



REPUBLICA DEMOCRATICA DE TIMOR-LESTE (RDTL)
MINISTERIO DE COORDENADOR DOS ASUNTOS ECONOMICOS (MCAE)
GABINETE SECRETÁRIA DE ESTADO DO AMBIENTE (GSEA)



Gabinete Secretaria de Estado
Rua D. Boaventura, Fomento,
Mandarin, Dili Timor-Leste

ENVIRONMENTAL LICENSE

Issued under Decree Law on Environmental Licensing Number 05/2011

In accordance with decision dated on 5th of November, 2018 by the Secretary of State for the Environment, Mr. Demétrio do Amaral de Carvalho, have Endorsed the Environmental Impact Statement (EIS) Environmental Management Plan (EMP) for Betano Refinery Plant project in Betano, Same, Manufahi. Due to endorsement of the EIS, EMP, and pursuant to the article 23 of Decree Law number 05/2011, issued an Environmental License for the project activity referred to in the Schedule below, subject to the conditions contained in the Annex.

Schedule

Proponent of the Project : TIMOR GAP, EP
Date Submitted Application : 5th of February 2014
Application Number : 236 / AIA-DNCPIA /II / 2014
Environmental License Number : 05 /DNCPIA-SEA / XI / 2018
Project : Betano Refinery Plant
Activity Scale : Oil refinery with capacity of 30,000 barrels per day
Category of Project : Category A
Municipality and Post Administration: Manufahi, Same
Date of Notification : 9th of November, 2018

Reference:

1. TIMOR GAP, EP, Project Document (PD) submission, 5th of February 2014,
2. DNCPIA, issued technical review, 10th of February, 2014;
3. TIMOR GAP, EP, PD revision submission, 4th of June, 2014;
4. DNCPIA, issued technical review of PD revision, 18th June, 2014;
5. TIMOR GAP, EP, PD revision submission, 27th of June, 2014,
6. DNCPIA, issued of the category project, 30th of June, 2014, classify as category A project;
7. DNCPIA, Betano Refinery Plant, categorize as a project category A is pursuant to annex I sector Oil industry (oil and gas Refinery), all classify as category A;
8. TIMOR GAP, EP, ToR draft submission, 19th of December, 2014,
9. DNCPIA, issue of the ToR technical review, 24th of January, 2015;
10. TIMOR GAP, EP, ToR revision resubmission, 28th of January, 2015;
11. DNCPIA, approval of the ToR, 6th of February, 2015;
12. TIMOR GAP, EP, Environmental Impact Statement (EIS) and Environmental Management Plan (EMP) submission, 16th of June, 2016;
13. DNCPIA, issued of the EIS and EMP technical review, 30th of October 2016;
14. TIMOR GAP, EP, EIS and EMP first revision submission, 16 of March, 2017;
15. DNCPIA, issued of the EIS and EMP first revision technical review, 12th of July, 2017;
16. TIMOR GAP, EP, EIS and EMP final submission, 6th of September 2017.
17. State secretariat of the environment, approval of the EIS and EMP, 5th of November, 2018;
18. State secretariat of the environment, issued an Environmental License, 9th of November, 2018.

Notes

1. This Environmental License is non-transferrable in accordance with Articles 22 (4) of Decree Law 05/2011;
2. Proposed changes to the project affecting environmental impacts or the project area/size, or relocation, are subject to technical review and approval in accordance with Chapter VIII of Decree Law 05/2011;
3. The Proponent is responsible for ensuring all other necessary license, permit, authorisations or recommendations are obtained from relevant government authorities;
4. The Proponent is responsible for ensuring that all subcontractors or others carrying out works must be comply with this Environmental License and EMP;
5. All future communications, six monthly EMP reports prepared by or on behalf of the proponent in relation to the project (construction and operation stage) and submitted to the National Directorate of Pollution Control and Environmental Impact (NDPCEI) shall be in both Tetum and English, and in both electronic and hard copy (printed);
6. This licence grant to the project, which the EIS and EMP has been approved dated 5th of November, 2018.

Annex - Conditions of Environmental License

The conditions contained in this Annex are to protect the environment and alleviate the adverse environmental impacts that generated by the project activity and enhance the positive impact of the project.

