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| cnmi seal latest**Ralph DLG. Torres**Governor**Arnold I. Palacios**Lt. Governor | Commonwealth of the Northern Mariana IslandsOFFICE OF THE GOVERNORBureau of Environmental and Coastal QualityDEQ: P.O. Box 501304, DCRM: P.O. Box 10007, Saipan, MP 96950-1304DEQ Tel.: (670) 664-8500/01; Fax: (670) 664-8540 DCRM Tel.: (670) 664-8300; Fax: (670) 664-8315[www.deq.gov.mp](http://www.deq.gov.mp) and [www.crm.gov.mp](http://www.crm.gov.mp)  | BECQ new logo latest**Eli D. Cabrera** Administrator**Zabrina S. Cruz**Director, DEQ |

Technical Support Document
Synthetic Minor Source Permit

Permittee: Mariana E-Land Corporation

Source: Kensington Hotel Saipan

Location: P.O. Box 500009
 San Roque, Saipan, MP 96950

Source Contact: Hosik “Brian” Shin, Chief Executive Officer
 Arnel Garamonte, Engineering Assistant Manager
 670-322-3311

Proposed Permit #: 2022-AP-001

Pursuant to the provision of Clean Air Act (CAA) section 110(a) and 301(d) and the Code of Federal Regulations (CFR) title 40, sections 49.151-161, the Commonwealth of the Northern Mariana Islands (CNMI) Bureau of Environmental and Coastal Quality (BECQ) is proposing to issue a Synthetic Minor Source permit to Mariana E-Land Corporation (“Permittee”) for Kensington Hotel Saipan (“Source”), located in San Roque, Saipan. This proposed permit would place enforceable restrictions on the potential to emit of the Source’s existing operations.

This Technical Support Document (TSD) provides BECQ’s analysis of the application and describes the equipment that is authorized to be operated, and the permit condition that will be included in the synthetic minor source permit.

**1. Source Description**
Kensington Hotel Saipan is an all-inclusive resort that comprises of a 15-story building with 313 guest rooms, numerous outdoor recreational zones, 8 eatery facilities, and two staff housings managed by Mariana E-Land Corporation. Kensington Hotel is located in the northern portion of Saipan, CNMI in the village of San Roque. Kensington Hotel Saipan, previously known as Palm’s Resort Saipan, officially opened in July 2016.

BECQ’s Division of Environmental Quality (DEQ) requires new and modified sources within the CNMI to apply and obtain a permit before construction or modification of air emission sources. Existing sources, prior to the enactment of CNMI’s Air Pollution Control Regulations (APCR), were directed to submit a complete minor source permit application within six months after the effective date of CNMI’s APCR. On October 15, 2021 the Source submitted a minor source permit application to BECQ to place enforceable operating restrictions on five existing diesel-fired generators and two existing diesel-fired boilers at Kensington Hotel. The application was deemed complete on November 15, 2021. No prior air permits were issued for Kensington Hotel in the past. The seven emission units are located throughout three adjacent properties owned and operated by Kensington Hotel Saipan. Specifically, three generators and two boilers are located in the main Kensington Hotel facility, one generator is located in the Kensington Hotel Pau-Pau Terrace staff housing, and one generator is located in the Kensington Hotel Dormitory staff housing. For this TSD document, “Kensington Hotel” encompasses all three locations. BECQ determined these locations as a single source due to common ownership and management control, and activities are located within adjacent properties.

After initial consultation with BECQ, the Permittee applied for a minor source permit to avoid being considered a major source subject to EPA’s Title V major source operating permit program. Following application reviewal and potential to emit calculations (PTE), Kensington Hotel surpassed major source emissions level for CO. A submission of a separate synthetic minor source or major source permit application was not needed by BECQ . The Permittee has proposed to take operating and emission limitations that will limit the existing Source’s PTE for CO to below the major source thresholds, as explained in Section 3. The Source’s existing operations are described below in Section 2. The Commonwealth of the Northern Mariana Islands is designated unclassifiable/attainment for all NAAQS due to the lack of monitoring or modeling data to characterize air quality in CNMI.

**2. Existing Emission-Generating Units and Activities**

The existing Source consists of five diesel powered generators and two diesel-fired boilers. Two of the generators, identified in the proposed permit as Emission Units (EU) 1-2, are classified as prime generators. These generators were commissioned in 2015 and 2019 and are used to supply power throughout Kensington Hotel resort, including auxiliary support facilities.

