

**Minor Modification to a Temporary Covered Source  
Review Summary**

**Application No:** 0040-14

**Permit No.:** 0040-01-CT

**Applicant:** Maui Paving, LLC.

**Facility Title:** 186 tph Hot Mix Asphalt Concrete Plant

**Location:** Camp 10, Ameron Quarry, Puunene, Maui

**Responsible Official:** Norman Shinno  
Plant Manager  
(808) 877-2755

**Contact Person:** Christopher Steele  
Manager, Environmental Compliance  
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**Mailing Address:** Maui Paving, LLC.  
P.O. Box 330838  
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**Application Date:** Dated August 13, 2007. Additional information dated December 14, 2007.

**Proposed Project:**

SICC: 2951 (Asphalt Paving Mixtures and Blocks)

Maui Paving, LLC. is proposing to modify its existing 186 tph hot mix asphalt concrete plant permitted under Temporary Covered Source Permit No. 0040-01-CT. This minor modification proposed to replace the existing 725 kW diesel engine generator with an EPA Tier 2 certified 725 kW diesel engine generator due to the poor condition of the generator.

This application is considered to be a minor modification since it meets the minor modification definition per HAR §11-60.1-81:

1. Does not increase the emissions of any air pollutant above the permitted emission limits;
2. Does not result in or increase the emissions of any air pollutant not limited by permit to levels equal to or above:
  - a. 500 pounds per year of a hazardous air pollutant;
  - b. twenty-five percent of significant amounts of emission as defined in section 11-60.1-1, paragraph (1) in the definition of "significant";
  - c. five tons per year of carbon monoxide; or
  - d. two tons per year of each regulated air pollutant other than carbon monoxide;
3. Does not violate any applicable requirement;
4. Does not involve significant changes to existing monitoring requirements or any

relaxation or significant change to existing reporting or recordkeeping requirements in the permit. Any change to the existing monitoring, reporting, or recordkeeping requirements that reduces the enforceability of the permit is considered a significant change;

5. Does not require or change a case-by-case determination of an emission limitation or other standard, a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis;
6. Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement, and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
  - a. A federally enforceable emissions cap assumed to avoid classification as a modification pursuant to any provision of Title I of the Act or subchapter 7; and
  - b. An alternative emissions limit approved pursuant to regulations promulgated pursuant to Section 112(i)(5) of the Act or subchapter 9; and
7. Is not a modification pursuant to any provision of Title I of the Act.

The application fee for a minor modification to a temporary covered source permit of \$100.00 was submitted and processed.

**Equipment Description:**

One (1) Cummins 725 kW diesel engine generator, model no. QST30-G5. Manufactured after April 1, 2006. EPA Tier 2 certified.

**Air Pollution Controls:**

The diesel engine generator burns no. 2 diesel fuel with a maximum sulfur content of 0.05% by weight (from 10/1/07) and 0.0015% by weight (from 10/1/10) for controlling SO<sub>2</sub> emissions.

**Applicable Requirements:**

Hawaii Administrative Rules (HAR)

Title 11 Chapter 59, Ambient Air Quality Standards

Title 11 Chapter 60.1, Air Pollution Control

Subchapter 1 - General Requirements

Subchapter 2 - General Prohibitions

11-60.1-31 Applicability

11-60.1-32 Visible Emissions

11-60.1-33 Fugitive Dust

11-60.1-38 Sulfur Oxides from Fuel Combustion

Subchapter 5 - Covered Sources

Subchapter 6 - Fees for Covered Sources, Noncovered Sources, and Agricultural Burning

11-60.1-111 Definitions

11-60.1-112 General Fee Provisions for Covered Sources

11-60.1-113 Application Fees for Covered Sources

11-60.1-114 Annual Fees for Covered Sources

Subchapter 8 - Standards of Performance for Stationary Sources  
40 CFR Part 60 - Standards of Performance for New Stationary Sources (NSPS)  
Subpart A - General Provisions  
Subpart III – Standards of Performance for Stationary Compression Ignition  
Internal Combustion Engines – not applicable since the proposed 1,150 kW  
diesel engine generator was manufactured before the applicability dates.

This source is not subject to PSD requirements because it is not a major stationary source, as defined in HAR Title 11, Chapter 60.1, Subchapter 7 and 40 CFR Part 52, Section 52.21.

This source is not subject to NESHAPS as there are no standards in 40 CFR Part 61 applicable to this facility.

This source is not subject to MACT as the facility is not a major source of HAPS, covered under 40 CFR Part 63.

**Best Available Control Technology (BACT):**

A Best Available Control Technology (BACT) analysis is applicable only to new covered sources and significant modifications to covered sources that have the potential to emit or a net emissions increase above significant levels as defined in HAR, §11.60.1-1. A BACT analysis is not applicable since this project is considered to be a minor modification to a covered source.

**Compliance Assurance Monitoring (CAM) Applicability:**

CAM is not applicable to this facility since the facility is not a major source of pollutants.

**Consolidated Emissions Reporting Rule (CERR)/In-house Reporting Applicability:**

40 CFR Part 51, Subpart A - Emission Inventory Reporting Requirements, determines CER based on the emissions of criteria air pollutants from Type B point sources (as defined in 40 CFR Part 51, Subpart A), that emit at the CER triggering levels specified in 40 CFR 51, Subpart A, Table 1. This facility does not emit at the CER triggering levels. Therefore, CER requirements are not applicable. However, annual emissions reporting is required since this is a covered source.

