

PROCEEDINGS OF THE ADMINISTRATOR, STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY, THIRUVANANTHAPURAM

(Present. SABITHA S)

Sub: SEIAA- Environmental clearance for the proposed china clay mining project in Sy. Nos. 427/1, 427/1-1, 427/1-2, 427/2, 427/4 & 427/5 at Melthonnakal Village, Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala by Sri. Chandrasekaran, M/s EICL limited Granted – Orders issued.

State Environment Impact Assessment Authority, Kerala

No. 940/SEIAA/EC1/ 4098/2015

dated, Thiruvananthapuram 16.10.2019

- Ref: 1. Application received on 06.10.2015 from Sri. Chandrasekaran R. ,DGM-Mines, M/s English India Clay Limited, Melthonnakal P.O., Thiruvananthapuram -695317
 - 2. Minutes of the 58th Meeting of SEAC held on 28th 29th June, 2016
 - 3. Minutes of the 62nd meeting of SEAC held on 06th & 07th September, 2016
 - 4. Minutes of the 64th SEAC meeting held on 16th & 17th NOVEMBER, 2016
 - 5. Minutes of the 68th meeting SEAC held on 20th& 21st February 2017.
 - 6. Minutes of the 66th meeting of SEIAA held on 07.04.2017
 - 7. Minutes of the 72nd meeting of SEAC held on 08th & 09th May 2017
 - 8. Minutes of the 75th meeting of SEAC held on 29th & 30th June 2017
 - 9. Minutes of the 73rd SEIAA Meeting held on 15.09.2017
 - 10. Minutes of the 80th SEAC meeting held on 11th OCTOBER, 2017
 - 11. Minutes of the 75th SEIAA meeting held on 28,10,2017
 - 12. Minutes of the 100th SEAC meeting held on 11th & 12th July 2019
 - 13. Minutes of the 101st meeting of SEAC held on 1st & 2nd August, 2019
 - 14. Minutes of the 102nd SEAC meeting held on 26th & 27th August, 2019
 - 15. Minutes of the 97th SEIAA meeting held on 24th September 2019
 - 16. G.O(Rt.) No.29/2019/Envt dt.12.04.2019

ENVIRONMENTAL CLEARANCE NO. 53/2019

Sri. Chandrasekaran R. ,DGM-Mines, M/s English India Clay Limited, Melthonnakal .P.O., Thiruvananthapuram -695317, vide his application received on 06.10.2015, has sought Environmental Clearance under EIA Notification, 2006 for the proposed china clay mining project in Sy. Nos. 427/1, 427/ 1-1, 427/1-2, 427/2, 427/4 & 427/5 at Melthonnakal Village, Trivandrum Taluk, Trivandrum District , Kerala. The project comes under Category: B & Schedule: 1 (a) of EIA Notification 2006.

- 2. The proposed project site falls within 8° 38' 5" N to 8° 38' 12"N and 76°50'57" E to 76°51'02"E . The lease area consists of 2.8999 hectares and having production capacity 25000 tonnes/Annum.
- 3. The proposal was placed in the 58th Meeting of SEAC held on 28th 29th June, 2016. According to the G.O.(Ms) No. 07/08/ID dated 16.01.2008 and G.O.(Ms) No. 68/08/ID dated 20.05.2008, the mining plan approved by Indian Bureau of Mines is valid for china clay mining since it is classified as a minor mineral. The proponent along with the RQP was present in the meeting and RQP made a power point presentation of the salient features of the project. The committee appraised the proposal based on the mining plan, pre-feasibility report and all other documents submitted along with the Form I application and decided to defer the item for field visit.
- 4. The proposal was considered in the 62nd meeting of SEAC, Kerala, held on 06th & 07th September, 2016. The Committee after examining the mining plan, prefeasibility report, field inspection report and all other documents submitted decided to defer the item for the production of the following additional documents
 - A combined plan of entire plot under EICL in cadastral scale indicating a) individual quarry leases with the status like working, refilled, yet to be exploited, b) plant area,
 - office area and other ancillary facilities c) RWH structures and d) space left for other purposes. Indicate the main roads also
 - Copy of the letter from DGMS permitting EICL to work as a single unit to be

provided

- Total area of all lease holds with in 500 m radius
- A detailed write up of proposed CSR with recurring and non-recurring expenditure to be provided.

