

STATE EXPERT APPRAISAL COMMITTEE - TAMIL NADU

Minutes of the 124th Meeting of the State Expert Appraisal Committee (SEAC) held on 04th January 2019 for Appraisal of Synthetic Organic Chemicals ,Building and Construction Projects, Mining Projects, Townships and Area Development projects, at Conference Hall, 2nd floor (down), Panagal Maligai, Saidapet, Chennai.

Agenda No. 124-01:

F.No: 6283/2018

Proposed new Periyathirukonam Limestone & Marl mine (32.295 Ha) capacity of 0.5004 MT/annum by M/s. Chettinad Cement Corporation Private Limited at S.F.No. 153/16, 153/17, 153/18, 153/19, 153/20, 160/11, 160/12, 160/13A, 160/13B, 160/13C, 161/4B, 161/5, 161/6, 161/7, 161/8, 161/9, 161/10, 161/15, 162/1, 162/2, 162/3A, 162/3B, 162/4A, 162/6A, 162/6B, 162/6C, 162/7, 162/8, 162/9, 162/10, 162/11A, 162/11B, 163/1, 163/2A, 163/2B, 163/2C, 163/3, 163/4, 163/5, 163/6, 163/9, 163/10, 163/11, 163/12A, 163/12B, 163/12C, 163/13, 163/14, 163/15, 163/16, 163/17, 163/18, 163/19, 163/20A, 163/20B, 163/20C, 163/21, 163/22, 163/23, 163/24, 163/25, 163/26, 163/27, 164/1A, 164/1B, 164/1C, 164/2A, 164/2B, 164/2C, 164/3, 164/4, 164/5, 164/6, 164/7, 164/8A, 164/8B, 164/9A, 164/9B, 164/10A, 164/10B, 164/10C, 164/11A, 164/11B, 164/12A, 164/12B, 164/12C, 164/12D, 164/12E, 164/12F, 164/13A, 164/13B, 164/14A, 164/14B, 164/15A, 164/15B, 164/15C, 164/16A, 164/16A, 164/16B, 164/16C, 164/16D, 164/16E, 164/16F, 165/1, 165/2, 165/3A, 165/3B, 165/3C, 165/3D, 165/4A, 165/4B, 165/4C, 165/5, 165/6, 165/7A, 165/7B, 165/8A, 165/8B, 165/8C, 165/8D, 165/8E, 165/8F, 165/9A, 165/9B, 165/10A, 165/10B, 165/10C, 165/11A, 165/11B, 165/11C, 165/11D, 165/12, 165/13A, 165/13B, 165/14, 165/15, 165/16, 165/17, 165/20, 165/21A, 165/21B, 165/22, 165/23, 166/1, 166/2A, 166/2B, 166/2C, 166/2D, 166/2E, 166/3, 166/4, 166/5, 166/6A, 166/6B,

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(SIA/TN/MIN/30013/2018)

The Proponents M/s. Chettinad Cement Corporation Private Limited has applied for ToR for the proposed new Periyathirukonam Limestone & Marl mine


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(32.295 Ha) capacity of 0.5004 MT/annum located at S.F.No. (As stated above), Periyathirukonam Village, Ariyalur Taluk, Ariyalur District, Tamil Nadu on 10.02.2017.

The project proposal was placed in the 94th meeting of the SEAC held on 08.09.2017. Based on the presentation made by the proponent and the documents furnished, the SEAC decided to issue ToR for the preparation of EIA report. Also it was decided that the ToR for EIA should include the following studies for assessment/ information .

1. The mining activity involves bailing out the ground water from a depth of 18m to 34m over an area of 32.295 Ha. The resulting quantum of ground water bailed out will be very huge running to several thousand cubic metres. The proponent should find the technical feasibility and environmentally safe methodologies to dispose/use this bailed ground water. In this exercise they must go for complete analysis of the characteristics of ground water and based on the characteristics decide the ultimate disposal/use of the ground water.
2. Measured from the river boundary there should be a buffer zone of 50 m uniformly left around the river zone. An affidavit should be submitted in this regard.
3. Hydro geological studies on removal of ground water shall be carried out to evaluate the impact of mining activities on the surrounding agricultural farms and habitations. It is seen that on the Southern side Marudaiyar River flows and on the remaining three sides wet agricultural lands are present. It is also learnt that agricultural activities are being carried out at present.