Three of the generators, identified in the proposed permit as EUs 3-5, are used solely for emergencies and are considered emergency generators. These generators were commissioned between 2015-2021 and are used as a backup energy supply during power outages for the Kensington Hotel Dining Hall, Kensington Hotel Dormitory, and Kensington Hotel Pau-Pau Terraces. All three generators may also be operated for annual testing and maintenance. All electrical power generated by EUs 3-5 are used onsite and not sent to the grid.

The diesel-fired boilers (EU 6 and EU 7) are used to produce hot water at the Source. For purposes of calculating emissions estimations for this permit action, they are assumed to operate 24 hours per day, year-round. Table 1 below includes a description for the existing generators and boilers.

**Table 1 – Existing Kensington Hotel Generator Plant Emission Unit Description**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Unit ID  | Unit Description | Make/Model | Engine Power/Output  | Use  | Fuel  |
| EU 1 | Prime Generator | Cummins QSK50-G6 | 1749 kilowatts | Prime  | ULSD |
| EU 2 | Prime Generator | Cummins QSK50-G4 | 1655 kilowatts | Prime  | ULSD |
| EU 3 | Emergency Generator  | Cummins VT-1710G | 510 kilowatts | Emergency | ULSD |
| EU 4 | Emergency Generator | Perkins JGDF5007 | 651 kilowatts | Emergency | ULSD |
| EU 5 | Emergency Generator | FPT Industrial F4HE0685A\*J | 220 kilowatts | Emergency | ULSD |
| EU 6 | Boiler  | Bryan BoilersAB250-S-150/15-FD0 | 2.44 MMBtu/hr | Hot Water  | ULSD |
| EU 7 | Boiler  | Bryan BoilersAB250-S-150/15-FD0 | 2.44 MMBtu/hr | Hot Water  | ULSD |

\*ULSD: Ultra-Low Sulfur Diesel (Maximum Sulfur Content of 15 ppm)

This Synthetic Minor Source permit action proposes to limit the amount of diesel fuel that may be combusted per year in EUs 1-2. Under these limits, Kensington Hotel’s PTE would fall under major source thresholds for all criteria air pollutants.

**3. Summary of Emissions**

Attachment 1 includes detailed fuel consumption and emission calculations, including emissions factors used in the calculations. These calculations include all permitted equipment at the Source. The calculations also revise the hours of operation proposed in the application, based on subsequent discussions with the Permittee. The following discussion summarizes the Attachment 1 calculations.

*Synthetic Minor Source Emission Limitations for Existing Operations*

The Permittee has proposed to take operating and emission limitations at EUs 1-2 that will limit the existing Source’s PTE for CO to below the major source thresholds. These limitations will be included in Section 2.17 of the proposed permit. Under the proposed conditions, combined diesel fuel consumption at EUs 1-2 would be limited to 532,503 gallons on a 12-month rolling average (approximately equivalent to the generators operation at full load for 12,410 combined hours). The fuel consumption of EUs 1-2 would be measured by a fuel meter and by recordkeeping of diesel fuel deliveries to the Source. No operating limitations are imposed on emergency generators, which used 1500 hours per year each for emission calculations, and operation of the two diesel-fired boilers at 8,760 hours per year each.

Table 2 below shows the Source’s uncontrolled and controlled PTE, and the applicable permitting thresholds for major NSR and title V in the Northern Mariana Islands. Uncontrolled PTE reflects operation of the two non-emergency prime generators at 100% load for 8,760 hours per year each, operation of the emergency generators of 1500 hours per year each, and operation of the two diesel-fired boilers 8,760 hours per year each.

**Table 2 –Kensington Hotel Existing Potential to Emit with and without Synthetic Minor Limits**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Potential to Emit w/o Synthetic Minor Limit (tpy)  | Potential to Emit w/Synthetic Minor Limit (tpy)  | Title V and NSR Major Source Thresholds (tpy)  |
| CO | 125.13 | 92.49 | 100 |
| NOx | 61.94 | 61.94 | 100 |
| SO2 | 0.22 | 0.22 | 100 |
| VOC | 7.96 | 7.96 | 100 |
| PM | 4.07 | 4.07 | 100 |
| PM10 | 4.27 | 4.27 | 100 |
| PM2.5 | 4.16 | 4.16 | 100 |

Using the AP-42 emission factors, the worst-case emissions under these operational limits would be 94.49 tpy of CO emissions. Since the engines do not operate at 100% load, the draft permit limits fuel usage to a 12-month polling average of 532,503 gallons, representing emission equivalent to 12,410 hours of operation.