Subsequently the proponent has submitted the documents/clarifications sought by 62^{nd} SEAC.

- 5. The proposal was placed in the 64th SEAC meeting held on 16th & 17th NOVEMBER, 2016. The Committee after examining all the documents and in view of the general complaints received decided to defer the item for submission of the following additional details.
 - 1. Copy of the existing lease order/ deed for the area
 - 2. Certificate from the revenue authority indicating that area does not attract the provisions of the Kerala Conservation of Paddy Land and Wetland Act
 - 3. An affidavit stating that the area is not involved in any pending litigation before any court of law
 - 4. A detailed write up on the on going /proposed CSR activities in the locality
- 6. The proposal was placed in the 68th meeting SEAC held on 20th& 21st February 2017. The Committee verified the additional documents submitted by the proponent and found satisfactory. Based on the Mining plan, Form.1, all other documents submitted with the proposal and the field visit report, the Committee decided to **Recommend for issuance of** EC subject to the general conditions.
- 7. The proposal was placed in the 66th meeting of SEIAA held on 07.04.2017. On examination of the file the Authority found that there are two representations/complaints about the projects one by Janasakthi Action Council and the other by Thanal and in a joint meeting held on 16.03.2016 at the Chamber of District Collector, Thiruvananthapuram certain conditions were laid down. Hence the Authority decided to return the proposal back to SEAC for clear-cut recommendation after ascertaining whether those conditions of District Level meeting have been implemented, if found pertinent.

- The proposal was placed in the 72nd meeting of SEAC held on 08th & 09th May 2017. The Committee decided to defer the item for further clarification regarding the validity of the mining plan.
- 9. The proponent has submitted the documents sought by the Committee. The proposal was placed in the 75th meeting of SEAC held on 29th & 30th June 2017. SEIAA has referred back the case to ascertain whether the proponent has implemented the decisions of the meeting taken by the District Collector. The Committee examined the matter and is of the opinion that the question of adherence to the decisions of a meeting taken by the District Collector is a matter to be looked into by distict administration. But the Committee has noted that various apprehensions and complaints raised by different individuals/organisations are well taken care of in the mining plan and through other interventions that are being taken up by the proponent in the locality. Hence as recommended earlier, EC can be issued after on completion of proceedings against violations already pointed out and subject to other conditions already proposed.
- 10. The proposal was placed in the 73rd SEIAA Meeting held on 15.09.2017. Authority observed that the proponent is having multiple leases in contiguous area in the locality for mining china clay. Many of the leases are obtained prior to 2006 when the MoEF notification dated 27.01.1994 was in force. According to the above notification, mining of major minerals with leases in more than 5 ha required environment clearance and at that point in time china clay was classified as a major mineral. The proponent was mining china clay from a contiguous area of more than 5 ha though the areas of individual leases were less than 5 ha. Hence the company has failed to comply with the conditions of MoEF Notification dtd. 27.01.1994 and to that extent there is violation.

The proponent has submitted a representation stating that the area is a fresh one and no mining has started and the question of violation does not arise. Hence SEIAA decided to return the proposal to SEAC and decide whether the project comes under the scope of violation in the light of the representation, if necessary after hearing the proponent.

11. The proposal was placed in the 80th SEAC meeting held on 11th OCTOBER, 2017. The Committee examined the points raised by SEIAA in its 73rd meeting and observed that as detailed in the relevant portion of the minutes of the 68th meeting of SEAC that the lease area

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under consideration is contiguous to many other lease areas in the locality. Therefore as detailed therein there was a violation with respect to MoEF Notification 27.01.1994. It is also pointed out that the violation is always against the action of the company but need not be always for a particular action in the proposed site. It is also pointed out that as of now the validity of \$1.03.2017 MoEF Notification regarding violation has expired and as such there are no standing instructions in this regard. The only action that can be initiated against violation is to take action under Environment Protection Act, 1986.

The proposal was placed in the 75th SEIAA meeting held on 28.10.2017. The Authority decided to conduct a site inspection by SEIAA to ascertain whether the proposed site is contiguous with the other two mining site owned by the proponent where there are reported violation.

