Maricopa County

Air Quality Department

Return completed form to:
Maricopa County Air Quality Department
3800 N Central Ave, Suite 1400, Phoenix, AZ 85012
Phone (602) 506-6010 Fax (602) 372-0587
AQPermits@maricopa.gov

STATIONARY ICE TEST REPORT NOTIFICATION

Documents may be submitted in person at:
3800 N. Central Ave. Suite 1400, Phoenix, AZ 85012 or 501 N. 44th Street, Suite 200, Phoenix, AZ 85008.

National Emission Standards for Hazardous Air Pollutants (NESHAP)
NOTIFICATION OF PERFORMANCE (COMPLIANCE) TEST REPORT
Stationary Reciprocating Internal Combustion Engines
Subpart ZZZZ: 40 CFR 63.6585 – 63.6675

Each facility required to conduct performance tests to demonstrate engine-specific compliance requirements must complete this form. The notification may be mailed to the address given above or e-mailed to AQPermits@mail.maricopa.gov.

Important: Please note that email will be our primary means for routine communication with you, unless you do not have an email account. Please be sure that your email address is entered correctly.

1. Company Information

Company Name: _____

Permit Number: _____

Mailing Address: Address: _____
City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____

Email: _____

2. Owner/Operator Information

Name and Title: _____

Please check whether the person listed above is owner or operator of the facility: ☐ Owner ☐ Operator

Mailing Address: Address: _____
City: _____ State: _____ Zip Code: _____

Phone: _____ Fax: _____

Email: _____

3. Facility Location Information (If different from company information)

Company Name: _____

Permit Number: _____

Mailing Address: Address: _____
City: _____ State: _____ Zip Code: _____

Are the compliance records located at the same location? ☐ Yes ☐ No

If the Location of compliance records is different please provide street address:

Address: _____

City: _____ State: _____ Zip Code: _____

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4. **Standard**. Indicate the relevant standard and other requirement that is the basis for this notification and the source's compliance date.

   i. Basis for the notification/relevant standard or other requirements. *[Sample response: 40 CFR 63.6645]*

   _____

   ii. Compliance Date: _____

5. **Method**. Describe the method(s) used to determine compliance.

Sample Response

Engine Description:

Performance test for an existing stationary spark ignition (SI) 4-stroke rich burn (4SRB) engines above 500 horsepower (HP) located at an area source.

This facility installed non-selective catalytic reduction (NSCR) to reduce formaldehyde emissions from their two (2) stationary existing 4SRB engines in order to comply with the emission standards in Table 2d of 40 CFR part 63, subpart ZZZZ. A performance test was conducted on 10/19/2013 using FTIR in accordance with the requirements in Table 4 of 40 CFR part 63, subpart ZZZZ. The catalyst inlet temperature and catalyst pressure drop were recorded during the initial performance test. This facility installed and operated a continuous parametric monitoring system (CPMS) to continuously measure the catalyst temperature according to the requirements in 40 CFR 63.6625(b) and (k). The catalyst inlet temperature and catalyst pressure drop that were recorded were within the allowed ranges as specified in Table 1b of 40 CFR part 63, subpart ZZZZ. This facility followed the startup requirements in 63.6625(h). The startup time was limited to 30 minutes and this facility minimized the engine's time spent at idle during startup.

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6. **Results.** Describe results of any performance tests, opacity or visible emission observation, continuous monitoring system (CMS) performance evaluations, and/or monitoring procedures or methods that were conducted. [§63.9(h)(2)(i)(B)]. Facility can attach test reports and output results from a CEMS and/or CPMS to this notification.

Sample Response:

Results

Source ID	Source Location	Test Date	Formaldehyde Reduction	Formaldehyde Concentration	Catalyst Inlet Temperature	Catalyst Pressure Drop	Startup Time
Engine A	Building 1	10/19/2013	82%	2.1 ppmvd at 15% O2	900°F	0.2 inches	8 min
Engine B	Building 1	10/19/2013	85%	2.5 ppmvd at 15% O2	1,100°F	0.15 inches	4 min

7. **Continuous Compliance.** Describe the methods you will use to determine continuous compliance, including a description of monitoring and reporting requirements and test methods. [§63.9(h)(2)(i)(C)]

Sample Response:

