



Commonwealth of the Northern Mariana Islands
OFFICE OF THE GOVERNOR
Bureau of Environmental and Coastal Quality
DEQ: P.O. Box 501304, DCRM: P.O. Box 10007, Saipan, MP 96950-1304
DEQ Tel.: (670) 664-8500/01; Fax: (670) 664-8540
DCRM Tel.: (670) 664-8300; Fax: (670) 664-8315
www.deq.gov.mp and www.cnm.gov.mp



Technical Support Document

Synthetic Minor Source Permit

Permittee: Fluor Intercontinental, Inc.

Source: Tinian North Field Asphalt Plant

Location: Tinian North Field, Tinian, CNMI

Source Contact: James D. Bailey, Project Manager or Cristopher Waechter, Environmental Manager

Application #1: Permit No. 2025-AP-002

Pursuant to the provisions of Clean Air Act (CAA) section 110(a) and Northern Mariana Islands Administrative Code (NMIAC) Title 65, the Commonwealth of the Northern Mariana Islands (CNMI) Bureau of Environmental and Coastal Quality (BECQ) Division of Environmental Quality (DEQ) is proposing to issue a Synthetic Minor Source permit to Fluor Intercontinental, Inc. ("Permittee") for the Tinian North Field Asphalt Plant ("Source"), located in Tinian North Field, Tinian, CNMI. This proposed permit would place enforceable restrictions on the potential to emit for the Source's 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 conditions that will be included in the synthetic minor source permit.

1. Source Description

The Tinian North Field Asphalt Plant, constructed and operated by Fluor Intercontinental, Inc., will support the rehabilitation of the existing Tinian North Field runways. The plant will facilitate on-site production of hot mix asphalt, enabling efficient and timely resurfacing, repair, and structural enhancement of the runway surfaces to meet current safety and operational standards.

BECQ's Division of Environmental Quality (DEQ) requires new and modified sources within the CNMI to apply and obtain a permit before the construction or modification of air emission sources. On July 22, 2025, the Source submitted a stationary minor source permit application to BECQ for a permit to construct and operate emission units at the site. The application was deemed complete on August 20, 2025. Following application review and potential to emit calculations (PTE) for the proposed project, Fluor Intercontinental, Inc.'s PTE surpassed the major source emissions threshold for CO. The Permittee has proposed to take operating and emission limitations that will limit the Source's PTE for CO to below the Title V major source thresholds, as explained in Section 3. The Source's 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 and New Emission-Generating Units and Activities

The current Source consists of eleven (11) diesel powered generators, one (1) hot mix asphalt batch plant, and one (1) rock crushing and screening plant. All generators, identified in the proposed permit as Emission Units (EU) 1-11, are classified as non-emergency (prime) engines. These generators were commissioned after 2021, utilize Final Tier 4 engines, and are used to supply power to the facility.

Table 1 below includes a description of the emission units that will be utilized for the project.

Table 1 – Tinian North Field Asphalt Plant Equipment List

Unit ID	Unit Description	Make/Model	Power Rating	Engine Tier	Use	Fuel
EU 1	Generator	Shindaiwa Generator Model DKG45F and an Isuzu Engine Model BP-4LE2X	36 kW & 65 HP	Tier 4	Prime	ULSD
EU 2	Generator	Shindaiwa Generator Model DKG45F and an Isuzu Engine Model BP-4LE2X	36 kW & 65 HP	Tier 4	Prime	ULSD
EU 3	Generator	Shindaiwa Generator Model DKG45F and an Isuzu Engine Model BP-4LE2X	36 kW & 65 HP	Tier 4	Prime	ULSD
EU 4	Generator	Shindaiwa Generator Model DKG45F and an Isuzu Engine Model BP-4LE2X	36 kW & 65 HP	Tier 4	Prime	ULSD