**4. Permit Content**

*Section 1- General Provisions*

1. Construction and Operation

The specified Emission Units are already constructed at the location specified in the Application. The permittee shall operate the specified Emission Units and any associated air pollution control equipment in compliance with this permit and all other applicable federal and territorial air quality regulations; and in a manner consistent with the Application.

1. Location

This permit only authorizes the permittee to operate the permitted source at the location specified in the Application.

1. Liability

This permit does not release the permittee from any liability for compliance with other applicable federal and territorial environmental laws and regulations, including the CAA and the Commonwealth Environmental Protection Act.

1. Severability

The provisions of this permit are severable. If any portion of this permit is held invalid, the remaining terms and conditions of this permit shall remain valid and in force.

1. Compliance

The permittee must comply with all provisions of this permit, including emission limitations that apply to the specified emissions units. Non-compliance with any permit provision is a violation of the permit and may constitute a violation of the CAA and the Commonwealth Environmental Protection Act, and is grounds for an enforcement action, and is grounds for the issuing authority to revoke and terminate the permitted source’s coverage under this permit.

1. Reporting Discontinuance

Within thirty (30) days of permanent discontinuance of the operation of any synthetic minor source, the discontinuation shall be reported in writing to the Administrator by a responsible official of the source.

1. Unavailable Defense

It is not a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the provisions of this permit.

1. Property Rights

The permit does not convey any property rights of any sort or any exclusive privilege.

1. Information Requests

You, as the permittee, shall furnish to the issuing authority, within thirty (30) calendar days, any information that the issuing authority may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. For any such information claimed to be confidential, the permittee must submit a claim of confidentiality.

1. Inspection and Entry

Upon presentation of proper credentials, the permittee must allow a representative of the issuing authority to:

* 1. Enter upon the premises where a source is located or emissions-related activity is conducted or where records are required to be kept under the conditions of the permit;
	2. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
	3. Inspect, during normal business hours or while the source is in operation, any facilities, equipment (including monitoring and air pollution control equipment), practices or operations regulated or required under the permit;
	4. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
	5. Record any inspection by use of written, electronic, magnetic and photographic media.
1. Posting of Permit

Sections 1 through 6 of this permit for the specified emission units must be posted prominently at the facility, and the emission units and any associated air pollution control equipment must be labeled with the identification name or number listed in the permit and in the Application.

1. Credible Evidence

For the purpose of establishing whether the permittee violated or is in violation of any requirement of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the permittee had performed the appropriate performance or compliance test or procedure.

*Section 2 – Emission Unit Limitations and Standards*

1. The permittee shall maintain and operate the specified emission units in a manner consistent with good air pollution control practices for minimizing emissions of regulated pollutants and considering the manufacturer’s recommended operating procedures at all times, including periods of startup, shutdown, maintenance and malfunction. The issuing authority will determine whether the permittee is using acceptable operating and maintenance procedures based on information available to the issuing authority which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, review of operating and maintenance records, and inspection of the permitted source.
2. The maximum rated power generation of the specified emission units at this facility shall be 1749 kilowatts (kW) or less for EU1, 1655 kilowatts (kW) or less for EU2, 510 kilowatts (kW) or less for EU3, 651 kilowatts (kW) or less for EU4, 220 kilowatts (kW) or less for EU5, 2.44 MMBtu/hr or less for EU6, and 2.44 MMBtu/hr or less for EU7.
3. The specified emission units shall only use diesel fuel. The sulfur content of the diesel fuel shall not exceed 15 parts per million (ppm) by weight.
4. The specified emission units shall not cause to be discharged into the atmosphere any gases that exhibit 20% opacity or greater averaged over any six consecutive minute period. During start-up, shutdown, or when breakdown of equipment occurs, the specified emission unit may discharge into the atmosphere air pollutants of a density not darker than 60% opacity.
5. EUs 1 and 2 (Existing Primary Generators)
a. Combined throughput of diesel fuel for EUs 1 and 2 shall not exceed 532,503 gallons of diesel fuel for any 12-month rolling period.
6. EUs 3-5 (Existing Emergency Generators)
a. EUs 3-5 shall be operated only for testing and maintenance of the emission units, required regulatory purposes, and power outages. Operation for maintenance, testing, and required regulatory purposes shall not exceed 100 hours per calendar year.