There are habitations surrounding the mining area. The EIA study should completely investigate the possible adverse impact on agriculture, vegetation and economics of the people living nearby.

4. A safety zone of 50m may be demarcated on the surface plan from Marudaiyar River and Vari River Course.
5. The quantum of mined material used for back filling into the mined out area shall be indicated. The back filling of mined out area shall be carried out scientifically ensuring that the ground water table in and around the mine is not disturbed quantitatively and qualitatively.
6. The comprehensive study shall be carried out to evaluate the impact of mining operations on the environment through expertise in the field of hydrogeology, ecology, mining and environment.
7. EIA study should critically evaluate the impact of transportation of mined material away from the mined area in terms of air pollution, noise pollution and traffic volume.
8. A detailed report on the CSR activities carried out through the mines already operated by the proponent in the same area should be furnished with evidence (receipts, photographs, reports, etc). They should also submit the proposed CSR activities with the budget details.
9. A detailed report on the green belt developed already in mines operated by the proponent in the same area should be furnished. They should also submit the proposed green belt development activities.



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The project proponent was accorded Terms of Reference by SEIAA-TN with public hearing for the above said proposal, vide letter No. SEIAA-TN/F.No.6283/M-XCIV/TOR-287/2017 dated: 17.09.2017.

The project proponent M/s. Chettinad Cement Corporation Private Limited has applied for seeking environmental clearance with EIA report along with the public hearing minutes to SEIAA-TN on 29.11.2018 for Proposed new Periyathirukonam Limestone & Marl mine (32.295 Ha) capacity of 0.5004 MT/annum by M/s. Chettinad Cement Corporation Private Limited at S.F.No. (as said above), Periyathirukonam Village, Ariyalur Taluk, Ariyalur District.

The salient features of the project submitted by the proponent are as follows:

The project proponent was accorded Terms of Reference by SEIAA-TN for the above said proposal, vide letter No. SEIAA-TN/F.No.6283/M-XCIV/TOR-287/2017 dated: 17.09.2017. Subsequently, an amendment to ToR was obtained vide letter no. SEIAA/TN/F.6283/M-XCIV/ToR-287/A/2017 dated 11.05.2018 for the change of name of applicant from M/s. Chettinad Cement Corporation Limited to M/s. Chettinad Cement Corporation Private Limited.

The Precise Area Communication (Letter of Intent) for grant of Mining Lease over an extent of 32.295 ha of patta lands has been issued vide letter No.7135/MMI/2010 dated 17.07.2012 for Limestone and Marl by the Commissioner of Geology and Mining.

The Mining Plan has been approved by IBM vide letter No.TN/ALR/MP/LST/2013.MDS dated 09.01.2017 for Limestone and Marl. Also,

the Mining Lease has been granted vide letter RC.No.7135/MM1/2010 dated 09.01.2017 for Limestone and Marl by the Commissioner of Geology and Mining. The mining Lease was executed and registered on 11.01.2017.

Draft EIA/EMP was prepared in conformity with the conditions laid down in ToR and submitted to the State Pollution Control Board for the purpose of Public Hearing / Consultations.

Public Hearing was conducted by State Pollution Control Board on 31.08.2018 in Periyathirukonam village, near government high school, Reddipalayam Post, Ariyalur Taluk, Ariyalur district, Tamil Nadu in which District Collector Ariyalur, District Revenue Officer, District Environmental Engineer, representatives of M/S. Chettinad Cement Corporation (P) Ltd, press fraternity and the public were present.

Final EIA/EMP report was prepared incorporating the public hearing proceedings and uploaded online along with the necessary documents.

Periyathirukonam Limestone Mine is located in Periyathirukonam village, Ariyalur Taluk and District, Tamil Nadu. The topography is of Flat terrain sloping towards East with elevation ranging from 34.5 to 37.0 m Above MSL. The ML Area falls in Survey of India, Toposheet No. 58/M/4 and is located between Latitude, 11°3'19.02"N - 11° 3'47.03"N and Longitude, 79°10'15.40"E - 79°10'41.96"E.

The ML area is located at 19 km (aerial distance, 13.3 km) Southeast of Ariyalur town. The Mine is approachable on Ariyalur -Trichy - Jayankondam National Highway (NH - 227) through a small connecting kutcharoad. Ariyalur Railway Station is located at a distance of 21 km (aerial distance, 14.7 km) from

the Mine. The Trichy Airport is at a distance of 83 km (aerial distance, 60 km) and the Cuddalore Port is at a distance of 115 km (aerial distance, 96 km).

