25,167
2014-2015	33321	11333
2015-2016	33409	14933
2016-2017	33,386	30267
2017-2018	31,373	0
2018-2019	33,432	0
2019-2020	33,415	0
2020-2021	33,430	0

#### **IV. PUBLIC HEARING ISSUES:**

**42. Date and Place of public hearing:**

The public hearing for this project was conducted on 02.12.2016 (11.00 A.M) at Sri Srinivasan Marriage Hall, 264, Thavapedam Road, Vallimalai Post, Katpadi Taluk, Vellore District.

**43. The designation of officer presided over the PH**

Thiru.K. Manivannan            District Revenue Officer, Vellore District.  
Thiru.M. Pannirselvam        District Environmental Engineer  
Thiru. E. Ganesan             Deputy Manager, M/s. TamilNadu Minerals Ltd.,  
Thiru. K. Sakthivel             Manager, M/s. TamilNadu Minerals Ltd.,  
And Public

**44. Issues raised during Public Hearing and assurance given alongwith the financial provisions and action plan, if any, by the project proponent. (Please attach as an annexure in a tabular form.):** Public hearing was conducted on 02.12.2016

**45. Number of representation received in writing from the district and outside of district.**

Out of 70 public participants, 7 participants were raised questions and their views and reply by proponent were recorded as minutes of the public hearing.

**V. Consultant;**

**46. Name of the EIA consultant who prepared the EIA/EMP report.**

Hubert Enviro Care Systems (P) Ltd. Chennai (NABET/EIA/1619/RA 0083 validity 29.09.2020)

**47. Whether the consultant has been accredited by the QCI and NABET as per the MoEF OM dated 2nd December, 2009.**

**Yes.**

**48. Name of specialists/consultants involved in making EIA report and in collecting data.** Hubert Enviro Care Systems (P) Ltd. Chennai

**Observation and recommendations of the EAC in the 36<sup>th</sup> EAC meeting held on 21st -22nd September, 2020:**

EAC deliberated on the information as presented and submitted by the PP. EAC further deliberated on the damage cost and remediation, NRAP and CRAP plan cost assessed by the PP. EAC also deliberated on the activities proposed under the plans. EAC after detailed deliberation deferred the proposal for want of following information:

1. Revised AAQ impact with and without control measures.
2. Revised damage assessment plan and accordingly the remediation and NRAP and CRAP considering specifically Air, Water, and Land use and also it should consider economic benefits accrual and savings on EMP during the violation period.
3. Proposed mitigation and management measures for the old dumps numbering 12.
4. Status of credible action.
5. Details of green belt/compensatory afforestation in the mining lease area based on impact prediction/mitigation measures, to be submitted.

Project proponent submitted the above information to the Ministry vide dated 07.12.2020. Accordingly, proposal was taken to the EAC for deliberation.

**Observation and recommendations of the EAC in the present meeting (40<sup>th</sup>)**

Project Proponent alongwith the consultant made the detailed presentation before the EAC on the information sought in the earlier meeting. After detailed presentation by the PP, EAC noted that compliance submitted still needs to be revised on the damage assessment aspect for Air, Water etc, Mitigation and Management measures for the old dumps numbering, Details of green belt. EAC advised PP to rework on these aspects and submit to EAC members through email before finalization of minutes.

As per the advice of EAC, PP reworked on the above issues and submitted the information to the EAC through email. EAC noted that PP has now revised the damage assessment by computing on annual basis for air, water and other attributes and has reworked the assessment of damage and has worked out the Remediation cost, natural and community resources augmentation plan apart from 1% of the capital cost towards community development activity. Initially PP had submitted for total amount of around 21.30 lakhs and now with the due corrections as suggested by us, the total amount towards RP, NRAP, CRAP submitted is now 61.40 lakhs.

The EAC after detailed deliberation on the information submitted by the PP (EIA/EMP report, PH issues, Compliance report, Form 2, Additional information, Annexures etc), recommended

the proposal for **grant of Environmental Clearance to Tamil Nadu Minerals Limited** for the production capacity of 1003 m<sup>3</sup> over an extent of 166.92 Ha, subject to the compliance of following Specific conditions in addition to all Standard conditions applicable for such projects:

- i. EAC recommended for an amount of **Rs 61.40 lakhs** towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details of Remediation plan, Natural resource Augmentation plan and Community Resource Augmentation plan with budgetary provision are mention below:

### Remediation Plan & Budgetary Provision

S. No	Activity	Remediation plan proposed Measures	Cost Allocation (INR)
1	<b>Land Environment</b>	Developing greenbelt at Mahimandalam village and Bodinatham village	<ul style="list-style-type: none"> <li>•200 No. of Trees (Each village 100 Nos &amp; Cost of Plant 500/-)</li> <li>=1,00,000</li> <li>(Additional 1500 Nos are also planned under Greenbelt compensation at Mahimandalam, Bodinatham &amp; Vallimalai villages cost will be 750000 lakhs will be spend under EMP)</li> </ul>
		Awareness among Mahimandalam and Bodinatham villages in the neighbourhood shall be provided for collection and segregation of solid waste.	For printing& distribution of leaflets =10,000/
		Dispensing of knowledge of proper segregation (degradable and non-degradable) at source. • Waste collection centre shall be provided in villages	<ul style="list-style-type: none"> <li>• Waste segregation awareness programmes (one time)</li> <li>=10,000/-</li> <li>• 2 bins for 3 villages (1 bin for each) (Mahimandalam, Bodinatham &amp; Vellamalai villages)</li> <li>3 x 40000 = 1,20,000/-</li> </ul>
<b>Total Cost of Remediation Measures for Land Environment Sub Total 2,40,000/-</b>			

2	<b>Air Environment</b>	Suppression of dust by sprinkling of water through water tankers on haul roads, and dust deposited areas including neighbourhood's areas.	<ul style="list-style-type: none"> <li>•Dust sprinkling system (Tractor with fabricated water storage tank along with Sprinkling arrangements) Refurbished Tractor (1No) Rs. 6,00,000/-</li> <li>Water Storage tank Rs.50,000/-</li> <li>Maintenance per Year Rs. 1,00,000/-</li> <li>= 7,50,000/-</li> </ul>
		Plantation / Provision of Green Belt development in nearby villages.	<ul style="list-style-type: none"> <li>•Already considered in Land Environment</li> <li>•(200 Nos for Mahimandalam village and Bodinatham village under Remediation measures and 1500 Nos of trees under EMP(Greenbelt compensation)</li> </ul>
		<ul style="list-style-type: none"> <li>• Plantation of trees at SH24 (2 sides of the road &amp; 4 km length) which is located at ~4 km (E) collaboration of NHAI/Forest Dep't.</li> <li>• Monitoring of Ambient Air Quality (3 Samples, twice a year) in nearby villages (Mahimandalam and Bodinatham villages)</li> </ul>	<ul style="list-style-type: none"> <li>•No. of trees 500 x 500/- (cost of each plant 500Nos) =2,50,000</li> <li>•AAQ monitoring twice in a year for 2 villages (Bodinatham and Mahimandalam villages)</li> <li>AAQ Monitoring 2 times in a Year/ for 2 Villages. Each Monitoring cost: 5000/-</li> <li>= 40,000</li> </ul>
		<ul style="list-style-type: none"> <li>• Health camps for neighbourhoods (Mahimandalam and Bodinatham villages) are considered in point S. No.7</li> </ul>	Already considered Each General Health camp= 20,000/- per Village (2 Nos Mahimandalam Village and Bodinatham Village)
<b>Total Cost of Remediation Measures for Air Environment Sub Total 10,40,000/-</b>			
3.	<b>Water Environment</b>		
	a) <b>Surface Water</b>	<ul style="list-style-type: none"> <li>• Maintenance of existing garland/ and diversion to nearby water bodies located</li> </ul>	For each village for Garlands/diversion of rainwater to nearby water

		at Bodinatham and Mahimandalam Village.	bodies 1,00,000/- ( 1,00,000 x 2 Villages) = 2,00,000/-
		• Refurbishment of abandoned public well (Bodinatham and Mahimandalam Village)	For each bore well 40,000/- Total 2 Nos of Bore wells(40,000 x 2 Nos) =80,000/
	<b>b) Ground Water</b>	• Construction of recharge pits for (Mahimandalam village and Bodinatham village and Vellamalai village)	5 Nos of pits for Each village (Each pit cost 10,000/-) = 1,50,000/-
<b>Total Cost of Remediation Measures for Water Environment Sub Total 4,30,000/-</b>			
<b>4</b>	<b>Noise &amp; Vibration Environment</b>	• Controlled blasting & Drilling methods • Providing in-built mechanism for reducing sound emissions	• Rs. 5,000/Month x 12 Months. = 60,000/
		• Deaf and Dumb specialist Health camps and primary treatment at Mahimandalam and Bodinatham village	• 2 Deaf and Dumb Health Camps for 2 villages (2 x 25,000). = 50,000/-
<b>Total Cost of Remediation Measures for Noise &amp; Vibration Sub Total 1,10,000/</b>			
<b>5</b>	<b>Ecological Environment</b>	• Compensatory additional plantation outside the mine lease	200 Nos for Mahimandalam village and Bodinatham village under Remediation measures already considered Land Environment and 1500 Nos of trees under EMP(7,50,000/-) as Greenbelt compensation.
		• Development of green belt along the boundary of water bodies away from the lease boundary	
		• Avenue plantation on external road	Already considered in air environment (Plantation of trees at SH24 (2 sides of the road & 4 km length) which is located at ~4 km (E) collaboration of NHAI/Forest Department)
			No. of trees 500 x 500/- (cost

			of each plant 500Nos=2, 50,000)
		• Distribution of tree seedling to peripheral villagers preferably native plants	=50,000/-
<b>Total Cost of Remediation Measures for Ecological Environment Sub Total 50,000/</b>			
<b>6</b>	<b>Socio-Economic Environment</b>	• Providing Health Camps to community.	Health camps are considered in above section Air Environment.  (i.e. Already considered Each General Health camp= 20,000/- per Village (2 Nos Mahimandalam Village and Bodinatham Village))
		• Provision of ambulance for transportation of injured labour	Ambulance is already available at site.
		• Community based rehabilitation of differently abled persons in Mahimandalam village and Bodinatham village	Each Village = 25000/- (2 x 25,000)  = 50,000/-
		• Solar street lamps to community (Bodinatham villages)	Solar street lamps installation for Bodinatham village 10 Nos (Each Solar LED street lamp with pole = 10000/-).  = 1,00,000
<b>Total Cost of Remediation Measures for Socio Economic Sub Total 1,50,000/-</b>			
<b>7</b>	<b>Occupational Health and safety</b>	• General Health camps for neighbourhoods (Mahimandalam and Bodinatham villages)	Each General Health camp= 20,000/- per Village  (2 Nos Mahimandalam Village and Bodinatham Village) 2 x 20000/-  =40,000/-
		• Self-employment training programme to educated persons. • neighbourhood villages (Mahimandalam and Bodinatham village)	Self-employment training programme for Mahimandalam and Bodinatham village educated persons. 2 Nos Programmes/Year/per village (Each Programme 25,000/-)

