

APPENDIX - I

(See paragraph - 6)

FORM 1

(I) Basic Information

Name of the Project:	Additional Petroleum storage Tanks at Ennore Installation.
Location / site alternatives under consideration:	Bharat Petroleum Corporation Limited, Survey No: 1556 B Vallur village and 354/1 Athipattu village, near Ennore, Ponneri Taluk, Thiruvallur Dist., Tamilnadu.
Size of the Project: *	<p>Additional Petroleum storage Tankage:</p> <p>ETHANOL : 3738 KL BIO diesel : 3738 KL ATF : 16000 KL</p> <p>Total : 23476 KL</p>
Expected cost of the project:	Rs. 66 Cr.
Contact Information:	<p>(M. Nedunchezian) (nedunchezianm@bharatpetroleum.com) Mobile phone : 9445509524 Bharat Petroleum Corporation Limited, No:1, Ranganathan gardens, Off 11 th Main road, Annanagar, Chennai 600040.</p>
Screening Category:	6 (B)
Capacity corresponding to sectoral activity (such as production capacity for manufacturing, mining lease area and production capacity for mineral production, area for mineral exploration, length for linear transport infrastructure, generation capacity for power generation etc.,)	NA

(II) Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S. No.	Information/ Check List confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	No	Existing 100 acres land
1.2	Clearance of existing land, vegetation and buildings?	No	No vegetation and Building in the land.
1.3	Creation of new land uses?	No	
1.4	Pre-construction investigations e.g. bore houses, soil testing?	Yes	Soil investigation being done.
1.5	Construction works?	Yes	Construction of 2 Nos. Above ground Petroleum product tanks for Ethanol (12.6m dia x 15.0m ht 1869 KL each) & 2 nos Above ground petroleum product for Bio Diesel (12.6m dia x 15.0m ht 1869 KL each) . 2nos of Above ground Vertical tank fro ATF (25.0m dia x 16.8m high pf 8000 KL each) Total capacity : 23476 KL 1 no 20" pipeline from adjacent HPCL Terminal to our Installation
1.6	Demolition works?	No	There is no demolition of the structures.
1.7	Temporary sites used for construction works or housing of construction workers?	No	No temporary sites were attributed for construction workers housing.
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	Yes	Excavation for tank pad and buildings
1.9	Underground works including mining or tunneling?	No	No under ground works.
1.10	Reclamation works?	No	No reclamation
1.11	Dredging?	No	No dredging
1.12	Offshore structures?	No	No offshore structures.
1.13	Production and manufacturing processes?	No	Industry operation involve in storage & distribution of petroleum products only.
1.14	Facilities for storage of goods or materials?	Yes	Receive, store and distribution of petroleum products.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	No	There is no significant solid waste OR liquid effluents. However Oil water separator will be provided.
1.16	Facilities for long term housing of operational workers?	No	There is no housing
1.17	New road, rail or sea traffic during construction or operation?	No	No new road, rail or sea traffic during construction and operation.

1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?	No	Nil
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	NIL
1.20	New or diverted transmission lines or pipelines?	No	Product pipeline will be constructed inside the Installation for handling the same.
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	No	No change of hydrology Or water courses envisaged.
1.22	Stream crossings?	No	There are no streams.
1.23	Abstraction or transfers of water form ground or surface waters?	No	NIL
1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	NIL
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	By road
1.26	Long-term dismantling or decommissioning or restoration works?	No	NIL
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	NIL
1.28	Influx of people to an area in either temporarily or permanently?	No	Only construction workers during project activities and they will be sourced locally.
1.29	Introduction of alien species?	No	NIL
1.30	Loss of native species or genetic diversity?	No	NIL
1.31	Any other actions?	Nil	Nil

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

S. No.	Information/check List confirmation	Yes/ No	Details thereof (with approximate quantities /rates, wherever possible) with source of information data
2.1	Land especially undeveloped or agricultural land (ha)	No	Existing of 100 Acres of Land will be used
2.2	Water (expected source & competing users) unit: KLD	No	Approx 3 KLD water us required for construction which will be purchased.
2.3	Minerals (MT)	No	NIL
2.4	Construction material – stone, aggregates, sand / soil (expected source – MT)	Yes	The required quantities of Stone – 500 MT (approx.) sand : 600 Cu.m will be purchased form local suppliers.
2.5	Forests and timber (source – MT)	No	NIL

2.6	Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)	Yes	DG sets will be used for the construction. 2 x 1000 KVA & 1 no 500 KVA DG set
2.7	Any other natural resources (use appropriate standard units)	No	NIL