General Conditions

- 1. Project in accordance with the Environmental Impact Statement and Environment Management Plan documents and Environmental Licenses***
 - 1.1. The Betano Refinery Plant project should be conducted in accordance with the Environmental Management Plan (EMP) prepared by TIMOR GAP, EP, in September, 2017;
 - 1.2 The Betano Refinery Plant project (construction and operation) must be conducted in accordance with the standard as depicted in chapter 9 of the EMP;
 - 1.3 All construction activities associated with the project must be carried out strictly within the project site boundary, as set out in the Betano Refinery Plant project as depicted on sub section 4.3.1 page 4-2 of the EMP;
 - 1.4 This Environmental License is granted for first period of (2) years from the date of notification set out in the schedule. At the time renewal, NDPCEI shall determine the time granted for the second License period;
 - 1.5 Any proposed changes, alterations or additions to the Project that the Proponent wishes to undertake that are not consistent with the EIS, EMP and this Environmental License, will require an additional Environmental License or amendment of this Environmental License, in accordance with relevant provisions of *Decree Law 05/2011*;
 - 1.6 The NDPCEI may review and alter any conditions in this Environmental License, including by requiring alterations to the Environmental Management Plan, to respond to any proposed changes to any component of the Project through any application made by the Proponent to NDPCEI relating to the Project, if NDPCEI deems it necessary to do so to protect the environment.
- 2. Construction phase**
 - 2.1 Before commence of site clearing, should be identify property of community such as cultural site, land, agriculture plantation, residence, etcetera that existing within project site and communicate with the owners to relocated and compensate;
 - 2.2 Vegetation removal or clearing within project site shall be minimized and shall be carried out on land that must be cleared for areas designated for Betano Refinery Plant. The total removed area shall be compensated with the same area in or out of the project site. Vegetation that must be removed for the purposes of Betano Refinery Plant construction activities shall be cleared in an incremental manner over the course of construction phase, with re-vegetation done at the earliest possible time for each component of the Project, to minimized soil erosion and sedimentation;

- 2.3 Any threatened plant located within construction area should be transplanted as part of the reforestation program;
- 2.4 When to commence the project activity, community who living surrounding project are must be engage to offer them jobs in which could help minimize the social impacts;
- 2.5 The Proponent shall ensure that a “Community Liaison Plan” is in place throughout the course of the construction phases of the Project, which shall include a complaint handling mechanism to respond to any concerns or complaints due to impacts from the development on the surrounding communities. Especially on resettlement issues of the residents within project area, a resettlement plan shall be carefully considered and responsibility by proponent;
- 2.6 To avoid run-off of murky water to the spring and river the existing within and surrounding project site shall be active monitoring and properly manage all land piles during rain seasons;
- 2.7 Need to provide Personal Protection Equipment (PPE) such as helmet, mask, plug, glove, vest, goggles for all employee during working hours;
- 2.8 Need to control erosion to mitigate sediment and dirty water entering the spring and river that existing within and surrounding project site;
- 2.9 Soil erosion and sediment control measures shall be comply and maintained for as long as necessary after the completion of the works to ensure that there is nil or minimal harm to the spring and river;
- 2.10 Possibility generated sedimentation to the farm land of the community, river and spring, it should be regularly checked by the proponent through inspecting the excavation and stockpiles. Restoration of sedimentation areas should be done as soon as possible to prevent severe sedimentation;
- 2.11 For air quality related to fugitive dust, inspection should be done to ensure that community, community residence existing adjacent with the construction site are not affected. Hence spraying water thrice per-day within and surrounding project site to minimize dust emission;
- 2.12 The proponent must assure that public water, river water and spring water, surface water existing nearby project site are safe from silt and contamination that includes fuels and lubricants used for facility construction;
- 2.13 The proponent must be ensure the disposal of surplus material at environmentally safe disposal/fill sites and spoil stockpiles are managed properly;
- 2.14 Soils from the digging must not be disposal into river water and spring water; it must be managed properly;
- 2.15 During the construction stage, will generated the noise, vibration, dust fugitive, waste, sedimentation, soil and water contamination from the equipment and activity, it must be controlled, referring to the benchmark as depicted in chapter 9 of the EMP;
- 2.16 The Proponent shall ensure there is regular monitoring of the water quality of the river, spring and well water;
- 2.17 Work hours for construction activities shall be limited between 07.00 and 18.00 hours during the

construction phase;