		1,00,000/-
<b>Total Cost of Remediation Measures for Occupational Health &amp; Safety</b>		<b>Sub Total 1,40,000/-</b>
		<b>Grand Total(INR)</b>
		<b>21,60,000/-</b>

#### Natural Resources Augmentation Plan and Budgetary provisions

S. No.	Activity	Year wise Implementation and Budgetary provision (INR)		Total Cost (INR)
		Year-1(2021)	Year-2(2022)	
1	Development of Greenbelt at connectivity road side of Chalicheemala Palli village (500 Nos of trees x 500/-)	--	2,50,000	2,50,000
2	Renovation/Desilting of water bodies located in Mahimandalam village, Bodinatham village and Vellamalai village(3 Water bodies each 1,00,000/-)	--	3,00,000	3,00,000
3	Rainwater conservation measuresRoof top rain water harvesting implantation at Govt. Schools for 3 Villages (Mahimandalam village Bodinatham village and Vellamalai village, (Each Harvesting System=50,000/-)	1,50,000	--	1,50,000
<b>Total</b>				<b>7,00,000</b>

#### Community Resource Augmentation Plan and Budgetary Provisions

S. No.	Activity	Year wise Implementation and Budgetary provision (INR)		Total Cost (INR)
		Year-1(2021)	Year-2(2022)	
1	Construction/Renovation of Mahimandalam & Bodinatham Village Main connectivity road.	2,00,000	2,00,000	4,00,000
2	Construction of Sanitation facilities (5 no. of Toilets for each village) for Govt. primary school at Bodinatham village & Mahimandalam Village.	2,00,000	2,00,000	4,00,000



3	Technical skill development programmes to the children of farmers/poor people (2 Programmes/Year/2 villages (Bodinatham village & Mahimandalam Village (Each programme 20000/-).	80,000	80,000	1,60,000
4	Solar lights with pole 5Nos/Villages(Each unit 20,000)	2,00,000	2,00,000	4,00,000
5	Smart Screen (CPU&Monitor-80,000/-) for Primary and Secondary Govt schools for Online Classes (Bodinatham village & Mahimandalam Village) 2 Screen/per village	1,60,000	1,60,000	3,20,000
6	Sanitary Napkin Dispenser/Vending Machine for Primary and Secondary Govt schools. (2 Nos/Villages) each unit: 20000/-.	60,000	60,000	1,20,000
7	Providing trolleys to Local Panchayat for transport of Municipal Solid Waste for 2 villages (Each Rs. 50,000/-).	1,00,000	1,00,000	2,00,000
8	Providing Medical equipment for primary health centre for 2 Villages (Each Rs. 50,000/-).	1,00,000	1,00,000	2,00,000
9	Common Community Hall for Bodinatham village & Mahimandalam Village	-	10,80,000	10,80,000
			<b>Total</b>	<b>32,80,000</b>

### Summary

S. No.	Name of the area	Budget (INR)
1	Estimation cost for remediation plan based on the Damage Assessment due to violation	21,60,000
2	Community Resource Augmentation Plan	32,80,000
3	Natural Resource Augmentation Plan	7,00,000
<b>Grand total</b>		<b>61,40,000</b>

- ii. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs 61.40 lakhs. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rs 61.40 lakhstowards Remediation

plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.

- iii. Remediation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.
- iv. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- v. Wild life Conservation plan for Schedule I species, if any, shall be prepared and implemented with the approval of the concerned CWLW.
- vi. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- vii. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
- viii. Effective dust suppression system shall be adopted at the transportation site and in the other parts of the mining lease to arrest the fugitive dust emission.
- ix. Project proponent shall take necessary other clearances/permissions under various Acts and Rules if any, from the respective authorities / department.
- x. The mining lease holder shall, after ceasing mining operations, under take re-grassing the mining area and any other area which may have been disturbed due to their mining activities and restore the land to condition which is fit for growth of fodder, flora and fauna etc.
- xi. Dump stability and reclamation shall be done pari passu with mining activity at railway sliding, corridors, avenues, crushers etc.

- xii. Activities proposed under CER and concerned raised during public hearing shall be made part of EMP as per Ministry's OM dated 30.09.2020 and to be completed within three years.
- xiii. As per Ministry's Notification dated 25th July, 2018 DSR for minor mineral shall be submitted to the Ministry prior to grant of EC.
- xiv. Credible action to be initiated and Court case shall be filed by the concerned SPCB against the Project Proponent u/s 19 of the E(P) Act. 1986.
- xv. The lease is valid upto 22/11/2022 and hence the EC will be valid upto that period.

**40.3.3. Expansion of Pesticide Manufacturing Unit from 15 TPA to 471.5 TPA at Plot nos. E-24, E-24 (Part) and E-23/1, MIDC, Lote Prashuram, Taluka Khed, District Ratnagiri, Maharashtra by M/s Godrej Agrovet Limited – Further consideration for Environmental Clearance**

**Proposal No. IA/MH/IND2/183739/2017 and File No. J11011/231/2003-IA-II(I)**

The Project Proponent and the accredited Consultant Rightsource Industrial Solutions Pvt. Ltd, made a detailed presentation on the salient features of the project and informed following:

- i. The proposal is for environmental clearance to the project proposed expansion of existing Herbicides/ Fungicides/ PGRs manufacturing unit at Plot No. E- 24, E-24 (Part) and E-23/1, MIDC Lote Parshuram, Taluka: Khed, District: Ratnagiri, Maharashtra by M/s. Godrej Agrovet Ltd. The project proposal was considered by EAC and issued standard ToR Vide File No. **J-11011/231/2003-IA-II (I) on 31st January, 2018** with exemption of Public Hearing as the unit is located in Notified Industrial Area established prior 14<sup>th</sup> Sept 2006 as per **OM J-11013/36/2014-IA-I dt. 10.12 2014**.
- ii. The proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held during 29-31<sup>st</sup> July, 2019. The committee noted that the existing environmental clearance dated 28<sup>th</sup> May 2004 granted by the Ministry was for manufacturing capacity @ 1.25 TPM (15 TPA). The unit is, however, engaged in production @100.60 TPA and as such, amounts to violation of the EIA Notification, 2006.
- iii. The proposal was considered by the Expert Appraisal Committee (EAC) for projects related to violation of the EIA Notification, 2006 in its meeting held on 30-31 December, 2019 in the Ministry. The committee, after detailed deliberations on the proposal in terms of the provisions of the above said Notification, confirmed the case to be of violation of the EIA Notification, 2006 and recommended for Standard Terms of Reference along with the additional conditions for undertaking EIA and preparation

of Environment Management Plan (EMP)

- iv. All Pesticides industry and pesticide specific intermediates (excluding formulations) projects are listed at S.N. 5(b) of Schedule of Environment Impact Assessment (EIA) Notification under Category 'A' and are appraised at Central Level by Expert Appraisal Committee(EAC).
- v. Ministry had issued EC earlier vide letter no. **J-11011/23/2003-IA-II; dated 28<sup>th</sup> May 2004** for in favor of M/s. Bahar Agrochem and Feeds Pvt. Limited to manufacture a herbicide 2-mercapto-6-chlorobenzonitrile (trade name GOD H001) with the manufacturing capacity of **1.25 TPM**. The EC was transferred in the name of M/s. Godrej Agrovet Ltd from M/s Bahar Agrochem and Feeds Pvt. Ltd **Vide File No. J-11011/23/2003 IA II (I) dated 06/03/2014**.
- vi. Existing land area is 10742 sq. m. and no additional land is required for the proposed expansion.
- vii. Industry has already developed green belt in an area of 2346.17 sq. m and proposed green belt in an area of 1225.15 sq. m. Total green belt area would be 3571.32 sq. m i.e. 33.25% out of total area of the project.
- viii. The estimated project cost is Rs. 10 Crores excluding existing investment of Rs 13.47 Crores. Total capital cost earmarked towards environmental pollution control measures is Rs 0.62 Crore and the Recurring cost (operation and maintenance) will be about Rs 0.11 Crore per annum.
- ix. Direct Employment will be 10 persons and indirect employment would be 20 persons after expansion. Industry proposes to allocate Rs 0.10 Crore @ of 1.0 % towards Corporate Environment Responsibility (CER) as per Ministry OM dated 1<sup>st</sup> May 2018.
- x. There are no national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, and Wildlife Corridors etc. within 10 km distance from the project site. River Vashishti is flowing at a distance of 4.15 Km in South west direction.
- xi. Ambient air quality monitoring was carried out at 8 locations during 1<sup>st</sup> March 2018 to 31<sup>st</sup> May 2018. The baseline data indicates the ranges of concentrations as: PM<sub>10</sub>(40.7-79.8 µg/m<sup>3</sup>), PM<sub>2.5</sub> (18.4-43.7 µg/m<sup>3</sup>), SO<sub>2</sub> (16.3-44.5 µg/m<sup>3</sup>) and NO<sub>x</sub>(11.9-40.5 µg/m<sup>3</sup>). AAQ modeling study for point source and Line Source emissions indicates that the maximum GLCs after the proposed project would be 0.021 µg/m<sup>3</sup>, 1.62 µg/m<sup>3</sup> and 0.235 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).