The mining lease area and the 10 km buffer zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc. No forest land is involved in the lease area. The area also does not come under CRZ category. Karaivetti Bird Sanctuary is located at 14.84 km (aerial) SW of the ML Area

In the buffer zone of 10 km radius, Reserve Forests viz., Vilangudi Reserve Forest (3.6 km,NE), Ulliyakkudi Reserve Forest (4.7 km,NE), Ambapur Reserve Forest (4.8 km,NE), Alvay Reserve Forest (7.4 km,E), Suttamalli Reserve Forest (8.1 km,NE), Sundaresvarapuram Reserve Forest (6.0 km,NE), Manageri Reserve Forest (7.7 km,NE), Kallankadu Reserve Forest (9.7 Km NE) and Vadakadal Reserve Forest (9.9 km,NE) exist. The water bodies like Marudaiyar River (Adjacent,S), Vari Course (Adjacent,E), Periyapadayachi Eri (Adjacent,N), Pungudi Kuttai (Adjacent,W), Alagappan Kuttai (Adjacent,E), Uppu Odai (1.2 km,NW), Kallar River (6.4 km,NW), Ottan Odai (4.6 km,SW), Vilangudi Odai (7.7 km,NE), Sukra Eri (5.5 km,S) and Pullambadi Canal (9.2 km,SW) are found.

The geological reserve is estimated as 4,590,011 Tonnes and the mineable reserve is estimated to be 2,786,788. The anticipated life of the mine is 7 years.

The mine is Non-conventional, mechanized, opencast mining method. Since the limestone formation is of soft sedimentary type and the overburden can also be removed by excavator/ripper, there will not be any drilling or blasting. The excavation of Overburden and Limestone will be done by deploying Hydraulic Excavator. The excavated Limestone/Marl will be broken into smaller pieces using

Rock Breaker. Excavator is engaged for loading the material in to the tippers. The transportation of mined Limestone and Marl to the Cement Plant will done using tippers.

The total quantity of 3.071million tons of waste generated during mining includes top soil, over burden and mineral reject. Out of total waste generated, top soil will be 0.517 million tons, over burden will be 2.251 million tons and mineral reject will be 0.303 million ton. The waste including mineral reject will be temporarily dumped within the lease area in the northeastern side. From the year 3 onwards the entire waste generated will be used for simultaneous backfilling. The waste from temporary waste dump will be rehandled in the year 3 and 4 and used for backfilling in the mined out void. As such there will not be any external waste dump.

In the post mining stage, out of 32.295 Ha of lease area, about 27.18 Ha comprising 11.187 Ha of mine area (6.562 ha - backfilled mined out area & 4.625 ha - mined out benches) & 15.993 Ha of Green Belt & Safety Zone area will be covered under plantation, about 4.083 Ha of mined out area will be left as water body, about 0.6 Ha will be left for Public use and about 0.432 Ha will remain undisturbed. The rainfall precipitation within the mine pits area collected as rain water harvesting at the bottom of pit.

As far as manpower is concerned, directly about 59 persons including the contract employees will be employed and indirectly more than 200 people will derive benefit.

The total water requirement is 30KLD out of which domestic purpose is 1.5 KLD, for dust suppression and Workshop activities is 25.0 KLD and for Greenbelt

Development is 3.5 KLD. For drinking purpose, mineral water will be provided. For other purposes, Mine Pit water / Borewell water will be used. The applications for using rain water/ ground water collected in mine pit are made to the Water Resources Department, State Ground and Surface Water Resources Data Centre, Chennai and to the CGWA, Delhi.

Site services like mineral water for drinking will be provided at the rest shelter for the workers. Other facilities like First Aid, Training Centre etc., will also be provided.

There is no Indian Pea Fowl (*Pavocristatus*) in the core zone and within 2 km radius from the project area. However presence of Indian Pea Fowl (*Pavocristatus*) is crossing /noticed within buffer zone. However, Conservation Plan for Indian Pea Fowl (*Pavocristatus*) is prepared for Periyathirukonam Limestone Mine of CCCPL, Ariyalur Taluk and District, Tamil Nadu and submitted. A budget of Rs.6.00 lakhs is allocated for Pea fowl conservation programme.