As per the judgement dated 08.01.2018 of the Hon'ble High court in WP (C) 31654/17 filed by EICL, files pertaining to the applications of EICL have been forwarded to MoEE vide letter dated 20.01.2018. The area of individual leases were less than 5 Ha. Therefore, the proponent failed to comply with the conditions of MoEF Notification dated 27.01.1994. As per the O.M. dated 12.02.2018 the area of 0-5 ha, the public consultation to be evaluated by SEAC for grant of EC by SEIAA. After that MoEF vide letter dated 05.03.2019, all the documents send back to SEIAA.

- 13. The proponent vide letter dated 02.07.2019 submitted a clarification on the systematic reclamation status of the proposed project, M/s EICL Ltd. The proposal was placed in the 100th SEAC meeting held on 11th & 12th July 2019. The Committee decided to invite the proponent for presentation.
- 14. The proposal was placed in the 101st meeting of SEAC held on 1st & 2nd August, 2019. The RQP made a presentation. The Committee entrusted Dr.G.Sankar, Dr.P.S.Easa, Smt.Beena Govindan & Dr.C. Bhaskaran for field inspection. The Subcommittee inspected the site on 20.08.2019.
- 15. The proposal was placed in the 102nd SEAC meeting held on 26th & 27th August, 2019. The Committee decided to recommend for EC subject to the following specific conditions:
 - 1. Storm water drains leading to RWH. The entire rainwater falling in the total plot of

EICL and the water being pumped out of working pits may be directed into the two unlined open RWH structures so as to enhance groundwater recharge of the region. The recharge should take place through the sandstone layer. The storm drains available now to have recharge few pits (with depth up to sandstone layer) with an overflow section in the down slope area.

- 2. At least 7.5 m width of tree belt to be provided as a dust suppression mechanism considering the wind direction. A five level tree types with broad leaves should be selected for the buffer zone vegetation.
- 3. Considering the impoverished nature of the refilled material, it needs to be provided with additional organic matter that is available in the form of biodegradable waste/sludge. The initiative taken by CREDAI in with the organic material generated by the solid waste treatment in the Clean City Movement could be made use of to improve the health of the soil.
- 4. The ECIL should monitor five open wells within 200m of the project area for quantity and quality (potable water standards)
- 5. The company should make provisions for recharging the wells, if any, of the households in the proximity of the project site.
- 6. An inventory of plants and butterflies seen in the area may be prepared. This could be categorised into those seen in the proposed buffer of 7.5 m and the rest of the area.
- 7. The present native plants in the buffer (7.5 m) of the proposed site are to be maintained while removing the exotics like Acacia. The buffer area could be augmented with native species. Host shrub plants of butterflies could also be used.
- 8. Native plants should be raised in a nursery, at least two years before the reclamation, for to be ready with two year old saplings for facilitating increased survival of the planted ones. Nursery could be entrusted to a group of people (Kudumbashree-Women Self Help) in the surrounding areas. Species suitable for the area could be selected with the help of experts.
- 16. The proposal was placed in the 97th SEIAA meeting held on 24th September 2019. The Authority noticed that the proposal was placed in the 100th SEAC meeting held on 11th 12th July 2019 and SEAC decided to invite the proponent for presentation. The proponent made presentation in the 101st SEAC meeting held on 01st 02nd August 2019 and the Committee constituted a Sub committee consisting of Dr.C.Bhaskaran (Chairman) and Smt.Beena Govindan (Member, *SEAC), Dr.P.S.Easa (Member, SEAC) and Sri.G.Sankar

(Member, SEAC) for field inspection. A detailed field visit was carried out on 20th August 2019. The proposal was again placed in the 102nd SEAC meeting held on 26th & 27th August 2019. The Committee decided to recommend for EC with some specific conditions to safeguard the environment of the region.

Authority noticed that a complaint has been received from Sri.B.R.Santhosh Kumar on 30.08.2019 in which the complainant has brought to the notice of the Authority the observations made by the Hon'ble High Court of Kerala in WA No.1761/18 about the irregularities committed by the proponent.