- xii. Total water requirement is 52.12 m<sup>3</sup>/day of which fresh water requirement of 37.18 m<sup>3</sup>/day will be met from MIDC water supply.
- xiii. Effluent of 18.09 m<sup>3</sup>/day is segregated into HTDS (5.98 m<sup>3</sup>/day) and LTDS (12.11 m<sup>3</sup>/day). HTDS effluent will be sent to MEE system followed by BTP and LTDS effluent will be treated in BTP followed by RO Plant. RO Rejects to MEE System and RO permeate to reuse, Condensate from MEE to reuse and MEE concentrated to ATFD, ATFD salts will be sent to TSDF and will achieve Zero Liquid Discharge (ZLD).
- xiv. Power requirement after expansion will be 400 KVA including existing 135 KVA and will be met from Maharashtra State Electricity Distribution Company Limited (MSEDCL). Existing unit has 1 DG sets of 200 KVA capacity, DG set is used as standby during power failure. Stack (height 10 m) will be provided as per CPCB norms to the proposed DG sets.
- xv. Existing unit has 1\* 0.6 TPH FO fired boiler and 100000 kcal/hr Thermic fluid heater. Additional 1\* 0.6 TPH FO fired boiler will be installed. Stack of height 21 meters is already installed for 0.6 TPH FO fired boiler and additionally stack of height 21 meters will be installed for controlling the particulate emissions within the statutory limit of 150 mg/Nm<sup>3</sup> for the proposed boilers.
- xvi. Process emissions are CO<sub>2</sub>, H<sub>2</sub>, NH<sub>3</sub>, O<sub>2</sub>, HBr, HCl & SO<sub>2</sub> which will liberate from manufacturing process of proposed products. Carbon dioxide and oxygen will be dispersed into the atmosphere, hydrogen will be diffused by using nitrogen through flame arrestor, ammonia and hydrogen chloride will be scrubbed by using chilled water media, hydrogen bromide and sulphur dioxide will be scrubbed by using C. S. lye solution.
- xvii. Solid wastes generated are organic and inorganic wastes. All the inorganic solid waste generated in the plant will be sent to TSDF for secure Land Fill and all the Organic Solid Waste will be sent to Cement Industries / TSDF for secure Land Fill.
- xviii. Public Hearing for the proposed project was exempted by EAC as the unit is located in Notified Industrial Area established prior 14<sup>th</sup> Sept 2006 as per **OM J-11013/36/2014-IA-I dt. 10.12 2014**.
- xix. The Compliance of Environmental Clearance conditions for the existing unit are certified by the Regional Office, Nagpur, MoEF & CC Vide F. No. 5-50/2004(ENV)/4848 dated 29<sup>th</sup> January 2019.
- xx. No Litigations against the Project Proponent.

xxi. The details of products and capacity are asunder:

S. No.	Products	Quantity (MT/A)		
		Existing	Proposed	Total
1.	GOD –HH001 Pyrethiobac Sodium Tech.	40	20	60
2.	Homobrassinolide (HBR)	0.6	0.9	1.5
3.	Bispyribac Sodium Technical	40	20	60
4.	Florchlorfenuron Technical	20	30	50
5.	Quizalofap-P-Ethyl Technical	00	60	60
6.	Dimethomorph Technical	00	60	60
7.	Metribuzin Technical	00	60	60
8.	Thiophanate Methyl technical	00	60	60
9.	Trifloxystrobin Technical	00	60	60
<b>TOTAL (A)</b>		<b>100.60</b>	<b>370.90</b>	<b>471.50</b>
<b>Formulation Products which are not required Prior Environment Clearance as per EIA Notification, 2006</b>				
1.	Bispyribac Sodium Formulation	144.405	0	144.405
2.	Florchlorfenuron Formulation	10.12	0	10.12
3.	Achook Nimin	36	0	36
4.	Bumper Bountee	12	0	12
5.	Combined (PGR) like super shakti & Diamore combine & double	12	0	12
6.	Dapcoat	24	0	24
7.	Agroneem	200	0	200
8.	Liquid Vipul, Vipul granules, Diamore Suruchi, Ruchira	36	0	36
9.	Neem oil Emulsifiable	24	0	24
10.	Hitweed Pyrethiobac Sodium (10%)	36	0	36
<b>TOTAL (B)</b>		<b>534.525</b>	<b>0.0</b>	<b>534.525</b>
<b>GRAND TOTAL (A+B)</b>		<b>635.125</b>	<b>370.90</b>	<b>1006.025</b>

**Observation and recommendation of the EAC in the 37<sup>th</sup> EAC meeting held on 22nd-23rd October, 2020**

EAC noted that Project Proponent has submitted the report without conducting Public Hearing (PH). PP requested EAC stating that in the EIA Notification 2006 and as amended thereof, activity proposed is exempted from the requirement of Public Hearing. EAC explained in detail to the PP that committee has stipulated PH in the ToR on the basis of the Madras High Court Judgement dated 14.03.2018, wherein activity alone under Schedule 8 of the parent notification was given

exemption. EAC further noted inconsistency in submission of the data in the report. Damage assessment to the environment and relevant remediation, NRAP, CRAP has not been computed during the violation period, which is an important part of ToR, has not been complied by the PP

Since the ToR has not been complied as far as PH and damage assessment study is concerned, EAC after detailed deliberation considering shortfall in submissions of the PP, decided to return the proposal and advised PP to submit the revised report with PH, damage assessment study as a part of additional chapter in the EIA report and current status on credible action u/s 19 of the E(P) Act, for consideration of Environmental Clearance.

Revised application was submitted vide proposal no. IA/MH/IND2/183739/2017 to the Ministry on 18.11.2020. Accordingly, proposal was considered in the 38<sup>th</sup> meeting held on 19.11.2020.

### **Observation and Recommendation of the EAC in the present (38<sup>th</sup>) meeting**

EAC after detailed presentation by the PP, observed that the proposal was considered by the Expert Appraisal Committee (Industry-2) in its meeting held during 29-31<sup>st</sup> July, 2019. The committee noted that the existing environmental clearance dated 28<sup>th</sup> May 2004 granted by the Ministry was for manufacturing capacity @ 1.25 TPM (15 TPA). The unit is, however, engaged in production @100.60 TPA and as such, amounts to violation of the EIA Notification, 2006.

The proposal was considered by the Expert Appraisal Committee (violation) in its meeting held on 30-31 December, 2019 in the Ministry. The committee, after detailed deliberations on the proposal in terms of the provisions of the above said Notification, confirmed the case to be of violation of the EIA Notification, 2006 and recommended for Terms of Reference.

EAC further noted that earlier proposal of EC was considered by the EAC (violation) in the 37<sup>th</sup> meeting, however project proposal was returned as PP did not conduct Public Hearing and damage assessment study. Therefore, project proposal was returned in the present form.

PP vide proposal number IA/MH/IND2/183739/2017 submitted the revised report and accordingly proposal is listed for appraisal in the present meeting. EAC also noted that, Ministry Vide OM No. 22-28/2020-IA - III dated 12.11.2020 has clarified about the requirement of Public hearing for violation cases. The relevant part of the O. M. dated 12.11.2020 is reproduced herein as under;

*"while considering the application for Environmental Clearance under the violation category as per the provisions of S. O. 804(E) dated 14.03.2017, the EAC/SEACs may insist upon public hearing to be conducted only for those categories of project for which the EIA Notification, 2006 itself requires public hearing to be conducted."*

EAC deliberated on the project including damage assessment part. EAC observed that environmental damage assessment is required to be revised. EAC after detailed deliberation **deferred** the project for want of following information:

1. In view of the above OM dated 12.11.2020, PP should submit the copy of notified Industrial area.
2. 3 % of the profit/ benefit accrued during violation period should be added to CRAP.
3. Green belt and plantation development to be revisited and verified and details to be submitted in tabular form for existing green belt/plantation and to be planted to comply with 33% requirement.
4. Cost saved for not having EMP in place should be added to the damage cost.
5. Rework on the entire damage assessment of all the environmental attributes and preparation of Remediation, Natural and Community Resource Augmentation Plan.
6. Damage to environmental attributes during the construction phase should be done.
7. Damage assessment shall be done considering profit accrued during the violation period (3% to CRA), cost of EMP saved during the violation period.
8. RP, NRA & CRA should have limited activities with capital investments and beneficial to the society.
9. Details of sensors in the plant for even small emission/solvent leakage along with photographs. Emergency preparedness plan in the event of failure of sensors to detect the emission.
10. Worst Case Scenario and risk assessment shall be studied using 3D modelling.
11. Land use plan before and after establishment of the industry should be submitted in tabular form.
12. Details of reaction and mass balance shall be submitted.
13. Status of Credible action u/s 19 of the E(P) Act.

PP submitted the compliance to the information sought by the EAC in its 38<sup>th</sup> meeting on 23.12.2020. Accordingly, proposal was taken to the EAC for further deliberation in the 40<sup>th</sup> meeting held on 31.12.2020.

### **Observation and Recommendation of the EAC in the present (40<sup>th</sup>) meeting**

Project Proponent made the detailed presentation on the additional information sought in the 38<sup>th</sup> EAC meeting. EAC noted that PP has now submitted the details of green belt, profit benefit accrued during violation period, revised damage assessment. EAC further deliberated on the risk assessment studies and details on sensors in the plant etc. EAC suggested PP that under CRA, activities should be selected which have capital investment. EAC advised PP to submit the revised CRA activities by 03.01.2021 through email. As suggested by the EAC, PP vide dated 01.01.2021 submitted the revised CRA.