- 2.18 The materials to be use for the construction of the project such as sand, stones and gravels should be apply for environmental license;
- 2.19 The Proponent shall comply with the WHO's *Air Quality Guidelines for particulate matter, ozone, nitrogen dioxide and sulfur dioxide*, and in particular shall implement appropriate dust suppression measures, including and the control of speed limits for vehicles, in particular during the dry season;
- 2.20 Avoiding in necessary eviction. If any target property area need to occupy, please negotiate in fair manner and applying prior consent principle;
- 2.21 Worker and staff compound close by community village must be develop in coordination with local leaders and the residence. Worker and staff need to respect local people, ritual, symbols of believe and cultures;
- 2.22 Do not damage ritual and the cultural site which existing within and surrounding of project site;
- 2.23 The community from the residential areas, farmlands and agricultural plantation whom are affected by construction activities must be given compensation in a fair and just manner;
- 2.24 The proponent must guarantee that community water supply facilities are not damaged during the construction activities;
- 2.25 Trucks carrying construction materials (sand, soil, stones, cement etc) must be covered by tarpaulin to prevent falling of materials from the trucks along the transporting;
- 2.26 During daytime dust fugitive generated by construction activities, it should be spraying water thrice a day within and surrounding the project site;
- 2.27 The Proponent should be ensure to prepare disposal site for solid and liquid waste that generated by construction activity, excavator, generator and vehicles;
- 2.28 The proponent should be responsible for all employees that suffered illness or accidents during construction stage;
- 2.29 The proponent must be use the company who belong environmental license or recommendation for materials construction supply such as sands, rocks and gravels;
- 2.30 The changing/alteration of project location during construction process outside the initial design must be submit additional/alteration design document submitted to Environmental Authority to issued an environmental licence;
- 2.31 No fuels sludge that generated by generator, excavators, cars and motorcycle release into river water, spring water, creek/stream, drainage and land that existing within and surrounding project site;
- 2.32 No open area burning of solid waste within and surrounding the project site during the construction phase;
- 2.33 The monitoring program shall also include monitoring of groundwater to ensure that there are no negative impacts on well water for local communities;

- 2.34 All damage of environmental generated by construction activities due to physical, ecological, economic social and culture, the proponent should responsible for compensation, rehabilitation and restoration;
- 2.35 The proponent must ensure that the solid and liquid waste generated during construction phase must be disposed at dumping site that designated by Municipality;
- 2.36 The EMP shall be modified to specify measures and/or actions that will be taken in the event that results from the monitoring programme exceed baseline values or parameters;
- 2.37 Upon completion of the construction phase, the proponent must be responsible to rehabilitated of eroded area, clean up all the solid waste and pile surplus from the construction activity around the project site;

3. Operation phase

- 3.1 The Proponent shall ensure that a “Community Liaison Plan” is in place throughout the course of the operational phases of the Project, which shall include a complaint handling mechanism to respond to any concerns or complaints due to impacts from the project on the surrounding communities;
- 3.2 Must be engage the local people in working opportunity during operation phase of each project component;
- 3.3 Need to provide Personal Protection Equipment (PPE) such as helmet, mask, plug, vest, for all employee during working hours;
- 3.4 Must be replanting the boundary of Betano Refinery Palnt project site, so that minimize the erosion and global warming;
- 3.5 The proponent should be responsible for all employees that suffered illness or accidents during operation stage;
- 3.6 Harmful liquid and solid that generate during operation of Betano Refinery Plant must be disposed to the basin that provide within project site;
- 3.7 Need the treatment process for the harmful liquid waste and solid waste that generate by Betano Refinery Plant operation, and it should be environmental friendly before release to the environment;
- 3.8 Harmful liquid spill occurrence during Betano Refinery Plant operation must be immediately restored so that do not contaminated to the physical within and surrounding project site;
- 3.9 Hazard or Dangerous Waste Treatment Plan (HDWTP) should be apply for separate Environmental License;
- 3.10 The monitoring program shall also include monitoring of groundwater to ensure that there are no negative impacts on well water for local communities;
- 3.11 The Proponent must ensure that waste collection mechanisms are adequate and that all waste is disposed of appropriately and on a regular basis;