**Insignificant Activities:**

No new insignificant activities are proposed with this application.

**Alternative Operating Scenarios:**

No new alternative operating scenarios are proposed with this application.

**Major Source Applicability:**

A major source as defined in §11-60.1-1 of HAR Title 11, has the potential to emit any HAP of 10 TPY or more, or 25 TPY or more of any combination of HAPs, or 100 TPY or more of any air pollutant. Calculated emissions do not meet these limits, and thus, this facility is not classified as a major source.

**Synthetic Minor Applicability:**

A synthetic minor source is a facility that is potentially major (as defined in HAR §11-60.1-1), but is made nonmajor through federally enforceable permit conditions (e.g., limiting the facility's hours of operation and limiting the facility's production rate). This facility is a synthetic minor based on potential emissions (NO<sub>x</sub> and PM) of greater than "major" levels (> 100 TPY) when the facility is operated at 8,760 hr/yr.

**Project Emissions:**

Shown below is a comparison of the emissions from the proposed EPA Tier 2 certified 725 kW diesel engine generator and the existing 725 kW diesel engine generator. The results show that the proposed 725 kW diesel engine generator can be considered a minor modification.

Pollutant	Proposed 725 kW DEG (lb/hr)	Proposed 725 kW DEG (tpy)	Existing 725 kW DEG (lb/hr)	Existing 725 kW DEG (tpy)	Difference (tpy)
NO <sub>x</sub>	9.21 <sup>1</sup>	10.12	23.67 <sup>2</sup>	24.57	-14.45
CO	1.05 <sup>1</sup>	1.16	6.29 <sup>2</sup>	6.53	-5.37
PM	0.28 <sup>1</sup>	0.31	0.74 <sup>2</sup>	0.77	-0.46
SO <sub>2</sub>	0.23 <sup>1</sup>	0.26	3.74 <sup>2</sup>	3.88	-3.62
TOC	0.21 <sup>1</sup>	0.23	0.67 <sup>2</sup>	0.69	-0.46

<sup>1</sup>Based on manufacturer's emission rates

<sup>2</sup>Based on AP-42 emission rates, Tables 3.4-1, 3.4-3, 3.4-4, 10/96

**Ambient Air Quality Impact Assessment:**

An ambient air quality impact assessment was not performed since the Department of Health does not require an ambient air quality impact assessment for minor modifications to a covered source.

**Significant Permit Conditions:**

1. Condition: Attachment II, Special Condition No. A.1.d.  

725 kW Cummins diesel engine generator [DEG] (model no. QST30-G5 NR2);

Purpose: The applicant proposes to replace the existing 725 kW diesel engine generator with a EPA Tier 2 certified 725 kW diesel engine generator due to the poor condition of the existing generator.
2. Condition: Attachment II, Special Condition No. B.2.  

The diesel engine generator is subject to the provisions of the following federal regulations:

  - a. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart A, General Provisions; and
  - b. 40 CFR Part 60, Standards of Performance for New Stationary Sources, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

Purpose: The diesel engine is a Tier 2 certified engine manufactured after April 1, 2006.

3. Condition: Attachment II, Special Condition No. C.3.b.

Fuel Limit

- i. Beginning October 1, 2007 and up through September 30, 2010, the diesel engine generator shall be fired only on diesel no. 2 with:
  - 1) A maximum sulfur content of 0.05% by weight, and
  - 2) A cetane index or aromatic content as follows:
    - a) Minimum cetane index of 40; or
    - b) Maximum aromatic content of 35 volume percent.
- ii. Beginning October 1, 2010, the diesel engine generator shall be fired only on diesel no. 2 with:
  - 1) A maximum sulfur content of 0.0015% by weight; and
  - 2) A maximum cetane index or aromatic content as follows:
    - a) Minimum cetane index of 40; or
    - b) Maximum aromatic content of 35 volume percent.

Purpose: NSPS Subpart IIII limits for sulfur content, cetane index or aromatic content are applicable requirements

4. Condition: Attachment II, Special Condition No. E.1.

Total Fuel Usage and Specifications

The permittee shall keep receipts of fuel deliveries identifying the delivery dates, fuel type, sulfur content (percent by weight), cetane index or aromatic content (volume percent), and amount (gallons) of fuel received. Fuel sulfur content, cetane index, and aromatic content may be demonstrated by providing the supplier's fuel specification sheet for the type of fuel purchased and received. Individual records on the total amount (gallons) of fuel fired in the drum dryer, DEG, and hot oil heater shall be maintained on an annual basis for the purpose of annual emissions reporting.

Purpose: Sulfur content, cetane index or aromatic content monitoring and recordkeeping are applicable requirements.

**Conclusion and Recommendation:**

Based on the information submitted by the applicant, it is the determination of the Department of Health (DOH) that the proposed minor modification of Temporary Covered Source Permit (CSP) No. 0040-01-CT will be in compliance with the all State and Federal air regulations. Therefore, recommend issuance of a minor modification to Temporary Covered Source Permit (CSP) No. 0040-01-CT, subject to the incorporation of the significant permit conditions noted above and a 45-day EPA review.

Darin Lum  
12/07