EAC after detailed deliberation on the information submitted by the PP (EIA/EMP report, Form 2, Additional information, Annexure etc), **recommended** the proposal for grant of Environmental



Clearance subject to the compliance of the following Specific conditions in addition to all Standard conditions applicable for such projects:

- i. EAC recommended for an amount of Rs 199.544 Lakhs towards Remediation plan and Natural and Community Resource Augmentation plan to be spent within a span of three years. The details are given on next page:

**Remediation plan with budgetary provision**

S.no	Component	Description	Locations	Rate	Total qty.	Total cost (rs.)	Year i	Year ii	Year iii
1.	Air Environment	Placing extra monitoring stations in nearby villages on downwind side	1. Asagani 2. Lote 3. Ghanekhunt	LS	3 Villages	20,64,800	10,32,400	5,16,200	5,16,200
2.	Noise Environment and Ecology	Plantation of native plants at 90% survival rate ; with cost of each sapling of not less than Rs.500, including maintenance for 3 years	1. Plantation in the MIDC Area 2. Nearby Villages	500	6,000	30,00,000	15,00,000	7,50,000	7,50,000
Grand Total 1 +2 (Rs.)						50,64,800	25,32,400	12,66,200	12,66,200

**Natural and Community Resource Augmentation Plan with budgetary provision**

s.n	Description	locations	rate	total	total cost	year i	year ii	year iii
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o				qty.	(rs.)			
<b>Natural Resource Augmentation Plan Activities</b>								
1a.	Construction of RWH-20 Nos @ 1, 03,080/per RWH (including raw material, labour, construction and maintenance for one year). 5 Nos in each location.	1. ZP School 2. Lote, 3. Awashi, 4. Asurde 5. Ghanekhu nt	1,03,080	20	20,61,600	6,87,200	6,87,200	6,87,200
1b.	Providing 1 KW Solar Street Lighting (including panels, inverters, wiring, structure, connectors, junction boxes, etc.) in nearby villages @ Rs.50, 000 per unit.	1. Asagani – 25 Nos 2. Lote - 25 Nos 3. Ghanekhu nt - 20 Nos	50,000	60	30,00,000	12,00,000	9,00,000	9,00,000
Sub-Total A (1a + 1b) in Rs.					50,61,600	18,87,200	15,87,200	15,87,200
<b>Community Resource Augmentation Plan</b>								
<b>Infrastructure development and up-gradation of existing Facilities</b>								
2a.	Supply of following essential items to nearby Public health centre and hospitals (1 Lot to each Location) <ul style="list-style-type: none"> <li>• Ambulance equipped with basic vitals checking equipment's @ Rs.10.46 Lacs Per Unit– 3 Nos each location</li> <li>• IT materials (Computer @ Rs.35000/ Unit &amp; Printers@</li> </ul>	1. Lote Hospital 2. Parshuram Hospital 3. PHC	12,76,000	3 Lot	38,28,000	12,76,000	12,76,000	12,76,000

	<p>Rs.25000/unit) - 2 Nos each location</p> <ul style="list-style-type: none"> <li>Furniture (Table @ Rs.10000/Unit &amp; Chair @ Rs.5000/ Unit) – 2 Nos each location</li> <li>Drinking water Purifier with storage facility and temperature control (Hot &amp; Cold) @ Rs.40000/ Unit- 2 Nos each location</li> </ul>							
Improving the socio-economic & Health conditions of villagers.								
2b.	<p>Distribution / implementation of following preventive items to contain spread of pathogens in the society including CoVID 19 at Rs.12 Lacs per village</p> <ol style="list-style-type: none"> <li>Free Medical Check-up / camp with free distribution of medicines at 2 times a year for 3 years – Rs.6 Lacs</li> <li>800 Nos Protective reusable Mask @ Rs.125 each – Rs.1 Lac</li> <li>100 Nos 5 Litre</li> </ol>	<ol style="list-style-type: none"> <li>ZP School</li> <li>Lote,</li> <li>Awashi,</li> <li>Asurde</li> <li>Ghanekhu nt</li> </ol>	12,00,000	5	60,00,000	30,00,000	15,00,000	15,00,000

	Sanitizers , each at Rs.100/ 5 Litre – Rs.1 Lac							
	4. Placement of 16 Nos of Scientific equipment (Eg.Shycocan) in each village enclosed public spaces like hospital, library, community hall, etc to prevent viral disease air & surface transmission Including Corona family of viruses at Rs.25,000/unit.- Rs.4 Lacs							
Sub-Total – B (2a+2b)					98,28,000	42,76,000	27,76,000	27,76,000
Grand Total (A+B)- In Rs					1,99,54,400	86,95,600	56,29,400	56,29,400

### Summary

Sl. No.	Description	Estimated cost (Rs. in Lakhs)
1	Remediation Plan	50.648
2	Natural Resources Augmentation Plan	50.616
3	Community Resources Augmentation Plan	98.28
<b>Total</b>		<b>199.544</b>

- ii. Total budgetary provision with respect to Remediation plan and Natural & Community Resource Augmentation plan is Rs 199.544 Lakhs. Therefore, project proponent shall be required to submit a bank guarantee of an amount of Rs. 199.544 Lakhs towards Remediation plan and Natural and Community Resource Augmentation plan with the SPCB prior to the grant of EC.

- iii. Remediation plan and Natural & Community Resource Augmentation plan shall be completed in 3 years whereas bank guarantee shall be for 5 years. The bank guarantee will be released after successful implementation of the remediation plan and Natural and Community Resource Augmentation Plan, and after the recommendation by regional office of the Ministry, Expert Appraisal Committee and approval of the Regulatory Authority.
- iv. Credible action to be initiated and Court case shall be filed by the concerned SPCB against the Project Proponent u/s 19 of the E(P) Act. 1986.
- v. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities, if applicable. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
- vi. Preventive measures to be taken to control ignition sources in bulk storage area and fire protection system to be established above ground storage tanks. Proper earthing shall be provided in all the electrical equipment wherever solvent handling is done.
- vii. Proper precautions to be taken to prevent inadvertent mixing of chemicals. Standard operating procedures to be strictly followed during handling of chemicals.
- viii. Solvents shall be stored in a separate space specified with all safety measures. Adequate Sensors shall be installed at sensitive locations for early detection of leakage and prevention of hazard.
- ix. Project Proponent to ensure proper disposal of Hazardous wastes.
- x. Project Proponent shall create green belt (peripheral plantation) as per guidelines of MoEF.
- xi. The PP has submitted 3D draft report and along with the compliance report for the control measures as per requirement. The Final report shall be submitted within a month.

**40.3.4. Color Granite Quarry (ML Area 15.00 Ha) at Village Gagarajapuram, Mandal Meliaputti, District Srikakulam (Andhra Pradesh) by M/s Vishwaksen Industries Pvt. Ltd. - Terms of Reference Old Proposal No. IA/AP/MIN/27523/2013 dated 20.07.2017] [F. No. 23- 171/2018-IA.III (V) ]**

Project Proponent did not attend the meeting. EAC opined that adequate opportunity has been given to the Project Proponent in past to attend the meeting. EAC therefore opined that Credible action under section 19 shall be initiated against the proponent as per the provision of the Ministry's Notification dated 14.03.2017.

**40.3.5. Synthetic organic chemicals (Polymer of Vinyl acetate, Vinyl copolymers, Acrylic Polymers & Polyvinyl Alcohol Solution) for 24000 TPA manufacturing capacity by M/s Jesons Industries Limited (Unit III) at Sy. No. 377/1/(16 A), Village Kachigam, Daman (UT of Daman & Diu) - Environmental Clearance**

**Proposal No. IA/DD/IND3/188146/2017 and File No. 23-113/2018-IA.III (V)**

The Project Proponent and the accredited Consultant M/s. Team Labs and Consultants, made a detailed presentation on salient features of the project and informed that:

- i The Proposal is for Environmental Clearance (EC) for proposed expansion of synthetic organic chemicals (Acrylic Polymers) at Sy. No. 377/1/(16A), Kachigam village, Daman and Diu Tehsil and District in the union territory of Daman and Diu **by M/s. Jesons Industries Limited Unit III.**
- ii The project proposal was considered by the Expert Appraisal Committee (Industry) in its 20<sup>th</sup> EAC meeting held on 28<sup>th</sup>-29<sup>th</sup> March, 2019 and recommended Standard Terms of References (TORs) along with specific terms of reference for the Project. The TOR was issued by Ministry vide letter no. 23-113/2018-IA.III(V); dated 28.10.2019.
- iii All Synthetic organic chemicals manufacturing units located outside notified industrial area are listed at S.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iv Jesons Industries Ltd. Unit III started operation in 1996 and obtained Consent letter no. PCC/DMN/5-3629/96-97/1278 dated 06.08.1996 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing vinyl acetate (600 MTPA), vinyl copolymers (600 MTPA), acrylic polymers (960 MTPA) and poly vinyl alcohol solution (100 MTPA) which did not attract prior environment clearance as the EIA notification was issued in 1994. The unit has renewed consent to operate (CTO) from PCC of Daman and Diu vide Letter No. PCC/DDD/O-720/WA/AA/KG/96-97/314 dated 14.07.2017 valid till 31.07.2021.
- v Existing land area of 930.77 m<sup>2</sup> (0.23 acres) land will be used for proposed expansion. No additional land acquired for proposed expansion.
- vi Industry is already developed Greenbelt in an area of 33% i.e., 310 m<sup>2</sup> (0.076 acres) of area of the project site.
- vii The estimated project cost for proposed expansion is Rs 2 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 31.8 lakhs and the Recurring cost (operation and maintenance) will be about Rs 20.5 lakhs Per annum.
- viii Total Employment from proposed expansion will be 15 persons as direct. Industry proposes to allocate 4.5 % i.e., Rs. 9 crores capital cost towards Corporate Environment Responsibility (CER) as per Ministry OM dated 1<sup>st</sup> May, 2018.