EU 5	Generator	EPG Generator Model MV-305 and Volvo Penta Engine Model 1672VE	279 kW and 374 HP	Tier 4	Prime	ULSD
EU 6	Generator	EPG Generator Model MV-305 and Volvo Penta Engine Model 1672VE	279 kW and 374 HP	Tier 4	Prime	ULSD
EU 7	Generator	Taylor Power Systems Generator Model TM630 and Volvo Penta Engine Model TWD1683GE	504 kW and 919 HP	Tier 4	Prime	ULSD
EU 8	Generator	Taylor Power Systems Generator Model TM630 and Volvo Penta Engine Model TWD1683GE	504 kW and 919 HP	Tier 4	Prime	ULSD
EU 9	Generator	Taylor Power Systems Generator Model TM1250 and Volvo Penta Engine Model TWD1683GE	1000 kW and 1837HP	Tier 4	Prime	ULSD
EU 10	Generator	Taylor Power Systems Generator Model TM1250 and Volvo Penta Engine Model TWD1683GE	1000 kW and 1837 HP	Tier 4	Prime	ULSD
EU 11	Generator	Generac Generator Model RD030 and Perkins Engine Model 404D-22TA	30 kW and 49 HP	Tier 4	Prime	ULSD
EU 12	Rock Crushing and Screening Plant	SAES	150 tph	N/A	Rock Crushing & Screening	N/A
EU 13	Hot Mix Asphalt Batch Plant	Marini Model Top Tower 3000	240 tph	N/A	Asphalt Production	N/A

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

3. Summary of Emissions

Attachment 1 includes detailed emission calculations, including emissions factors used in the calculations. These calculations include all permitted equipment at the Source. The following discussion summarizes the Attachment 1 calculations.

Synthetic Minor Source Emission Limitations for New Operations

The Permittee has proposed to take operating and emission limitations on EU 13 that will limit the Source's PTE for CO to below the Title V major source threshold of 100 tpy. These limitations will be included in Section 4, Condition 17 of the proposed permit.

The hot-mix asphalt production at the asphalt batch plant will be limited to 30,000 tons per month and monthly production will be monitored and recorded in tons.

No operating limitations are imposed on EUs 1–12. Therefore, emissions for the non-emergency engines (EUs 1–11) were estimated based on 8,760 operating hours. Emissions from the rock crushing and screening plant (EU 12) were calculated using its 150 tph capacity, assuming single-operation design with wet suppression for fugitive dust control.

Table 2 below shows the Source’s uncontrolled and controlled PTE and the applicable permitting thresholds title V in the Northern Mariana Islands. Uncontrolled PTE reflects the operation of the eleven (11) non-emergency prime engines/generators at 100% load for 8760 hours annually, hot-mix asphalt batch plant at 240 tph, and rock crushing and screening plant at 150 tph.

Table 2 –Tinian North Field Asphalt Plant 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)	NSR Major Source Thresholds (tpy)
CO	151.05	35.66	100
NO _x	64.43	31.33	100
SO ₂	12.37	2.79	100
VOC	39.66	18.49	100
PM	81.15	21.43	100
PM ₁₀	45.43	12.51	100
PM _{2.5}	18.63	5.23	100

Using EPA emission standards and manufacturers’ specification sheets as emission factors, the worst-case emissions under these operational limits would be 35.66 tpy of CO emissions. The permit limits the asphalt plant throughput limit to 30,000 tons/month.

4. Review of Applicable Requirements

40 CFR PART 1090—REGULATION OF FUELS, FUEL ADDITIVES, AND REGULATED BLEND STOCKS

Diesel fuel used in the CNMI is exempted from 1090 subpart C and D fuel requirements pursuant to 40CFR § 1090.620. Instead, all diesel fuel used at this source/facility is required to utilize ultra-low sulfur diesel pursuant to the requirements of NMIAC Title 65.

40 CFR Part 60 Subpart IIII

EUs 1 – 11 are new (after 2006) non-emergency stationary reciprocating internal combustion engines (RICE) located at an area source of hazardous air pollutants (HAP) emissions. Therefore, these units are not subject to Subpart ZZZZ, but instead are subject to NSPS *40 CFR Part 60 Subpart IIII provisions*.