Authority is of the view that the resources of the State have to be used on sustainable basis for the welfare of the State without harming the environment of the region. It is brought to the notice of the Authority that this project is likely to provide employment to large no. of people in the locality. Authority took note of the observations made by Hon'ble High Court and decided to issue EC with following specific conditions to address the observations made by Hon'ble High Court of Kerala.

- 1) Proponent to take steps to implement the decisions taken in the joint meeting held in the chamber of District Collector, Thiruvananthapuram on 16.03.2016 involving Janasakthi Action Council & Thanal.
- 2) If the quarrying operations lead to cluster situation the guidelines prescribed in the EIA Notification 2006 of MoEF & CC should be followed to address the environmental issues arising out of such a cluster situation.
- 3) Proponent to address the irregularities/issues raised in the reports of Directorate of Mining Safety, Banglore and Impact Assessment Study report of Directorate of Mining & Geology, Government of Kerala, referred in Judgment of Hon'ble High court of Kerala.

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- 4) 'As mining activities carried out by the proponent, is alleged to be one of the reasons for lowering the ground water table, Proponent to adopt corrective measures while mining and take steps to recharge the ground water table in the immediate vicinity of 500 mts like Rain water harvesting etc.
- 5) Proponent to pay 100% of the value of the illegally mined mineral, as estimated by District Geologist if it is not paid already. This is as per the direction of Hon'ble High Court in the judgment.

- 6) State Pollution Control Board to initiate violation proceedings against the proponent as per Notification S.O 804(E) dated.14.03.2017 & S.O 1030 (E) dated.08.03.2018 under EIA Notification 2006 of MoEF &CC. SEAC to assist Pollution Control Board in this process as laid down in OMs cited.
- 7) Activities relating to Corporate Environmental Responsibilities (2% of total project cost) shall be carried out leading to protection and promotion of environment in the project region as per OM F.No.22-65/2017-IA-III dt.01.05.2018 of MoEF & CC in consultation with the District Collector.
- 8) The proponent shall carry out quarrying as per the approved Mining Plan and the proponent should strictly follow the Kerala Minor Mineral Concession Rules 2015 and amendments thereby.
- 9) Director of Mining & Geology & State Pollution Control Board to inspect the quarrying site atleast once in 3 months to ensure that quarrying operations are carried out as per the approved Mining Plan.
- 10) The entire rainwater falling in the total plot of EICL and the water being pumped out of working pits may be directed into the two unlined open RWH structures so as to enhance groundwater recharge of the region. The recharge should take place through the sandstone layer. The storm drains available now to have recharge few pits (with depth up to sandstone layer) with an overflow section in the down slope area.
- 11)At least 7.5 m width of tree belt to be provided as a dust suppression mechanism considering the wind direction. A tree belt of five canopy level with broad leaved species should be selected for the buffer zone vegetation.
- 12) Considering the impoverished nature of the refilled material, it needs to be provided with additional organic matter that is available in the form of biodegradable waste/sludge. The initiative taken by CREDAI with the organic material generated by the solid waste treatment in the Clean City Movement could be made use of to improve the health of the soil.
- 13) The ECIL should monitor five open wells within 200m of the project area for quantity and quality (potable water standards)
- 14) The company should make provisions for recharging the wells, if any, of the households in the proximity of the project site.

- 15) An inventory of plants and butterflies seen in the area may be prepared. This could be categorised into those seen in the proposed buffer of 7.5 m and the rest of the area.
- 16) The present native plants in the buffer (7.5 m) of the proposed site are to be maintained while removing the exotics like Acacia. The buffer area could be augmented with native species. Host shrub plants of butterflies could also be used.
- 17) Native plants should be raised in a nursery, at least two years before the reclamation, for to be ready with two year old saplings for facilitating increased survival of the planted ones. Nursery could be entrusted to a group of people (Kudumbashree-Women Self Help) in the surrounding areas. Species suitable for the area could be selected with the help of experts.

The EC is issued for 1/5 th of the quantity as approved in the Mining Plan for a period of 1 year subject to above specific conditions & general conditions.

Authority directs that no quarrying operation shall be carried out after 1 year by the proponent under this EC till the above conditions are fulfilled to the satisfaction of Committee appointed by SEAC which may do the inspection before the completion of 1 year and submit its report on compliance.