- ix There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve forests etc. lies within 10 Km distance.

There are area has nine reserve forests in the 10km radius study area, and the nearest reserve forest is at a distance of 3 km in the southwest direction. Interstate boundary between Gujarat state and the union territory of Daman, Diu and Nagarhaveli is at a distance of 0.63 km from the site in south direction.

Daman Ganga river is flowing at a distance of 0.5 km from the site in southwest direction, Kolak river is flowing at a distance of 5.4 km from the site in northwest direction, Kalu or Darota Nadi is flowing at a distance of 3.5 km from the site in southwest direction.

- x Ambient air quality monitoring was carried out at eight locations during March – May 2019 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (48-89  $\mu\text{g}/\text{m}^3$ ), PM<sub>2.5</sub> (16-42  $\mu\text{g}/\text{m}^3$ ), SO<sub>2</sub> (5-33  $\mu\text{g}/\text{m}^3$ ) and NO<sub>2</sub> (10-34  $\mu\text{g}/\text{m}^3$ ) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLC<sub>5</sub> after the proposed expansion would be 0.07  $\mu\text{g}/\text{m}^3$ , 1.01  $\mu\text{g}/\text{m}^3$ , and 1.49  $\mu\text{g}/\text{m}^3$  with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- xi The total water requirement after expansion is 48.4 KLD out of which 41.9 KLD will be fresh water and 6.5 KLD is recycled water. The required water is drawn from external sources of Industrial tankers.
- xii Effluent of 8.5 m<sup>3</sup>/day will be treated through “Zero Liquid Discharge” based effluent treatment system. The treatment system consists of biological treatment plant followed by evaporation. Condensate from evaporation is reused in cooling towers and boiler make-up, salts are sent to Gujarat Enviro Protection Infrastructure Limited (GEPIL), MotaRandha, Dadra Nagar Haveli. Domestic wastewater will be sent to septic tank followed by soak pit.
- xiii Power requirement after expansion will be 200 kVA inclusion existing 100 kVA and will be met by Daman and Diu Electricity. Existing unit has 1 no. DG set of capacity 100 kVA; additionally, 1 x 100 kVA DG set is proposed as standby during power failure. Stack (height 2 m) will be provided as per CPCB norms to the proposed DG set of 1 x 100 kVA in addition to existing DG set stack (height 2 m for 100 kVA) which will be used as standby during power failure.
- xiv Existing unit has 2 x 600 TPH furnace oil fired boilers, out of which 1 x 600 kg/hr will be kept as standby. No additional boilers are proposed for expansion. Effective stack with height of 25m installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>).
- xv Details of Process emissions generation...and its management: No process emissions will anticipate from manufacturing process.

xvi Details of solid waste/Hazardous waste generation and its management.

Solid waste generated from proposed expansion is filter residue and reactor scraping residue generated from manufacturing activity, ETP sludge and evaporation salts from wastewater treatment, used oil from boiler and standby DG sets. Filter and reactor scraping residue is sent to CSWD site of GEPIL, MotaRandha, Dadra Nagar Haveli. Waste oil and used batteries from the DG sets are sent to authorized recyclers. The sludge from effluent treatment plant is considered hazardous and the same is sent to CSWD site of GEPIL, MotaRandha, Dadra Nagar Haveli. The solid wastes are stored in containers in designated storage location and are labelled. The other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorize buyers after detoxification.

xvii Public Hearing for the proposed project has been conducted by the Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli on 05.10.2020 at 11.00 AM at Daman Industries Association Hall at Kachigam village, Somnath, Nani Daman. The main issues raised during the public hearing are related to employment to locals and wastewater treatment and disposal.

xviii Details of Certified compliance report submitted by RO, MoEF&CC.: Jesons Industries Ltd. Unit III started operation in 1996 and obtained Consent letter no. PCC/DMN/5-3629/96-97/1278 dated 06.08.1996 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing vinyl acetate, vinyl co-polymers, acrylic polymers and poly vinyl alcohol solution which did not require environment clearance at that time (based on S.O. 60(E) dated 27.01.1994 EIA notification).The unit has renewed consent to operate (CTO) from PCC of Daman and Diu vide Letter No. PCC/DDD/O-720/WA/AA/KG/96-97/314 dated 14.07.2017 valid till 31.07.2021.

xix Status of Litigation Pending against the proposal, if any: Case No. 02/2020 under section 15 and 16 of EPA act 1986. Hearing is going on.

xx Following are the list of proposed manufacturing capacities

#### Manufacturing Capacity

S. No	Name of Product	Capacity (TPA)		
		Permitted/ Existing	Proposed	After Expansion
1	Polymers of Vinyl Acetate	600	--	600
2	Vinyl Co-Polymers	600	--	600
3	Acrylic Polymers	960	21740	22700
4	Polyvinyl Alcohol Solution	100	--	100
	<b>Total</b>	<b>2260</b>	<b>21740</b>	<b>24000</b>

#### List of Utilities

S. No	Utility	Consented	Addition for	After
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			<b>Enhanced Capacity</b>	<b>Expansion</b>
1	Furnace Oil Fired Boiler (Kg/hr)	2 x 600	---	2 x 600*
2	DG Sets (kVA)**	1 x 100	1 x 100	2 x 100

\* 1 x 600 Kg/hr Furnace oil fired Boiler shall be kept as standby.

\*\*DG sets will be used during load shut down period only

**Violation details:** The unit obtained consent to operate vide consent no. PCC/DMN/5-3629/96- 97/1278 dated 06.08.1996 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing polymers of vinyl acetate (600 MTPA), vinyl co-polymers (600 MTPA), acrylic polymers (960 MTPA) and poly vinyl alcohol solution (100 MTPA). The unit has renewed consent to operate (CTO) from PCC of Daman and Diu vide Letter No. PCC/DDD/O-720/WA/AA/KG/96-97/314 dated 14.07.2017 valid till 31.07.2021. The unit initiated enhanced production of Acrylic Polymers from 960 TPA to 22700 TPA without EC from 10.03.2016. The total manufacturing capacity is 24000TPA in existing site area of 0.23 acres.

### **Observation and Recommendation of the EAC in the present (40<sup>th</sup>) meeting**

After detailed presentation by the PP, EAC observed that PP obtained consent to operate vide consent no. PCC/DMN/5-3629/96- 97/1278 dated 06.08.1996 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing polymers of vinyl acetate (600 MTPA), vinyl co-polymers (600 MTPA), acrylic polymers (960 MTPA) and poly vinyl alcohol solution (100 MTPA). The unit has renewed consent to operate (CTO) from PCC of Daman and Diu vide Letter No. PCC/DDD/O-720/WA/AA/KG/96-97/314 dated 14.07.2017 valid till 31.07.2021. The unit initiated enhanced production of Acrylic Polymers without EC from 10.03.2016 and stopped enhanced production. It was proposed to increase the manufacturing capacity of acrylic polymers from 960 TPA to 22700 TPA without increasing other products manufacturing capacity. The total manufacturing capacity after expansion was 24000 TPA in existing site area of 0.23 acres.

EAC further noted that application is for 24000 TPA manufacturing capacity and No previous EC was granted to the Project, as proposal is being appraised for EC for the first time, instant proposal should not have treated as expansion proposal as far as EC is concerned. EAC therefore opined to modify the subject title.

EAC deliberated on the project including damage assessment part. EAC observed that environmental damage assessment is required to be revised. EAC after detailed deliberation **deferred** the project for want of following information:

1. Details of waste water treatment including flow sheet for Material balance.
2. Rework on the entire damage assessment of all the environmental attributes and preparation of Remediation, Natural and Community Resource Augmentation Plan.
3. Damage assessment shall be done considering profit accrued during the violation period (3% to CRA), cost of EMP saved during the violation period. Further, RP, NRA and CRA should be prepared outside the Industrial unit and not related to the EMP.

4. RP, NRA & CRA should have limited activities with capital investments and beneficial to the environment and society.
5. Details of sensors in the plant for even small emission/solvent leakage along with photographs. Emergency preparedness plan in the event of failure of sensors to detect the emission.
6. Worst Case Scenario and risk assessment shall be studied using 3D modelling.
7. Land use plan before and after establishment of the industry should be submitted in tabular form.
8. Details of reaction and mass balance shall be submitted.
9. As per the Ministry's OM dated 30.09.2020, physical activities shall be proposed considering issues raised during Public Hearing/requirement of local population. Activities should be made tabulated.
10. Details of EC and Non EC products in TPM covered under EIA Notification 1994 and 2006 to be tabulated with details of consent to establish and consent to operate.
11. 1% of capital cost shall be spent under EMP for community development activity.

