118-	Proposed construction of LPG Bottling Facility of capacity 44 TMTPA by M/s. Bharat Petroleum Corporation Limited at S.No: 168 pt, 169, 170, 171 pt 173, 174 pt (Old 6 Fa): 169		
F.6434/2017	Tamilnadu – Category "B1"-6 (b) Isolated Storage & Handling of Hazardous Chemicals (As per threshold planning quantity indicated in column 3 of schedule 2 & 3 of MSIHC Rules 1989 amonded 2000)		
	The Proponent, M/s. Bharat Petroleum Corporation Limited., has		
	applied for Environment Clearance for the proposed construction of LPG		
	Bottling Facility of capacity 44 TMTPA at 6 No. 160		
	Bottling Facility of capacity 44 TMTPA at S.No: 168 pt, 169, 170, 171 pt, 173, 174 pt (Old S.F.No. 497 pt, 408, 400 pt, 704		
	173, 174 pt (Old S.F.No. 497 pt, 498, 499 pt, 500pt, 501, 502 & 503 pt), Uchapatti Village Thirumangeless T. L.		
	pt), Uchapatti Village, Thirumangalam Taluk, Madurai District, Tamilnadu on 02.04.2018.		
	The EIA report was placed in the 109th meeting held on 25.04.2018.		
	Based on the presentation made by the proponent and the documents		
	furnished, the SEAC decided to defer the proposal for want of the		
	following details:		
	1. The Certificate from Department of Geology and mining,		
	Madurai District regarding the status of the rough stone quarry, whether it is in operation or closed/suspended.		
	2. If the quarry is in operation or presently suspended, the detailed		
	VIDIGION STUDY Chould be		
	organisation and submit the report.		
	3. The proponent shall carry out storm water management studies		
	by engaging the services of reputed institution for the following and the report shall be submitted,		
	A. To prevent flooding of the surrounding area		
	B. Control the flood management within the premises.		
	4. The proponent shall submit detailed proposal for CSR activities		
	focussing nearby Government Schools with infrastructure facilities		
	for education, sanitary facilities and Sports.		
	5. The certificate from the competent Authority to ensure the		
4	1		

distance of habitation from the proposed site and also furnish the detailed impact study on the habitation nearby due to the proposed activity.

The above minutes was communicated to the project proponent on 07.06.2018. The proponent has furnished the reply to SEIAA-TN on 23.06.2018 The proposal along with the details furnished by the proponent were placed in the 116th SEAC Meeting held on 10.07.2018.

In the presentation of the proponent, the reply to the five queries was covered. The observations of the SEAC on the reply furnished are as follows:

- 1. Query 1: Quarry in operation and the lease period of the quarry will expire on 03.06.2020.
- 2. Query 2: The vibration study was carried out for the quarry operation without blasting impact.
- Query 3: the storm water management study was conducted and the study concluded that no flooding occurs in the surrounding areas of the plant.
- 4. Query 4: the CSR activity proposal has been furnished.
- 5. Query 5: A certificate from VAO has been submitted to imply that scatter houses are located at a distance of 200m, 500m and 600m from the proposed site. However, the proponent has not furnished the impact study and habitation nearby due to the proposed activity.

During the presentation, the proponent made the following points:

- The blast induced ground vibration from the neighbouring quarry (peak particle velocity) for the normal charge was used in the site in order to understand the impact of quarrying at the project area.
- The proponent has informed the Committee that the quarry is not carrying out any blasting operations currently.
- 3. The proponent has also informed that the proposed location of the project is at a distance of 400m from the boundary of the

quarry. Hence, the proponent requested the committee to consider the danger zone of 300m as specified in the mining statue (MMR, 1961).

However, based on the information provided by the proponent related to the ground vibration and sensitivity of the project, the SEAC felt that the validation of the data (peak particle velocity) shall be carried out by involving a reputed institution such as IIT, NIT, Anna University, etc.

The proponent is instructed comply with the following:

- a) A letter from the concerned authority (AD / DDGM) that the quarry under reference does not carry out drilling and blasting for the production of the desired quantity as per mine plan should be obtained and submitted to SEIAA-TN.
- b) If what is stipulated in (a) is not possible, then the proponent needs to carry out blasting in the quarry to study the impact of vibration. If such study is not possible within the quarry lease, a similar study can be carried out in the nearby area with similar rock type and submit a report.
- c) The proponent needs to establish that there is no impact of mining, like fly rock endangering the functioning of the plant.
- d) The proponent has to conduct impact study on the nearby habitation due to the proposed activity.