Environmental Clearance as per the EIA Notification 2006 is hereby accorded for the proposed china clay mining project in Sy. Nos. 427/1, 427/ 1-1, 427/1-2, 427/2, 427/4 & 427/5 at Melthonnakal Village, Thiruvananthapuram Taluk, Thiruvananthapuram District, Kerala by Sri. Chandrasekaran, M/s EICL limited for an area of 2.8999 hectares, for 1/5 th of the quantity as approved in the Mining Plan for a period of one year subject to the specific conditions in para 16 above, and subject to the further condition that no quarrying operation shall be carried out after 1 year by the proponent under this EC till the above conditions are fulfilled to the satisfaction of Committee appointed by SEAC which may do the inspection before the completion of 1 year and submit its report on compliance, all the environmental impact mitigation and management measures undertaken by the project proponent in the Form I, EMP, PFR and Mining plan submitted to SEIAA. The assurances and clarifications

given by the proponent will be deemed to be a part of these proceedings as if incorporated herein. Also the general conditions for projects stipulated for mining (items 1 to 48), appended hereto will be applicable and have to be strictly adhered to.

- 18. The Clearance issued will also be subject to full and effective implementation of all the undertakings given in the application form, mitigation measures as assured in the Environment Management Plan and the mining features including progressive mine closure plan as submitted with the application and relied on for grant of this clearance. The above undertakings and the conditions and the undertakings in Chapter 4 (Mining), Chapter 5 (Blasting), Chapter 6 (Mines Drainage), Chapter 7 (Stacking of Mineral rejects and Disposal of waste) Chapter 11 (Environment Management Plan) & Part C (Progressive Mine Closure Plan) of the Mining Plan as submitted will be deemed to be part of this proceedings as conditions as undertaken by the proponent, as if incorporated herein.
- 19. Validity of the Environmental Clearance will be one year from the date of this clearance, subject to inspection by SEIAA on annual basis and compliance of the conditions, subject to earlier review of E.C in case of violation or non-compliance of conditions or genuine complaints from residents within the security area of the quarry.
- 20. Compliance of the conditions herein will be monitored by the State Environment Impact Assessment Authority or its authorised offices and also by the regional office of the Ministry of Environment & Forests, Govt. of India, Bangalore.
 - Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.
 - ii. Instances of violation if any shall be reported to the District Collector,
 Thiruvanathapuram

iii. The given address for correspondence with the authorised signatory of the project is Sri. Chandrasekaran R. ,DGM-Mines, M/s English India Clay Limited, Melthonnakal .P.O., Thiruvananthapuram -695317

SABITHA S Administrator, SEIAA

То,

Sri. Chandrasekaran R.
DGM-Mines
M/s English India Clay Limited
Mclthonnakal .P.O.
Thiruvananthapuram -695317

Copy to,

- MoEF Regional Office, Southern Zone, Kendriya Sadan, 4th Floor, E&F Wing, II Block, Koramangala, Bangalore-560034.
- 2. The Principal Secretary to Government, Environment Department, Government of Kerala.
- 3: District Collector, Thiruvanathapuram
- 4. Director, Mining & Geology, Thiruvananthapuram -4.
- 5. The Member Secretary, Kerala State Pollution Control Board
- 6. District Geologist, Thiruvanathapuram
- 7. Tahsildhar, Thiruvanathapuram Taluk, Thiruvanathapuram
- 8. Village Officer, Melthonnakal Village, Thiruvanathapuram
- 9. Chairman, SEIAA:
- 10. Website.
- 11. S/f
- 12. O/c

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA <u>GENERAL CONDITIONS</u> (for mining projects)