**40.3.6. Construction emulsions, Synthetic acrylic polymer emulsions, Industrial synthetic adhesives, Glue and Adhesives by M/s Jesons Industries Limited (Unit I) at Sy. No. 377/1/7, Village Kachigam, Daman (UT of Daman & Diu) - Environmental Clearance Proposal No. IA/DD/IND3/188107/2017 and File No. 23-114/2018-IA.III (V)**

The Project Proponent and the accredited Consultant M/s. Team Labs and Consultants, made a detailed presentation on salient features of the project and informed that:

- i The Proposal is for Environmental Clearance (EC) for proposed expansion of Construction, Synthetic acrylic polymer emulsions, Industrial synthetic adhesives, Glue and Adhesives at Sy. No. 377/1/7, Kachigam village, Daman and Diu Tehsil and District in the union territory of Daman and Diu by **M/s. Jesons Industries Limited Unit I**.
- ii The project proposal was considered by the Expert Appraisal Committee (Industry) in its 20<sup>th</sup> EAC meeting held on 28<sup>th</sup>-29<sup>th</sup> March, 2019 and recommended Standard Terms of References (TORs) along with specific terms of reference for the Project. The TOR was issued by Ministry vide letter no. 23-114/2018-IA.III(V); dated 05.11.2019.
- iii All Synthetic organic chemicals manufacturing units located outside notified industrial area are listed at S.No. 5(f) of Schedule of Environmental Impact Assessment (EIA) Notification under category 'A' and are appraised at Central Level by Expert Appraisal Committee (EAC).
- iv Jesons Industries Ltd. Unit I was established in 2000 and obtained Consent letter no. PCC/DDD/G-2255/WA/KG/99-2000/758 dated 12.07.2000 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing synthetic adhesives (3000 MTPA) and textile auxiliaries (5400 MTPA) which did not attract prior environment clearance as the EIA notification was issued in 1994. The unit has renewed consent to operate (CTO) from PCC of Daman and Diu vide Letter No. PCC/DDD/PCC/DDD/G-2255/WA/AA/KG/99-00/559989 dated 27.07.2020 valid till 28.02.2023.

- v Existing land area of 2913.74 m<sup>2</sup> (0.72 acres) land will be used for proposed expansion. No additional land acquired for proposed expansion.
- vi Industry is already developed Greenbelt in an area of 33% i.e., 971.25 m<sup>2</sup> (0.24 acres) of area of the project site.
- vii The estimated project cost for proposed expansion is Rs 4 crores. Total capital cost earmarked towards environmental pollution control measures is Rs 42.9 lakhs and the Recurring cost (operation and maintenance) will be about Rs 27.4 lakhs Per annum.
- viii Total Employment from proposed expansion will be 15 persons as direct. Industry proposes to allocate 2.5 % i.e., Rs. 10 lakhs capital cost towards Corporate Environment Responsibility (CER) as per Ministry OM dated 1<sup>st</sup> May, 2018.
- ix There are No national parks, wildlife sanctuaries, Biosphere Reserves, Tiger/Elephant Reserves, Wildlife Corridors, Reserve forests etc. lies within 10 Km distance.

There are area has nine reserve forests in the 10km radius study area, and the nearest reserve forest is at a distance of 2.9 km in the southwest direction. Interstate boundary between Gujarat state and the union territory of Daman, Diu and Nagarhaveli is at a distance of 0.62 km from the site in south direction.

Daman Ganga river is flowing at a distance of 0.4 km from the site in southwest direction, Kolak river is flowing at a distance of 5.5 km from the site in northwest direction, Kalu or Darota Nadi is flowing at a distance of 3.4 km from the site in southwest direction.

- x Ambient air quality monitoring was carried out at eight locations during March – May 2019 and submitted baseline data indicates that ranges of concentrations of PM<sub>10</sub> (48-89 µg/m<sup>3</sup>), PM<sub>2.5</sub> (16-42 µg/m<sup>3</sup>), SO<sub>2</sub> (5-33 µg/m<sup>3</sup>) and NO<sub>2</sub> (10-34 µg/m<sup>3</sup>) respectively. AAQ modelling study for point source emissions indicates that the maximum incremental GLCs after the proposed expansion would be 0.07 µg/m<sup>3</sup>, 1.01 µg/m<sup>3</sup>, and 1.49 µg/m<sup>3</sup> with respect to PM<sub>10</sub>, SO<sub>x</sub> and NO<sub>x</sub>. The resultant concentrations are within the National Ambient Air Quality Standards (NAAQS).
- xi The total water requirement after expansion is 67.1 KLD out of which 57.9 KLD will be fresh water and 9.2 KLD is recycled water. The required water is drawn from external sources of Industrial tankers.
- xii Effluent of 10.8 m<sup>3</sup>/day will be treated through “Zero Liquid Discharge” based effluent treatment system. The treatment system consists of biological treatment plant followed by evaporation. Condensate from evaporation is reused in cooling towers and boiler make-up, salts are sent to Gujarat Enviro Protection Infrastructure Limited (GEPIL), MotaRandha, Dadra Nagar Haveli. Domestic wastewater will be sent to septic tank followed by soak pit.

- xiii Power requirement after expansion will be 500 kVA inclusion existing 250 kVA and will be met by Daman and Diu Electricity. Existing unit has 1 no. DG set of capacity 250 kVA; additionally, 1 x 250 kVA DG set is proposed as standby during power failure. Stack (height 9 m) will be provided as per CPCB norms to the proposed DG set of 2 x 250 kVA in addition to existing DG set stack (height 9 m for 250 kVA) which will be used as standby during power failure.
- xiv Existing unit has 2 x 850 TPH furnace oil fired boilers, out of which 1 x 850 kg/hr will be kept as standby. No additional boilers are proposed for expansion. Effective stack with height of 30m installed for controlling the Particulate emissions (within statutory limit of 115 mg/Nm<sup>3</sup>).
- xv Details of Process emissions generation....and its management.  
No process emissions will anticipate from manufacturing process.
- xvi Details of solid waste/Hazardous waste generation and its management.

Solid waste generated from proposed expansion is filter residue and reactor scraping residue generated from manufacturing activity, ETP sludge and evaporation salts from wastewater treatment, used oil from boiler and standby DG sets. Filter and reactor scraping residue is sent to CSWD site of GEPIL, MotaRandha, Dadra Nagar Haveli. Waste oil and used batteries from the DG sets are sent to authorized recyclers. The sludge from effluent treatment plant is considered hazardous and the same is sent to CSWD site of GEPIL, MotaRandha, Dadra Nagar Haveli. The solid wastes are stored in containers in designated storage location and are labelled. The other solid wastes expected from the unit are containers, empty drums which are returned to the product seller or sold to authorize buyers after detoxification.

- xvii Public Hearing for the proposed project has been conducted by the Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli on 05.10.2020 at 11.00 AM at Daman Industries Association Hall at Kachigam village, Somnath, Nani Daman. The main issues raised during the public hearing are related to production quantity, wastewater disposal and storages.
- xviii Details of Certified compliance report submitted by RO, MoEF&CC.

Jesons Industries Ltd. Unit I was established in 2000 and obtained Consent letter no. PCC/DDD/G-2255/WA/KG/99-2000/758 dated 12.07.2000 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing synthetic adhesives and textile auxiliaries which do not require environment clearance at that time (based on S.O. 60(E) dated 27.01.1994 EIA notification).

The unit has renewed consent to operate (CTO) from PCC of Daman and Diu vide Letter No. PCC/DDD/PCC/DDD/G-2255/WA/AA/KG/99-00/559989 dated 27.07.2020 valid till 28.02.2023

- xix Status of Litigation Pending against the proposal, if any  
Case No. 08/2020 under section 15 and 16 of EPA act 1986. Hearing is going on.
- xx Following are the list of proposed manufacturing capacities

### **Manufacturing Capacity**

S. No	Name of Product	Capacity (TPM)		
		Permitted/ Existing	Proposed	Total
1	Synthetic Adhesives	250	--	250
2	Textile Auxiliaries	450	--	450
3	Vinyl Polymers	--	800	800
4	Acrylic Polymers	--	835	835
5	Glue & Adhesives	--	170	170
6	Primary Ink ( <i>By mixing and blending without chemical reaction and usage of diazo dyes</i> )	50	---	50
	<b>Total</b>	<b>750</b>	<b>1805</b>	<b>2555</b>

#### List of Utilities

S. No	Utility	Consented	Addition for Enhanced Capacity	After Expansion
1	Furnace Oil Fired Boiler (Kg/hr)	2 x 850	---	2 x 850*
2	DG Sets (kVA)**	1 x 250	1 x 250	2 x 250

\* 1 x 850 Kg/hr Furnace oil fired Boiler shall be kept as standby.

\*\*DG sets will be used during load shut down period only

**Details of violation submitted by PP:** Jesons Industries Ltd. Unit I was established in 2000 and obtained Consent letter no. PCC/DDD/G-2255/WA/KG/99-2000/758 dated 12.07.2000 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing synthetic adhesives (3000 MTPA) and textile auxiliaries (5400 MTPA) which did not attract prior environment clearance as the EIA notification was issued in 1994. Initiated production (**1805 TPM**) of Acrylic Polymers, Vinyl Polymers and Glue & Adhesive without EC since 10.08.2015. The total manufacturing capacity is **2555 TPM** including Primary Ink not covered under EC product, in existing site area of 0.72 acres.

#### Observation and Recommendation of the EAC in the present (40<sup>th</sup>) meeting

After detailed presentation by the PP, EAC observed that Unit I was established in 2000 and obtained Consent letter no. PCC/DDD/G-2255/WA/KG/99-2000/758 dated 12.07.2000 from Pollution control committee (PCC) of Daman, Diu & Dadra and Nagar Haveli for manufacturing synthetic adhesives (3000 MTPA) and textile auxiliaries (5400 MTPA) which did not attract prior environment clearance as the EIA notification was issued in 1994. Initiated production (1805 TPM) of Acrylic Polymers, Vinyl Polymers and Glue & Adhesive without EC since 10.08.2015. The total manufacturing capacity is **2555 TPM** including Primary Ink not covered under EC product, in existing site area of 0.72 acres

EAC further noted that application is for 2555 TPA manufacturing capacity and No previous EC was granted to the Project. As proposal is being appraised for EC for the first time, instant proposal should not

have treated as expansion proposal as far as EC is concerned. EAC therefore opined to modify the subject title.

EAC further noted that application is for 2555 TPM manufacturing capacity and No previous EC was granted to the Project, as proposal is being appraised for EC for the first time, instant proposal should not have treated as expansion proposal as far as EC is concerned. EAC therefore opined to modify the subject title.