Various welfare schemes formulated and being implemented by CCCPL in the region proves to be a tremendous boon to the local population on socio economic front. The proponent has already spent Rs. 35.5 lakhs during year 2016-17 and about Rs. 9.35 lakhs during year 2017-18 for various CSR activities for other nearby working mines and plant.

For future CSR activities, as per company's act, 2% of the net profit will be spent every year based on needs & priority. The breakup of the same will be decided based on the immediate need and priority. Based on its annual budget and based on need based assessment of the people, the company can select and implement the activities each year.

According to MoEF&CC Office Memorandum dated 01.05.2018, as this is a green field project with project cost less than 100 crores, it is required to allocate 2% of the capital investment as the CER budget and the same will be followed. M/s. Chettinad Cements will contribute substantially to the overall economy and social development of the area through CER activities in addition to CSR. The activities to be carried out will be suitably determined by a need based assessment. The CER activities proposed for the project area will be implemented to supplement the existing governmental programs among the local population. Developmental activities will be carried out keeping sustainable development in mind. The proposal was placed in the 124th SEAC Meeting held on 04.01.2019. The proponent made a detailed presentation about the project proposal. Based on the presentation made by the proponent and the documents furnished for the project the committee noticed that the following aspects as specified in the ToR have not been included in the report. Hence, the committee decided to defer the project and instruct to furnish the following details:

1. The mining activity involves bailing out the ground water from a depth of 18m to 34m over an area of 32.295 Ha. The resulting quantum of ground water bailed out will be very huge running to several thousand cubic metres. The proponent should find the technically feasibility and environmentally safe methodologies to dispose/use this bailed ground water. In this exercise they must go for complete analysis of the characteristics of ground water and based on the characteristics decide the ultimate disposal/use of the ground water.

2. Hydro geological studies on removal of ground water shall be carried out to evaluate the impact of mining activities on the surrounding agricultural farms and habitations. It is seen that on the Southern side Marudaiyar River flows and on the remaining three sides wet agricultural lands are present. It is also learnt that agricultural activities are being carried out at present. There are habitations surrounding the mining area. The EIA study should completely investigate the possible adverse impact on agriculture, vegetation and economics of the people living nearby.
3. The comprehensive study shall be carried out to evaluate the impact of mining operations on the environment through expertise in the field of hydrogeology, ecology, mining and environment.
4. The quantum of mined material used for back filling into the mined out area shall be indicated. The back filling of mined out area shall be carried out scientifically ensuring that the ground water table in and around the mine is not disturbed quantitatively and qualitatively.
5. Hydrological study shall be conducted in the quarrying site considering the surrounding environment and the study report shall be submitted to SEIAA.
6. A safety zone shall be demarcated on the surface plan from Marudaiyar River and Vari River Course as per norms.
7. Ground water study report shall be conducted by a reputed Government institution like NIT, IIT and the study report shall be furnished.
8. NOC from Chief Engineer, PWD based on the new regulation on water body (River). Since the project is located adjacent to water body.

On receipt of the above details, the projects would be re considered for appraised.

Agenda No. 124-02:

F.No: 6636/2018

Proposed production of Linear Alkyl Benzene Sulphonic Acid (LABSA) - M/s. Detergeo Chem Private Limited by New India Group at plot No. F-52, SIPCOT industrial complex, Karumbukuppam Village, Gummidipoondi Taluk, Tiruvallur District, Tamil Nadu - for Environmental Clearance

(SIA/TN/IND2/30139/2018)

The project proponent gave a detailed presentation on the salient features of the project and informed that:

1. The project is located at
 - a) 13°24'48.91"N Latitude, 80°6'44.10"E Longitude
 - b) 13°24'48.20"N Latitude, 80°6'47.28"E Longitude
 - c) 13°24'46.92"N Latitude, 80°6'46.90"E Longitude
 - d) 13°24'47.68"N Latitude, 80°6'43.56"E Longitude
2. The total plot area is 4048 sq.mts (0.4048 hectares). The break up details for the building are as follows :
 - a. Production shed - 1400 sq.m
 - b. UG Water Tank/Cooling towers - 96 sq.m
 - c. Sulphur Yard - 80 sq.m
 - d. Tank Farm - 336 sq.m


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