- 3.12 Proponent shall comply with the World Health Organisation (WHO) *Guidelines for Community Noise*;
- 3.13 Must be available space for environmental green within and surrounding project site, so that minimize the hot temperature;
- 3.14 No open burning shall be permitted on the Project site during the operation phase;
- 3.15 Possibility generated fumes during engine operation, it should be controlled, maintenance and managed properly;
- 3.16 The proponent should be ensure that river and spring existing within and adjacent project site, with the project site are not contaminated during the operation stage;
- 3.17 Need the best available technology within operation area to prevent of oil leaking, oil spill and fire occurrence during the operation stage;
- 3.18 No open area burning of solid waste within and surrounding the project site during the operation stage;
- 3.19 The Proponent should be ensure to prepare disposal site for solid and liquid waste that generated by operation activity;
- 3.20 No fuels sludge that generated by engine, generator, cars and motorcycle release into river, creek/stream, spring, drainage and land that existing within and surrounding operation area;
- 3.21 Must be available the garbage bin for solid waste disposed within the operation area;
- 3.22 The proponent must ensure that the solid waste generated during operation phase must be disposed at dumping site of the Municipality;
- 3.23 During the operation stage, will generated the noise, fumes and sludge from the equipment, it must be controlled, referring to the benchmark as depicted in chapter 9 of the EMP;
- 3.24 The EMP shall be modified to specify measures and/or actions that will be taken in the event that results from the monitoring programme exceed baseline values or parameters;
- 3.25 All damage of environmental generated by operation activities due to physical, ecological, economic social and culture, the proponent should responsible for compensation, rehabilitation and restoration;
- 3.26 The proponent must ensure that the solid and liquid waste generated during operation phase must be collected and disposed at dumping site that designated by Municipality;

4. Deactivation Phase

- 4.1 Need to provide Personal Protection Equipment (PPE) such as boggy shoes, helmets, masks, earplugs, gloves, vests, goggles for all employee during working hours;
- 4.2 Should be engaged the local people in working opportunity at deactivation phase;

- 4.3 Dismantle of Refinery Plant facilities should be managed properly and disposed at the dumping site of the Municipality;
- 4.4 The proponent should be responsible for all employees that suffered illness or accidents during Refinery Plant deactivation phase;
- 4.5 No open area burning of solid waste within and surrounding the project site during deactivation phase;
- 4.6 For air quality related to fugitive dust, inspection should be done to ensure the residents who live adjacent along the project site are not affected. Hence spraying water within project site to minimize dust emission to the residential areas, river and spring;
- 4.7 The community from the residential areas, farmlands and agricultural plantations whom are affected by deactivation activities must be given compensation in a fair and just manner;
- 4.8 During deactivation stage, will generate the noise, vibration, dust fugitive, waste, soil contamination from the facilities operation, it must be controlled, referring to the standard as depicted on chapter 9 of the EMP;
- 4.9 Trucks carrying debris and solid waste must be covered by tarpaulin to prevent falling of materials from the trucks during transportation;
- 4.10 During daytime dust fugitive generated by deactivation activities, it should be sprayed with water thrice per day within and surrounding the project site;
- 4.11 All damage of environmental generated by deactivation activities due to physical, ecological, economic, social and culture, the proponent should be responsible for compensation, rehabilitation and restoration;
- 4.12. The proponent must ensure that the solid waste generated during deactivation activity must be disposed at dumping site of the Municipality;
- 2.13 Upon completion of the deactivation phase, the proponent must be responsible to clean up all the solid waste and piles surplus from the deactivation activity within and around the project site and restore of the project area;
- 3.14 The Proponent must comply all the Notes and conditions of Environmental License and Environmental Management Plan.

The NDCPEI will conduct the supervision during the construction, operation and deactivation activities refer to the Environment License and Environment Management Plan.

Dili, 9th of November, 2018

Demétrio do Amaral de Carvalho
Secretary of State for the Environment