EAC deliberated on the project including damage assessment part. EAC observed that environmental damage assessment is required to be revised. EAC after detailed deliberation **deferred** the project for want of following information:

1. Details of waste water treatment including flow sheet for Material balance.
2. Rework on the entire damage assessment of all the environmental attributes and preparation of Remediation, Natural and Community Resource Augmentation Plan.
3. Damage assessment shall be done considering profit accrued during the violation period (3% to CRA), cost of EMP saved during the violation period. Further, RP, NRA and CRA should be prepared outside the Industrial unit and not related to the EMP.
4. RP, NRA & CRA should have limited activities with capital investments and beneficial to the environment and society.
5. Details of sensors in the plant for even small emission/solvent leakage along with photographs. Emergency preparedness plan in the event of failure of sensors to detect the emission.
6. Worst Case Scenario and risk assessment shall be studied using 3D modelling.
7. Land use plan before and after establishment of the industry should be submitted in tabular form.
8. Details of reaction and mass balance shall be submitted.
9. As per the Ministry's OM dated 30.09.2020, physical activities shall be proposed considering issues raised during Public Hearing/requirement of local population. Activities should be made tabulated.
10. Details of EC and Non EC products covered under EIA Notification 1994 and 2006 to be tabulated with details of consent to establish and consent to operate.
11. 1% of capital cost of the project shall be earmarked under EMP for community development capital expenditure.

**40.3.7. Chettichavadi Jagbir Magnesite and Durite Mines over an extent of 449.364 Ha located at Village Chettichavadi, Taluk Salem, District Salem, Tamil Nadu by M/s Dalmia Bharat Sugar and Industries Limited - Further consideration for Terms of Reference**

**Proposal No. IA/TN/MIN/73566/2018 and File No.23-227/2018-IA.III (V)**

**Details submitted by the Project Proponent**

The Proposal of M/s. Dalmia Bharat Sugar & Industries Ltd is for Mining of– Magnesite & Dunite–from Chettichavadi Jaghir Magnesite & Dunite Mines for Total Excavation 1.4 million Tonne per annum (MTPA)/ [including 0.06 million tons of Magnesite, 0.12 million tons of Dunite, Waste, O.B, Inter Burden, Top Soil etc.] from mining lease area 449.364 Ha located at Village Chettichavadi Tehsil Salem, District Salem, State Tamilnadu by M/s. Dalmia Bharat Sugar And Industries Ltd.

The mining lease is located on Survey of India Topo-sheet no. 58 I/2. The area is bounded between the coordinates Latitude 11°43'09.8"N to 11°43'36.3"N and Longitude 78°07'23.2" E to 78°09'11.5" E. The said project/activity is covered under category A of item 1(a) of the Schedule to the EIA Notification, 2006 as amended, and requires prior EC from the MoEF & CC based on the appraisal by Expert Appraisal Committee.

Fresh Application was made online vide proposal no: IA/TN/MIN/73566/2018 dated 19-Mar-2018 under Violation category for Terms of References (TOR) in Terms of Provision of the Ministry's Notification S.O.804.(E) and submitted FORM I and PFR.

Details of Minerals: Magnesite- Major Mineral. Dunite- Minor Mineral – (Dunite was declared minor mineral vide Ministry of Mines Notification dated 10th February 2015, prior to that it was major mineral)

**Letter of Intent (LoI)/Mining Lease Details:** G.O.MS.No.74 Industries MMDI Dept. dated 11.03.1997 vide and the lease deed was executed on 30<sup>th</sup> Mar 1998 for 20 years i.e. 20.08.1986 date and is valid till 19.08.2006.

**Method of Mining & Mining Plan Details:** The Mining Plan was approved by IBM vide LR No. TN/SLM/MMP/MG & DU-2055.MDS dated 01.05.2019. As per which the method of mining shall be Opencast Other than mechanized mine.

**Method of workings:** After Deep-hole drilling and blasting are carried out, 2071 FEL and BH40 dumpers combination is deployed on blasted face for directly loading the blasted muck pile. The material is carried to the spoil bank where it is dumped on the spoil bank edge in a thin layer over a long stretch. Like this certain number of dumper loads are brought and spread on the spoil bank edges side by side. The workers are allowed to pick and collect the ore superficially visible. The collected ore is broken chipped, dressed and stacked. Once the visible ore is collected, dozer is given to spread the material across. Again the ore is collected and stacked. Thus the entire ore is collected without losing even the small jelly. Finally the left over waste spoil is dozed down the slope of the spoil bank and space is created for fresh dumping. Then the cycle is repeated. The small jelly visible on the spoil bank slopes is also collected and stacked at the toe of the spoil banks. The stacked ore is serially numbered and properly accounted. These stacks are sampled and analyzed. If the stacks analyze less than 6.2 % SiO<sub>2</sub>, they are directly transported to the plant. If the stacks analyze more than 6.2 % SiO<sub>2</sub>, they are subjected to re-cleaning by deploying manpower to bring down the silica content to

less than 6.2 % SiO<sub>2</sub> by further chipping of the impurities and sizing. The ore analyzing above 11 % silica is termed as Mineral Reject. The loading and transporting of raw Magnesite stack is done by 1420 model BEML wheel loader and 10 tonner tippers combination.

Please provide the details of drilling & blasting, bench height and width, ultimate pit limited, ultimate pit slope, intersection of ground water table if any: Deep Hole Drilling is carried out with 100 mm dia Pneumatic drills. Wet drilling is carried out while doing pneumatic drilling. Sparingly Jack Hammer drilling is carried out on boulders. Deep hole Blasting is carried out using slurry explosives. Since the Magnesite are thin and fragile there is a need to avoid fragmentation and powdering to enhance recovery of Magnesite. Only slight heaving effect is given with minimum charge of explosives. Generally small blast are carried out with holes drilled in 2 rows only with 9-10 holes in each row. At a time we are blasting 18 to 20 holes on an average with hole depths raising from 6-8 mtrs. The Bench height in top development benches is maintained as 7-7.5 mtr. The bench width is maintained at 25 to 30 mtr for easy maneuverability of machines and for stacking Magnesite Minerals.

Ultimate Pit Limit: The Magnesite ore of all the three categories extend upto the depth of 320m RL above MSL. For mining Magnesite ore of all the three categories mining operations shall be extended upto the depth of 320m RL above MSL. Laterally, it is proposed to extend the ultimate pit limit beyond the ore, non-ore contact zone in the eastern part of the leasehold and the ultimate pit slopes will be on the barren pyroxenite. This is proposed with the intension of mining the entire mineralized area. The ultimate pit slope angle is taken as 45° from horizontal. The ultimate pit limits have been worked out.

The Ground Water Table in the western most part of the lease area (for the cross sections from E 2350 to E3500) is at 325m RL above MSL. In the rest of the area, the Ground Water Table is at 335m RL above MSL. So far our Mining operation has not intersected the ground water table.

No Crusher, Screen, beneficiation plant within the lease hold area.

Plantation details: we are planting at least 2000 tree samplings per year and total number of plantation done so far is 60674. The total green belt area at present is 19.23 Ha. The information on land use pattern is as under:

S. no	Type of land use	Area of land use (in ha.)		
		At present as on 01.01.2021	At the end of the next 5 years	At the end of lease period i.e.31.03.2030
1	2	3	4	5
1	Area of excavation	366.89	366.89	366.89
2	Storage for top soil	0.50	--	--
3	Overburden dumps	46.853	47.803	48.803
4	Mineral storage	3.00	0.5	--



5	Infrastructure (workshop, Administrative buildings etc.,)	1.00	1.00	1.00
6	Roads	4.89	4.89	4.89
7	Railways	--	--	--
8	Greenbelt & Rehabilitation	19.23	21.73	21.73
9	Tailing Pond	--	--	--
10	Effluent treatment plant	--	--	--
11	Mineral separation plant	--	--	--
12	Township area	--	--	--
13	Others (to be specified)	--	--	--
14	Area which will remain untouched	7.001	6.551	6.051
	<b>Total</b>	<b>449.364 ha (82.616 ha land is surrendered)</b>	<b>449.364 ha</b>	<b>449.364 ha</b>

**Details of past production since inception of mine authenticated by DMG:**

Production details:

Sl. No.	Year	Magnetite in M.T	Dunite in M.T
1	1979-80	96301.500	Nil
2	1980-81	120629.100	Nil
3	1981-82	130104.900	Nil
4	1982-83	85886.000	Nil
5	1983-84	114180.000	24.000
6	1984-85	119400.940	538.000
7	1985-86	104036.500	42.000
8	1986-87	92442.500	890.000
9	1987-88	92188.700	1137.000
10	1988-89	131801.200	2695.000
11	1989-90	138062.700	205.000
12	1990-91	139653.000	Nil
13	1991-92	140042.000	Nil
14	1992-93	151190.240	Nil
15	1993-94	53760.100	Nil
16	1994-1995	106724.420	Nil
17	1995-1996	96671.640	150.000
18	1996-1997	105983.460	60.000

19	1997-1998	102472.790	200.000
20	1998-1999	88041.010	1459.000
21	1999-2000	87357.840	1329.000
22	2000-2001	87932.880	0.000
23	2001-2002	66005.440	0.000
24	2002-2003	42187.428	1749.722
25	2003-2004	31432.453	1822.818
26	2004-2005	42374.484	1096.242
27	2005-2006	26887.140	7994.527
28	2006-2007	18671.430	2565.000
29	2007-2008	29554.628	1850.000
30	2008-2009	42227.866	1430.000
31	2009-2010	61738.768	13850.000
32	2010-2011	41698.568	5610.000
33	2011-2012	27482.870	3900.000
34	2012-2013	6651.081	15150.000
35	2013-2014	4124.538	9355.000
36	2014-2015	16594.206	47500.000
37	2015-2016	15038.052	37815.000
38	2016-2017	10343.074	11620.000
39	2017-18	3404.934	11720.000
40	2018-19 (upto Aug 2018)	1167.487	131.000

*S. Anand*  
Deputy Director (I/c),  
Dept. of Geology and Mining,  
Salem.