Section 3- Monitoring and Testing Requirements

1. EUs 1 and 2 (*Primary Generators)*
a. The permittee shall monitor fuel use of the specified emission units on a monthly basis in gallons.
b. The permittee shall monitor all maintenance and repair activities conducted on the specified emission units.
c. The permittee shall maintain fuel purchase receipts, showing the fuel type, sulfur content, date of delivery, and amount (gallons) of fuel delivered to the site. Fuel sulfur content may be demonstrated by providing the fuel supplies specification sheet for the type of fuel purchased and received.
2. EUs 3-5 (*Emergency Generators)*
a. The permittee shall monitor the monthly hours of operation and current calendar year total hours of operation;
b. The permittee shall monitor the monthly hours used for emergency purposes and monthly hours used for non-emergency purposes;
c. The permittee shall monitor fuel use of the specified emission units on a monthly basis in gallons.
d. The permittee shall monitor all maintenance and repair activities conducted on the specified emission units.
e. The permittee shall maintain fuel purchase receipts, showing the fuel type, sulfur content, date of delivery, and amount (gallons) of fuel delivered to the site. Fuel sulfur content may be demonstrated by providing the fuel supplies specification sheet for the type of fuel purchased and received.

Section 4- Recordkeeping Requirements

1. The permittee shall maintain all records required to be kept by this permit onsite for at least five (5) years from the date of origin, unless otherwise stated in this permit.
2. The permit Application and all documentation supporting that application shall be maintained by the permittee for the duration of time the specified emission units are covered under this permit.
3. Records for Primary Generators
4. The amount of fuel used each month in gallons;
5. All maintenance and repair activities conducted;
6. Fuel delivery and purchase receipts.
7. Records for Emergency Generators
	1. The monthly hours of operation specifying the hours used for emergency purposes and for non-emergency purposes, and the current calendar year total hours of operation;
	2. The amount of fuel used each month in gallons;
	3. All maintenance and repair activities conducted;
	4. Fuel delivery and purchase receipts.

Section 5- Annual Fee Requirements

1. Annual fees shall be paid in full:

 a. Within sixty (60) days after the end of each calendar year; and

 b. Within thirty (30) days after the permanent discontinuance of the minor source.

1. The annual fees shall be determined and submitted in accordance with applicable Air Pollution Control Regulations.

Refer to *§ 65-10-605 Annual Emission Fees for Minor or Synthetic Minor Sources* for information on Annual Fee Requirements.

1. The annual emissions data for which the annual fees are based shall accompany the submittal of

 any annual fees and submitted on forms furnished by the Division of Environmental Quality.

1. The annual fees and the emission data shall be mailed to or paid at the *Division of Environmental Quality P.O. Box 501304 Saipan, MP 96950* located at Middle Road, Gualo Rai. Please have checks be made payable to CNMI Treasury

Section 6- Notification and Reporting Requirements

1. *Compliance Plan*
The permittee shall submit a written or electronic notice to the issuing authority within sixty (60) days of the issuance of this permit:
	1. A compliance statement acknowledging the conditions of this permit and how the permittee intends to meet permit requirements;
	2. A copy of monitoring forms required under Condition 23 and 24.
2. *Notification of Closure*

The permittee must submit a report of any permanent or indefinite closure to the issuing authority in writing within thirty (30) calendar days after the cessation of all operations at the facility. The notification must identify the owner, the current location, and the last operating location of the specified emission units. It is not necessary to submit a report of closure for regular, seasonal closures, or closures due to intermittent operational constraints.

1. *Annual Reports*The permittee shall submit an annual report on or before March 15 of each year to BECQ. The annual reports shall cover the period from January 1 to December 31 of the previous year and shall include:
a. Summaries of the required monitoring and recordkeeping in Section 3 and 4;
b. Summaries of deviation reports submitted pursuant to Condition 32.
2. *Deviation Reports*

Except for emergencies, in the event any emissions units, air pollution control equipment, or related equipment malfunctions or breaks down and causes the emission of air pollutants in violation of these rules or a permit, the owner or operator shall immediately notify the BECQ of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable, but not later than seven days after the malfunction or breakdown.

