

Republic of the Philippines Department of Environment and Natural Resources ENVIRONMENTAL MANAGEMENT BUREAU Region VIII

DENR Compound, Jones Street, Barangay 2, Tacloban City Tel No: (053) 832-1088 / (053) 832-2319 embr8_records@emb.gov.ph

Permit No: PTO-OL-R08-2022-02445 Date Issued: 25 Mar 2022
Application Type: New Date Expiration: 25 Mar 2027

PERMIT TO OPERATE Air Pollution Source and Control Installations

Pursuant to Part IV, Rule XIX of the Rules and Regulations of R.A. 8749, authority is hereby granted to:

Tongonan Geothermal Project/Subsurface - Well Services (Tongonan Geothermal Project/Subsurface -Well Services)

Tongonan, Ormoc City, Leyte

subject to the following terms and conditions:

TERMS AND CONDITIONS

- 1. This Permit is issued for the permittee to operate one (1) unit "Caterpillar" CTU Power Pack Engine rated at 325.0 HP (242 KW), one (1) unit "Detroit" Pump Engine rated at 318.0 HP (237 KW), one (1) unit "Black Diamond" Cooling Pump Engine rated at 75.0 HP (56 KW), one (1) unit "Caterpillar" Nitrogen Pump Engine rated at 525.0 HP (391 KW), one (1) unit "Fiat" Mission Pump Engine rated at 30.0 HP (22 KW) for the purpose of Prime Mover and one (1) unit "Isuzu" Generator Set rated at 60.0 KVA (48 KW) for the purpose of Standby Power, respectively at the permittee's establishment identified on this Permit. (Refer to attached Annex at page 3)
- 2. Any application for renewal of this Permit shall be filed **not less than thirty (30) days** before the expiry date indicated on this Permit.
- 3. This Permit shall be posted in a conspicuous location of the premises, and shall be adequately framed or otherwise protected against damage.
- 4. Without limiting the generality of the previous condition, the permittee shall ensure that the emissions from the permitted installations or processes comply with:
 - the National Emission Standards for Source Specific Air Pollutants as specified in Rule XXV of the IRRs of RA 8749; and
 - the National Ambient Air Quality Standards for Source Specific Air Pollutants from Industrial Sources/Operations as specified in Rule XXVI of the IRRs of 8749.
- 5. The permittee shall submit Self-Monitoring Reports to the Bureau in accordance with DENR Administrative Order No. 27 (Series of 2003) and any written instructions by the Bureau at three-monthly intervals, commencing with submission of the **first Report** on or before **April 15, 2022**. (Online Submission at https://client.emb.gov.ph/smr)
- 6. The permittee shall at all times have an appointed or designated Pollution Control Officer (PCO) pursuant to DAO 2014-02.
- 7. The permittee shall at all times allow authorized or accredited officers of the Department or the Bureau entry to the establishment and access to any part of the establishment to conduct inspections, gather information, test emissions or take samples.
- 8. The permittee shall not make or allow any alterations or modifications to operations, activities, installations, processes, plant or equipment at the establishment that might substantially change the nature or quantity of the associated emissions without obtaining the approval of the Bureau, including the obtaining of any necessary Permit to Operate.
 - 9. The permittee shall ensure that the concentrations of the emissions from the stack/exhaust serving the **one (1) unit 525.0 HP (391 kW) "Caterpillar" Nitrogen Pump Engine** shall not exceed the following limits:
 - Particulate Matter (PM): 150 milligrams per normal cubic meter;
 - Sulfur Dioxide (SO2): 700 milligrams per normal cubic meter;
 - Carbon Monoxide (CO): 500 milligrams per normal cubic meter; and
 - Nitrogen Oxide (NOx): 2000 milligrams per normal cubic meter.

Filina Fee : Php 600.00 O.R. No.: 226-03152022-983741 Date: March 15, 2022 : Php 15000.00 O.R. No.: 226-03152022-983741 Permit Fee Date: March 15, 2022 : Php 10.00 O.R. No.: 226-03152022-983741 Date: March 15, 2022 PD1856 Documentary Stamp Tax : Php 30.00 O.R. No.: 226-03152022-983741 Date: March 15, 2022



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- 10. The first testing required by the previous condition and Emission Test Reports shall be submitted to the Bureau within **three (3) months** from the date of issuance of this permit.
- 11. The testing required by the previous condition shall be repeated and Emission Test Reports shall be submitted to the Bureau at **once per two (2) year intervals**. The results of this testing shall be reported in the Self-Monitoring Reports submitted in accordance with Permit Condition No.5.
- 12. The permittee shall sample and analyze emissions of Particulate Matter (PM), Sulfur Dioxide (SOx), Carbon Monoxide (CO) and Nitrogen Oxide (NOx) from the stack/s serving the one (1) unit 525.0 HP (391 kW) "Caterpillar" Nitrogen Pump Engine in accordance with the methods specified in the IRRs of RA 8749 and including the submission of the proposed test plan to the Bureau at least two (2) weeks prior to the date of conduct of the emission test and shall submit an Emission Test Report on the results of this emission testing to the Bureau after thirty (30) days after the conduct of emission test. During the sampling of the emissions, the generator set shall be operated at an output of 30% or greater than the permitted capacity. The following data on operating conditions shall be collected during the sampling period, and included in the Emission Test Report: (a) the actual output of the (Prime Mover); (b) stack or exhaust dimensions (height and inside diameter); (c) average annual operating hours; and (d) the rate of fuel consumption.
- 13. The permittee shall burn only Diesel Fuel Oil in the one (1) unit "Caterpillar" CTU Power Pack Engine rated at 325.0 HP (242 KW), one (1) unit "Detroit" Pump Engine rated at 318.0 HP (237 KW), one (1) unit "Black Diamond" Cooling Pump Engine rated at 75.0 HP (56 KW), one (1) unit "Caterpillar" Nitrogen Pump Engine rated at 525.0 HP (391 KW), one (1) unit "Fiat" Mission Pump Engine rated at 30.0 HP (22 KW)and one (1) unit "Isuzu" Generator Set rated at 60.0 KVA (48 KW) for the whole duration of the permit validity.

Recommended by:

Approved by:

ENGR. HENNEN Y G. HAYAG OIC-Chief, Clearance and Permitting Division ENGR REYNALDO B. BARRA

OIC-Regional Director

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Annex

Fuel Burning					
ID	APSI	Capacity	Brand name	Type of Fuel	APCD
140104	CTU Power Pack Engine	325.0 HP	Caterpillar	Diesel	
140358	Pump Engine	318.0 HP	Detroit	Diesel	
140369	Cooling Pump Engine	75.0 HP	Black Diamond	Diesel	
140372	Nitrogen Pump Engine	525.0 HP	Caterpillar	Diesel	
140374	Mission Pump Engine	30.0 HP	Fiat	Diesel	
140397	Generator Set	60.0 KVA	Isuzu	Diesel	

O.R. No.: 226-03152022-983741 Filing Fee : Php 600.00 Date: March 15, 2022 Permit Fee : Php 15000.00 O.R. No.: 226-03152022-983741 Date: March 15, 2022 PD1856 : Php 10.00 O.R. No.: 226-03152022-983741 Date : March 15, 2022 Documentary Stamp Tax : Php 30.00 O.R. No.: 226-03152022-983741 Date : March 15, 2022



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