*Asst. Dir. Geol. & Min.*

**Project Cost & Employment:**

Project	Cost of Project
Total capital cost	Rs.1964.81 Lakhs
Cost of production	Rs 3988.95Per tonne
Cost for implementing EMP	Rs.20Lakhs

**Observations and recommendations of committee of 12<sup>th</sup>EAC meeting held on 28<sup>th</sup>-29<sup>th</sup> August, 2018:**

Project was earlier considered by the EAC in the 12<sup>th</sup> meeting held during 28-29, August, 2018. The EAC, after detailed presentation by PP observed that mining started by the PP in the year 1966. First renewal of mining lease was granted over an extent of 531.98 Ha (to make them co-terminus), vide G.Os.No: 74 dated 11.03.1997 for a period of 20years (20.08.1986 to 19.08.2006). Thereafter, application for second mining lease renewal was made vide Letter No: SL:G.O: 55200 (1) dated 11.07.2005 over an extent of 449.364 Ha. Now the company operates the mine by virtue of Order of injunction passed in MP No.1 of 2006 in W.P.Nos. 25518 and 25519 of 2006 of the Hon'ble High Court of Madras. Mining activity stopped on 11.01.2017. EAC also observed that in Annexure II submitted to MoEF&CC, PP mentioned that general condition does

not applies to the project whereas in Form 1 it is mentioned that general condition applies to the project.

EAC after detailed deliberation recommended to defer the proposal for want of following documents to be submitted:

- (i) The Project Proponent shall give an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. before grant of ToR/ EC. The undertaking interalia include commitment of the PP not to repeat any such violation in future. In case of violation of above undertaking, the ToR/Environmental Clearance shall be liable to be terminated forthwith.
- (ii) Details of past production of mine since its inception duly authenticated by Department of Mines & Geology, State Government.
- (iii) Letter of Intent for mining lease to be submitted from State department of Mines and Geology.
- (iv) As per Form 1, details about the general condition is to be submitted.

**Observations and recommendations of committee in 28th EAC meeting held during 25th-26th November, 2019:**

Project proponent along with the consultant made the detailed presentation on the information sought in the 12th meeting. EAC after detailed deliberation deferred the proposal for want of following information:

- (i) Revised affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. before grant of ToR/ EC. The undertaking interalia include commitment of the PP not to repeat any such violation in future. In case of violation of above undertaking, the ToR/Environmental Clearance shall be liable to be terminated forthwith.
- (ii) Details of mine closure notice submitted to the DGMS.
- (iii) Total excavation details to be submitted in the revised Form 1.
- (iv) Detail of court case to be submitted in the revised form 1 and to be presented before the committee.
- (v) Second renewal is not deemed therefore letter of intent for the second renewal of mining lease is to be submitted.

(vi) Justification for continuing mining.

PP submitted the information vide letter dated 27.08.2020. Proposal was again taken to the 36<sup>th</sup> EAC meeting held during 21-22 September 2020 for deliberation on the information as sought by the EAC in 28<sup>th</sup> meeting held in Nov.2019.

#### **Observations and recommendations of committee of EAC meeting (36th )**

Project Proponent gone for enhanced production beyond the base line production of the year 1993-94 without obtaining prior environment clearance, hence violated the provisions of EIA Notification. Project Proponent submitted the application under the Ministry's Notification dated 14.03.2017 for consideration of proposal under violation. Proposal was last considered in the 28<sup>th</sup> meeting held during 25<sup>th</sup> -26<sup>th</sup> November, 2019.

EAC deferred the project and sought some additional information including letter of intent for renewal of mine lease in favour of the Project Proponent as the second renewal is not deemed. Project Proponent vide letter dated 27.08.2020 submitted the request to the Ministry through Parivesh Portal for consideration of the ToR proposal.

Accordingly, proposal was listed in the Agenda of 36<sup>th</sup>, however **PP did not attend the meeting**. EAC observed that proposal was considered in the 28<sup>th</sup> meeting held during November 2019 and was deferred for want of information required for appraisal of mining project. PP on 27<sup>th</sup> August 2020, after almost ten months submitted the information to the Ministry, which is an inordinate delay at the PP end and unacceptable. Further, on perusal of the information submitted by the PP on the compliance of 28<sup>th</sup> EAC meeting, it is observed that PP has not yet complied as far as LoI, total excavation details are concerned. EAC took it seriously and advised PP to submit the required information before the next EAC meeting for consideration of ToR.

EAC deferred the project for grant of ToR. Since it is a violation case, recommended the following: *The State Government/SPCB to take action against the project proponent under the provisions of section 19 of the Environment (Protection) Act, 1986, and further no consent to operate for project to be issued till the project is granted EC.*

Accordingly, Ministry vide letter dated 25.11.2020 issued a letter to the State Govt to take action against the proponent under section 19 of the E(P) Act 1986.

#### **Observations and recommendations of committee of present EAC meeting (40<sup>th</sup>)**

Project Proponent alongwith the Consultant made the detailed presentation before the EAC on the information sought by the EAC in the earlier meeting. The EAC deliberated on the information submitted by the PP and observed that PP has gone for enhanced production of both the minerals beyond the base line production of the year 1993-94 without obtaining prior

environment clearance, hence violated the provisions of EIA Notification. EAC also noted that Dunite was declared minor mineral vide Ministry of Mines Notification dated 10th February 2015, prior to that it was major mineral. Regarding mine lease renewal, EAC also deliberated on the submission made by the PP regarding mine lease renewal:

*2nd renewal application for renewal of Mining lease over an area of 449.364 Ha for Magnesite and Dunite in S.F.No.-6 of Chettichavadi Village, Salem District, Tamil Nadu vide letter no. SL:GO:55200(1) dated 11th July, 2005. Since no order was passed by Mining and Geology Department on the said application, DBSIL filed W.P.25518/2006 before Hon'ble High Court of Madras wherein Hon'ble High Court vide interim orders dated 17th August,2006, allowed the operations of the Mines under the provisions of the deemed extension Rule 24(A)(6) of MCR, 1960.*

*DBSIL has already timely moved an application for renewal of its application of its Mining Lease, no specific order refusing renewal of Mining lease was passed till the promulgation of MMDR 2015 therefore the mining lease in question got automatically extended up to 31<sup>st</sup> March 2030, hence no letter of intent or NOC would be required by the Department of Geology and Mines to effectuate the said automatic extension of Mining, lease till 31<sup>st</sup> March, 2030,, in view of the Section 8(A) (5) and (6) of MMDR Amendment Act, 2015*

EAC opined that PP is mining with interim orders dated 17th August,2006 of Hon'ble High Court of Madras and therefore submission made regarding mine lease validity may be accepted at ToR stage, however PP is required to submit the valid mine lease document at time of EC application.

EAC after detailed deliberations in the present meeting (40<sup>th</sup>) on the proposal and additional information submitted and affidavit submitted, confirmed the instant case to be of violation of the EIA Notification, 2006 and in terms of the provision of Ministry's Notification dated 14.03.2017 **recommended** for issuing Standard Term of Reference along with the following specific Term of Reference to M/s. Dalmia Bharat Sugar & Industries Ltd is for Mining of Magnesite & Dunite from Chettichavadi Jaghir Magnesite & Dunite Mines for total excavation 1.4 million Tonne per annum (MTPA) from mining lease area 449.364, for undertaking EIA study and preparation of Environmental Management Plan (EMP):

- (i) Ministry has issued 25.11.2020 issued a letter to the State Govt to take action against the proponent under section 19 of the E(P) Act 1986. Status of action taken by the State govt/SPCB u/s 19 of the E(P) Act shall be submitted.
- (ii) Assessment of ecological damage with respect to air, water, land and other environmental attributes. The collection and analysis of data shall be done by an environmental laboratory duly notified under the Environment (Protection) Act, 1986, or an environmental laboratory accredited by NABL, or a laboratory of a Council of Scientific and industrial Research (CSIR) institution working in the field of environment.

- (iii) Preparation of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage assessed and economic benefits derived due to violation.
- (iv) The remediation plan and the natural and community resource augmentation plan to be prepared as an independent chapter 13 in the EIA report by the accredited consultants.
- (v) Budget of remediation plan and natural and community resource augmentation plan corresponding to the ecological damage shall be completed within three years and to be prepared accordingly
- (vi) EIA/EMP report shall be prepared taking cognizance and impacts (Cumulative) of the adjacent mines leases, if any.
- (vii) In case of violation of undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated, the ToR Clearance shall be liable to be terminated forthwith.
- (viii) One season fresh base line data shall be collected for preparation of EIA/EMP reports.
- (ix) The PP is required to conduct public hearing as per EIA notification, 2006 and as amended thereof.
- (x) The PP should also address the all the issues raised during the already held public hearing along with commitments made and with fund provision to address above issues in tabular form to be submitted along with EIA/EMP report.
- (xi) Detailed hydrological study to be carried out in core and buffer zone of the project as per GEC 2015 guidelines.
- (xii) The Action Plan on the compliance of the recommendations of the CAG as per Ministry's Circular No. J-11013/71/2016-IA.I (M), dated 25.10.2017 needs to be submitted at the time of appraisal of the project and included in the EIA/EMP Report.
- (xiii) Details of benefit accrued during the violation period along with capital cost of the project are to be submitted.
- (xiv) Mine plan as approved by Indian Bureau of Mines to be submitted.
- (xv) DGMS permission is to be submitted for blasting at project site, if any.

- (xvi) As per Ministry's Notification dated 25th July, 2018 DSR shall be submitted with EIA/EMP report for minor mineral.
- (xvii) Details as per Annexure XI as mentioned in the agenda shall be submitted.
- (xviii) Valid Mine lease documents from the State department of mines be submitted with EC application.
- (xix) Impact assessment of mining activity on the National park, WLS etc within 10 km of the study area shall be studied.

**40.3.8. Discussion on any other item with permission of the Chair.**