The SEAC decided to defer the issue of EC and decided to direct the proponent to comply with the requirement as detailed in paragraphs (a), (b), (c) & (d) listed above and submit the same to SEIAA-TN. Once the details are furnished the SEAC will decide the further course of action on issue of EC.

The above minutes of the SEAC were communicated to the proponent through SEIAA-TN. Based on the directions, the proponent conducted

studies and submitted the report to SEIAA-TN.

The report submitted by the proponent was placed in the 118<sup>th</sup> SEAC meeting held on 03.08.2018. A comparison of the directions given and a compliance by the proponent is as follows:

- a) A letter from the concerned authority (AD / DDGM) that the quarry under reference does not carry out drilling and blasting for the production of the desired quantity as per mine plan should be obtained and submitted to SEIAA-TN.
- b) If what is stipulated in (a) is not possible, then the proponent needs to carry out blasting in the quarry to study the impact of vibration. If such study is not possible within the quarry lease, a similar study can be carried out in the nearby area with similar rock type and submit a report.
- c) The proponent needs to establish that there is no impact of mining, like fly rock endangering the functioning of the plant.
  - Compliance For directions in a, b, c, vibration study was conducted during the time of blasting in a similar type of nearby quarry and study report submitted.
- d) The proponent has to conduct impact study on the nearby habitation due to the proposed activity.

Compliance – A detailed impact study report submitted.

From the perusal of the vibration study report and the impact study report, the following conclusions are made:

- 1. The vibrations in the proposed LPG bottling plant would be safe even for the blasting operation, if any carried out in the quarry.
- 2. The blasted rock generated by blasting operations are diffused over the 70-100 m in the western side of blasting area. The fly rock was not observed in both the blasts (where one instrument is kept at the distance of 200m in the western side) and is well

- within the core zone of the quarry and not reaching the buffer zone.
- Worst case explosion scenarios reached a maximum distance of 150.898m as per weather category 1.5/F at 0.02068 bar and maximum radiation effect reached a maximum of 64.73m as per the studies conducted.
- 4. The impact is minimum at radiation level of 4 KW/m<sup>2</sup> and the scenarios are contained within the proposed plant boundary.

Based on the conclusions arrived at in the study, the SEAC decided to recommend the proposal to SEIAA-TN for the grant of Environmental Clearance subject to the following conditions in addition to the normal conditions:

- 1) The proponent should operate and maintain the terminal in order to ensure safety of the people in the nearby village. Strict monitoring of escape of hazardous gases in the terminal should be done and all safety management system should be in place round the clock.
- 2) Towards green belt, the project proponent has to allot 33% of total plot area .Green belt shall be planted with the following species:

Pongamia glabra	Pungan
Michelia champaca	Shenbagam
Ficus religiosa	Arasu
Azadirachta indica	Vembu
Terminalia arjuna	Neermarudhu
Calophyllum inophyllum	Punnai
Syzygium cumini	Naval
Madhuca longifolia	llippai
Mimusops elengi	Magilam

3) For CER: The project proponent shall allocate and utilize the CER

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Member-Secretary, SEAC

Chairman, SEAC

fund of Rs. 2.32 Crores(one time)(1.5 % of the project cost of Rs. 155 crores), for the purpose of infrastructure facilities including basic amenities like drinking water supply and sanitation, sports facilities in the nearby villages and infrastructure for schools and primary health center in the vicinity of the industry within 5km radius from the project site. The proponent should spend the CER funds before obtaining CTO from TNPCB.

4) Towards CSR activities, the project proponent shall follow the existing norms i.e. 2% of the annual profit in future. The CSR funds also should be utilised as per the directions given for CER fund utilisation.

No	Name	Designation	Signature
	Dr. K. Thanasekaran	Member	Stewar
	Dr.K.Valivittan	Member	
3	Dr.Indumathi M. Nambi	Member	
4	Dr. G. S. Vijayalakshmi	Member	
5	Dr. M. Jayaprakash	Member	Detante.
6	Shri V. Shanmugasundaram	Member	
7	Shri B. Sugirtharaj Koilpillai	Member	188 mg
8	Shri. P. Balamadeswaran	Co-opt Membe	r Ses
9	Shri. M.S. Jayaram	Co-opt Membe	er Jayaram

Member-Secretary, SEAC

Chairman, SEAC