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

S. No.	Information/Check List confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
3.1	Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)	YES	The Installation will store the Petroleum products. Rapid risk Assessment (RRA) for additional storage tanks has been done.
3.2	Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)	No	NIL
3.3	Affect the welfare of people e.g. by changing living conditions?	No	NIL
3.4	Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,	No	NIL
3.5	Any other causes	No	NIL

4. Production of solid wastes during construction or operation or decommissioning (MT/month)

S. No.	Information/Check List confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
4.1	Spoil, overburden or mine wastes	No	NIL
4.2	Municipal waste (domestic and or commercial wastes)	Yes	Food waste of 1 Kg per day during the construction & 1 kg per day during operation phase. The same will be composed and will be used as manure.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	Yes	After five years after commissioning.
4.4	Other industrial process wastes	No	NIL
4.5	Surplus product	No	NIL
4.6	Sewage sludge or other sludge from effluent treatment	No	NIL

4.7	Construction or demolition wastes	Yes	Construction debris and metal scraps will be generated during the construction phase. The construction debris will be used for laying internal roads and the metal scraps will be given to recycle.
4.8	Redundant machinery or equipment	No	NIL
4.9	Contaminated soils or other materials	No	NIL
4.10	Agricultural wastes	No	NIL
4.11	Other solid wastes	No	NIL

5. Release of pollutants or any hazardous, toxic or noxious substances to air (kg/hr)

S. No.	Information/Check List confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	No	NIL
5.2	Emissions from production processes	No	No production involves
5.3	Emissions from materials handling including storage or transport	No	NIL
5.4	Emissions from construction activities including plant and equipment	Yes	Intermittent SPM during excavation, which will be controlled by watering
5.5	Dust or odours from handling of materials including construction materials, sewage and waste	No	Only material handling equipments will be used and water will be sprayed to avoid dust.
5.6	Emissions from incineration of waste	No	NIL
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	NIL
5.8	Emissions from any other sources	No	NIL

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

S. No.	Information/Check List confirmation	Yes/No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	No	No significant noise, vibration and emissions envisaged. The vehicles and the construction equipments will be maintained properly to reduce the noise and vibration.
6.2	From industrial or similar processes	No	
6.3	From construction or demolition	Yes	
6.4	From blasting or piling	No	
6.5	From construction or operational traffic	No	
6.6	From lighting or cooling systems	No	
6.7	From any other sources	No	

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No.	Information/Check List confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	From handling, storage, use or spillage of hazardous materials	No	There will not be any risk of contamination as the products are contained within the dyke and are provided by a proper drainage system to the oil separator and the dyke will be impervious. Adequate measures will be implemented as per the statutory requirements.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	Already STP and ETP are planned in the existing phase.
7.3	By deposition of pollutants emitted to air into the land or into water	No	NIL
7.4	From any other sources	No	NIL
7.5	Is there a risk of long term build up of pollutants in the environment from these sources?	No	NIL

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

S.No.	Information/Check List confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	The layout storage tanks are prepared in line with CCOE / OISD guidelines. The handling of products as per the laid down industry practices. A risk analysis has been carried out for additional storage tanks and mitigation measure will be implemented.
8.2	From any other causes	No	NIL
8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?	No	All the foundations are earthquake proof and are designed as per IS 1893 9 Part 1) :2002 Criteria for Earthquake Resistant Design of Structures: Part 1 General Provision and buildings.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality

S. No.	Information/Check List confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	Lead to development of supporting facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.: <ul style="list-style-type: none"> • Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.) • housing development • extractive industries • supply industries • other 	No	NIL
9.2	Lead to after-use of the site, which could have an impact on the environment	No	There will not be any addition to the prevailing conditions.
9.3	Set a precedent for later developments	Yes	There will be marginal increase in the socio economic attribute due to the installation of the storage terminal.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	Yes	There will be positive impact due to the increased activity due to the proposed activity.

(III) Environmental Sensitivity

S.No.	Areas	Name/ Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	Pulicat lake 10 KM
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	No	Ennore creek on northern side
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	No	NIL
4	Inland, coastal, marine or underground waters	No	NIL

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5	State, National boundaries	No	NIL
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	NIL
7	Defence installations	No	NIL
8	Densely populated or built-up area	Atthipattu Pudhu nagar	Located outside the city limits. No dense population available in around the plant
9	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Respective facilities are available at the above villages.	Atthipattu pudhunagar which is at 2KM
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	NIL	NIL
11	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	NIL	NIL
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	NIL	NIL