The permittee is subject to the following requirements:

1. The Permittee must comply with the emission standards for new CI engines in 40 CFR § 60.4201 for their 2007 model year and later stationary CI ICE.
2. The permittee shall operate and maintain the new CI engines according to the manufacturer's emission-related written instructions.
3. The permittee is prohibited from changing emission related settings of the new CI engines in a way

that is not permitted by the manufacturer.

4. The permittee must meet the requirements of 40 CFR part 1068, as applicable with respect to EUs 1-11.

40 CFR Part 60 Subpart OOO

EU 12 is a fixed nonmetallic mineral processing plant constructed after August 31, 1983, and is therefore subject to NSPS 40 CFR Part 60 Subpart OOO provisions.

The permittee is subject to the following requirements:

1. The permittee must comply with the opacity standards in 40 CFR § 60.672(b) and (c), which limit visible emissions to 12 percent opacity for crushers and 7 percent opacity for screens, conveyor transfer points, and other affected units. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the emission limits.
2. The permittee must perform monthly periodic inspections to check that water is flowing to discharge spray nozzles in the wet suppression system. The owner or operator must initiate corrective action within 24 hours and complete corrective action as expediently as practical if the owner or operator finds that water is not flowing properly during an inspection of the water spray nozzles. The owner or operator must record each inspection of the water spray nozzles, including the date of each inspection and any corrective actions taken, in the logbook required under § 60.676(b).
3. The permittee must conduct initial performance testing and ongoing visible emissions monitoring in accordance with EPA Method 9, as required under 40 CFR § 60.11 and 60.675.
4. The permittee shall maintain records of control equipment inspections, maintenance activities, and production rates as specified in 40 CFR § 60.676(b) and (c).
5. The permittee must comply with all applicable reporting requirements in 40 CFR §§ 60.7 and 60.676, including performance test results and any deviations from standard operating conditions.

40 CFR Part 60 Subpart I

EU 13 is a hot mix asphalt facility constructed after June 11, 1973, and is therefore subject to NSPS 40 CFR Part 60 Subpart I provisions.

The permittee is subject to the following requirements:

1. The permittee must comply with particulate matter standards for hot mix asphalt facilities in 40 CFR § 60.92 for their hot mix asphalt batch plant.
2. The permittee shall conduct an initial performance test according to 40 CFR § 60.93 for particulate matter using EPA Method 5 and an opacity test using Method 9 within 60 days of achieving maximum production, but no later than 180 days after startup.

Local code applicable requirements:

1. The permittee shall comply with NMIAC § 65-10-102. No person shall cause or permit the emission of visible air pollutants greater than 20 percent opacity, except during startup, shutdown, or equipment breakdown, when emissions shall not exceed 60 percent opacity for more than six minutes in any consecutive 60-minute period.

2. The permittee shall comply with NMIAC § 65-10-103 by taking reasonable precautions to prevent visible fugitive dust from becoming airborne. In no case shall visible fugitive dust be discharged beyond the property boundary from which it originates.
3. Beginning one year after the granting of the enforceable conditions, the permittee and/or authorized representative shall provide a certification to BECQ that the facility has operated all emission units within the limits imposed by the permit conditions. This certification shall include a brief summary of the emissions subject to the conditions for that time period and a comparison to those threshold levels of a Title V major source. The permittee must be in compliance with all emission limitations, operating limitations, and other applicable requirements at all times. (Basis NMIAC § 65-10-506)
4. Except as specified in NMIAC § 65-10-605 (b), the permittee shall pay an annual emissions fee in full within the first 60 days of each calendar year and a closure fee shall be paid within 30 days after the permanent discontinuance of the minor source. The total of such payment shall be based on the provisions in NMIAC § 65-10-605. (Basis NMIAC § 65-10-605)

5. 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 the following location:

CNMI Bureau of Environmental and Coastal Quality
Gualo Rai Center, Chalan Pale Arnold Rd
P.O. Box 501304, Saipan, MP 96950
(670)-664-8500/8512/8534

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 Fluor Intercontinental, Inc."

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 Justin Pangelinan at (670)-664-8500/12.