- 1. A separate environmental management and monitoring cell with qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
- 2. Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
- 3. Sprinklers shall be installed and used in the project site to contain dust emissions.
- 4. Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
- 5. In view of the deep pits left after the excavation, stacking at maximum top level should be carried out.
- 6. Corporate Environment Responsibility agreed upon by the proponent should be implemented.
- 7. The project proponent shall comply the conditions stipulated by the statutory authorities concerned.
- 8. Tarring /multiple options on the access roads shall be undertaken so as to reduce dust pollution during movement of vehicle.
- 9. Overburden materials should be managed within the site and used for reclamation of mine pit as per mine closure plan / specific conditions.
- Height of benches should not exceed 5 m, and width should not be less than 5 m, if there is no mention in the mining plan/specific condition.
- 11. Ground level should be fixed in individual cases separately
- 12. No mining operations should be carried out at places having a slope greater than 45°.
- 13. Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB. This condition is applicable only in such cases if a crusher is adjacent to the quarry.
- 14. The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
- 15. Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
- 16. The transportation of minerals should be done in covered trucks to contain dust emissions. The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project. SEAC should assess the number of trees in each project site before the issuance of EC so as to ensure the promptness in planting.
- 17. Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
- 18. A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided.
- 19. 50 m buffer distance should be maintained from forest boundaries.
- 20. Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating mining activity.
- All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.
- 22. In the case of any change(s) in the scope of the project, extent quantity, process of mining technology involved or in any way affecting the environmental parameters/impacts as assessed, based on which only the E.C is issued, the project would require a fresh appraisal by this Authority, for which the proponent shall apply and get the approval of this Authority.
- 23. The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- 24. The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.

- 25. The project proponent should advertise in at least two local newspapers widely circulated in region, one of which (both the advertisement and the newspaper) shall be in the vernacular large informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the State Environment Impact Assessment Authority (SEIAA) of the and may also be seen on the website of the Authority at www.seiaakerala.org. The advertisations should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- 26. The Environmental Clearance shall be put on the website of the company by the proponent.
- 27. Proponent shall submit half yearly reports in soft copy and SEIAA will upload it on the website
- 28. The details of Environmental Clearance should be prominently displayed in a metallic board of the first 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public
- 29. The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.
- 30. No change in mining technology and scope of working should be made without prior approval of the SEIAA, No further expansion or modifications in the mine shall be carried out without prior approval of the SEIAA, as applicable.
- 31. The Project proponent shall ensure that no natural water course and/or water resources shall be obstructed due to any mining operations. Necessary safeguard measures to protect the first order streams, if any, originating from the mine lease shall be taken.
- 32. The top soil, if any, shall temporarily be stored at earmarked site(s) only for the topsoil shall be used for land reclamation and plantation. The over burden (OB) generated during the mining operations shall be stacked at earmarked dump site(s) only. The maximum height of the dumps shall not exceed 8m and width 20m and overall slope of the dumps shall be maintained to 450. The OB dumps should be scientifically vegetated with suitable native/species to prevent erosion and surface run off. In critical areas, use of geo textiles shall be undertaken for stabilization of the dump. The entire excavated area shall be backfilled. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining.
- 33. Catch drains and siltation ponds of appropriate size shall be constructed around the mine working, mineral and OB dumps to prevent run off of water and flow of sediments directly into the river and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- 34. Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM₁₀ and PM_{2.5} such as haul Road, loading and unloading points and transfer points it shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
- 35. Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
- 36. Measures should be taken for control of noise levels below 85 dBA in the work environment.
- 37. The funds earmarked for environmental protection measures and CER activate should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the State Environment Impact Assessment Authority (SEIAA) office.
- 38. The Regional Office of MOEF & CC located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (S) of the Regional Office by furnishing the requisite data/information/monitoring reports.
- 39. Any appeal against this Environmental Clearance shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.
- 40. Concealing the factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- 41. The SEIAA may revoke or suspend the order, for non implementation of any of the specific or thisimplementation of any of the above conditions is not satisfactory. The SEIAA reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

- 42. The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license on consent given by any other authority for the same project.
- 43. The Environmental Clearance will be subject to the final order of the courts in any pending litigation related to the land or project, in any court of law.
- 44. The mining operation shall be restricted to above ground water table and it should not intersect ground water table.
- All vehicles used for transportation and within the mines shall have 'PUC' certificate from authorized pollution taking centre. Washing of all vehicles shall be inside the lease area'
- 46. Project proponent should obtain necessary prior permission of the competent authorities for drawal of requisite quantity of surface water and ground water for the project.
- 47. Regular monitoring of flow rates and water quality upstream and downstream of the springs and perennial nallahs flowing in and around the mine lease area shall be carried out and reported in the six monthly reports to SEIAA.
- 48. Occupational health surveillance program of the workers should be under taken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.

Administrator, SEIAA