This facility will determine continuous compliance with applicable requirements by continuing to use monitoring methods as identified in Section III and Section IV of this notification. In addition, the facility plans to do the following: (1) continuously monitoring the catalyst inlet temperature to ensure it remains greater than or equal to 750°F and less than or equal to 1,250°F; (2) monitor the catalyst pressure drop monthly to ensure that the pressure drop across the catalyst does not change by more than 2 inches of water from the pressure drop across the catalyst measured during the initial performance test; (3) conduct performance test on each engine every 8,760 hours of operation or 3 years, whichever comes first, to measure formaldehyde emissions to determine that formaldehyde is reduced by 76 percent or more; (4) record the necessary information as specified in §63.6655, and (5) submit the necessary notifications and reports, according to the requirements in §63.6645 and §63.6650.

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8. **Emissions:** Describe the type and quantity of hazardous air pollutants (HAP) emitted by the source (or surrogate pollutants if specified in the relevant standard), reported in units and averaging times and in accordance with the test methods specified in the relevant standard. [§63.9(h)(2)(i)(D)]

Sample Response.

The following hazardous air pollutants (HAP) were emitted by affected sources at this facility during the period 10/19/2013 – 10/31/2013.

Source ID	Source Location	Source Description	HAP Emitted	HAP Emitted (tons)
Engine A	Building 1	Waukesha 4SRB 1,000 HP non - emergency engine	Formaldehyde	0.008
Engine B	Building 1	Waukesha 4SRB 1,000 HP non - emergency engine	Formaldehyde	0.008

9. **Facility Designation**. If the relevant standard applies to both major and area sources, present an analysis demonstrating whether the affected source is a major source, using the emissions data generated for this notification. [§63.9(h)(2)(i)(E)]

Sample Response.

This facility consists of two 1,000 HP rich burn engines. Each 1,000 HP engine emits 2.43 x10^{-4} lb/HP-hr of uncontrolled HAP emissions and operate continuously (8,760 hours per year). Consequently, yearly HAP emissions are 2.43 x10^{-4} lb/HP-hr x 8,760 hrs/yr x 1,000 HP x ton/2,000 lb x 2 engines = 2.1 tons/yr and below the threshold to be classified as a major source, therefore this facility is an area source. We do not expect these sources to emit HAP in quantities greater than the major source threshold.

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10. **Controls.** Describe the air pollution control equipment or method for each emission point, including each control device (or method) for each hazardous air pollutant and the control efficiency (percent) for each control device or method. [§63.9(h)(2)(i)(F)]

Sample Response.

The following pollution control equipment is used for each engine listed at this facility. Additionally, this facility uses other compliance methods that do not involve pollution control equipment, including a CPMS.

Source ID	Source Location	Equipment Type	Control Device	Control Efficiency	HAP Controlled
Engine A	*Building 1*	*Johnson Matthey 3-way (NSCR) Catalyst*	*NSCR/AFR*	*Reduces formaldehyde by 76% or more*	*Formaldehyde*
Engine B	*Building 1*	*Johnson Matthey 3-way (NSCR) Catalyst*	*NSCR/AFR*	*Reduces formaldehyde by 76% or more*	*Formaldehyde*

11. **Construction/Reconstruction.**

i. Did you submit an application for construction or reconstruction under §63.5(d) that contained preliminary or estimated data? [§63.9(h)(5)]

☐ Yes ☐ No ☐ Not Applicable (did not submit an application for construction or reconstruction)

ii. If you answered yes, provide actual emission data or other corrected information below.

12. **Certification**

Based upon information and belief formed after a reasonable inquiry, I, as a responsible official of the above-mentioned facility, certify the information contained in this report is accurate and true to the best of my knowledge. The above-mentioned facility _____ (has/has not) complied with the relevant standard or and other applicable requirements referenced in the relevant standard. [§63.9(h)(2)(i)(G)]

_____ _____
Name of Certifying Official (print or type) Title

_____ _____
Signature of Certifying Official Date Field

Note: Responsible official is defined under §63.2 as one of the following: a president, vice-president, secretary, or treasurer of the company that owns the plant; the owner of the plant; the plant engineer or supervisor; a government official if the plant is owned by the federal, state, city, or county government; or a ranking military officer if the plant is located on a military installation.