* 1. The owner or operator shall provide the following information in writing within five working days of the malfunction or breakdown:
1. Identification of each affected emission point and each emission limit exceeded;
2. Magnitude of each excess emission;
3. Time and duration of each excess emission;
4. Identity of the process or control equipment causing each excess emission;
5. Cause and nature of each excess emission;
6. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the CNMI ambient air quality standards;
7. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
8. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.
9. The submittal of the notice shall not be a defense to an enforcement action.
10. *Reporting and Notification Address*

The permittee shall send all required and requested reports and documentation to the issuing authority at the mailing address below:

Administrator

Bureau of Environmental and Coastal Quality

Gualo Rai Center, Chalan Pale Arnold Rd

P.O. Box 501304

Saipan, MP 96950

1. *Certification*

All reports and documentation required by this permit shall include the signature of a responsible official as to the truth, accuracy, and completeness of the information. The submittal must state that, based on information and belief formed after reasonable inquiry, the statements and information are true, accurate, and complete. If the permittee discovers that any reports or notification submitted to the reviewing authority contain false, inaccurate, or incomplete information, the permittee shall notify the issuing authority immediately and correct or amend the submittal as soon as is practicable.

Section 7- Changes to this Permit

1. *Permit Termination, Suspension, Reopening, and Amendment*

The Administrator, at the Administrator’s sole discretion or on the petition of any person, may terminate, suspend, reopen, or amend any minor source permit if, after affording the permittee an opportunity for a hearing in accordance with the Administrative Procedures Act 1 CMC §§ 9101, et seq., the Administrator determines that:

1. The permit contains a material mistake made in establishing the emissions limitations or other requirements of the permit;
2. Permit action is required to assure compliance with the requirements of the Act; 2 CMC, Division 3, Chapter 1; and these rules;
3. Permit action is required to address additional requirements of the Act; 2 CMC, Division 3, Chapter 1; and these rules;
4. There is a violation of any condition of the permit;
5. The permit was obtained by misrepresentation or failure to disclose fully all relevant facts;
6. The source is neither constructed nor operated in accordance with the application for the minor source permit and any information submitted as part of the application;
7. There is a change in any condition that requires either a temporary or permanent reduction or elimination of the permitted emissions;
8. More frequent monitoring or reporting by the permittee is necessary; or
9. Such is in the public interest, as determined pursuant to 2 CMC, Division 3, Chapter 1.

**6. Public Participation**

A. Public Comment Period

In accordance with CNMI’s Air Pollution Control Regulations, specifically **NMIAC § 65-10-508** and **NMIAC § 65-10-509,** BECQ must provide public notice and a 30-day public comment period to ensure that the affected community and the general public have reasonable access to the application and draft permit information.

The draft permit, this TSD, and all other supporting materials for the draft permit are available for review at either of the following locations:

 CNMI Bureau of Environmental and Coastal Quality
 Clean Air Branch Office

 Gualo Rai Center, Chalan Pale Arnold Rd

 P.O. Box 501304, Saipan, MP 96950
 (670)-664-8500/8516

 Kensington Hotel Saipan
 San Roque, Chalan Pale Arnold Rd

 P.O. Box 500009, Saipan, MP 96950

 Contact: Arnel Garamonte, Engineering Assistant Manager

 (670)-322-3311

Any person may submit written comments on the draft permit during the public comment period.

These comments must raise any reasonably ascertainable issues with supporting arguments by the

close of the public comment period. Anyone may request a public hearing pursuant to **NMIAC § 65-10-508** prior to the end of the public comment period. BECQ accepts comments and requests for a public

hearing by mail to the BECQ address listed above and via email to deq.air@becq.gov.mp. For written or emailed comments, we ask that commenters please include the subject line: “Comments on Proposed Synthetic Minor Source Permit for Kensington Hotel Saipan.”

B. Final Synthetic Minor Source Permit Action

A final permit becomes effective 30 days after permit issuance, unless: (1) a later effective date is specified in the permit; or (2) appeal of the final permit is made; or (3) the permitting authority makes the permit effective immediately upon issuance, which it can do only if no comments resulted in a change in the draft permit or a denial of the permit. We will send notice of the final permit action to any individual who commented on the draft permit during the public comment period. Anyone may request a copy of the final permit at any time by contacting the BECQ Clean Air Branch Permits Office at deq.air@becq.gov.mp or by calling (670)-664-8500/8516.