San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

JAN 19 2016

Salome Hernandez
San Joaquin County
44 N San Joaquin Street - Suite 590
Stockton, CA 95202

Re: Notice of Preliminary Decision - Authority to Construct
Facility Number: N-9212
Project Number: N-1153213

Dear Mr. Hernandez:

Enclosed for your review and comment is the District's analysis of San Joaquin County's application for an Authority to Construct for the permitting of an existing diesel-fired emergency engine powering an electrical generator located at 161 South Sutter Street, Stockton.

The notice of preliminary decision for this project will be published approximately three days from the date of this letter. After addressing all comments made during the 30-day public notice period, the District intends to issue the Authority to Construct. Please submit your written comments on this project within the 30-day public comment period, as specified in the enclosed public notice.

Thank you for your cooperation in this matter. If you have any questions regarding this matter, please contact Mr. Fred Cruz of Permit Services at (209) 557-6456.

Sincerely,

Arnaud Marjollet
Director of Permit Services

AM:fjc

Enclosures

cc: Tung Le, CARB (w/ enclosure) via email

Seyed Sadredin
Executive Director/Air Pollution Control Officer

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San Joaquin Valley Air Pollution Control District
Authority to Construct Application Review
Diesel-fired Emergency Standby IC Engine

Facility Name:	San Joaquin County	Date:	January 6, 2016
Mailing Address:	44 N San Joaquin Street – Suite 250 Stockton, CA 95202	Engineer:	Fred Cruz
		Lead Engineer:	James Harader
Contact Person:	Salomne Hernandez		
Telephone:	(209) 468-3364		
Email:	shernandez@sjgov.org		
Application No:	N-9212-1-0		
Project No:	N-1153213		
Complete:	December 22, 2016		

I. Proposal:

The applicant submitted an application to permit an existing emergency IC engine that was installed in 1991. At the time the engine was installed it would have required a permit from San Joaquin County APCD.

II. Applicable Rules:

Rule 2201 New and Modified Stationary Source Review Rule (4/21/2011)
Rule 2410 Prevention of Significant Deterioration (6/16/2011)
Rule 2520 Federally Mandated Operating Permits (6/21/2001)
Rule 4001 New Source Performance Standards (4/14/1999)
Rule 4002 National Emission Standards for Hazardous Air Pollutants (5/20/2004)
Rule 4101 Visible Emissions (2/17/2005)
Rule 4102 Nuisance (12/17/1992)
Rule 4201 Particulate Matter Concentration (12/17/1992)
Rule 4701 Stationary Internal Combustion Engines – Phase 1 (8/21/2003)
Rule 4702 Stationary Internal Combustion Engines – Phase 2 (8/18/2011)
Rule 4801 Sulfur Compounds (12/17/1992)
CH&SC 41700 Health Risk Assessment
CH&SC 42301.6 School Notice
Title 17 CCR, Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression-Ignition (CI) Engines
California Environmental Quality Act (CEQA)
Public Resources Code 21000-21177: California Environmental Quality Act (CEQA)
California Code of Regulations, Title 14, Division 6, Chapter 3, Sections 15000-15387: CEQA Guidelines

III. Project Location:

The facility is located at 161 South Sutter Street, Stockton, CA.
The project is not located within 1,000 feet of a K-12 school. Therefore, the school notification requirements of CH&SC Section 42301.6 are not required.

IV. Process Description:

The 741 bhp Cummins diesel-fired emergency engine powers an electrical generator and will engage when electrical power is lost to this site.

V. Equipment Listing:

N-9212-1-0:
741 BHP DETROIT MODEL 81237305 DIESEL-FIRED EMERGENCY ENGINE (TIER 0) POWERING AN ELECTRICAL GENERATOR.

VI. Emission Control Technology Evaluation:

The engine is equipped with (check all that applies):

x	turbocharger
_____	intercooler/aftercooler
_____	4° injection timing retard (or equivalent per District Policy SPP 1805)
_____	positive crankcase ventilation (PCV)
_____	90% efficient control device for crankcase emissions
_____	particulate filter

VI. Emission Calculations:

A. Assumptions:

Operating schedule:	24 hours/day, 20 hours/year
Density of diesel fuel:	7.1 lb/gal
EPA F-factor:	9051 dscf/MMBtu (corrected to 60° F)
PM_{10} fraction of diesel exhaust is:	96% (Reference - CARB, 1988)
Fuel heating value:	137,000 Btu/gal
BHP to Btu/hr conversion:	2542.5 Btu/hp-hr
Thermal efficiency of engine	commonly ≈ 35%
Fuel rate:	39.3 gal/hr @ 100% load (see below)

Fuel rate N-9212-1-0: 39.3 gal/hr @ 100% load[1]
Fuel rate calculated as follows:

[1] The applicant did not supply fuel usage for this emergency engine.

Fuel rate = $\frac{\text{(BHP rating) (BHP to Btu/hr conversion)}}{\text{(Fuel heating value)(Thermal efficiency of engine)}}$

$\frac{\text{(741 bhp)(2,542.5 Btu/hr)}}{\text{(137,000 Btus/hr)(0.35)}}$ = 39.3 gals/hr

B. Emission Factors:

The emission factors are based on AP-42, Table 3.3-1, Emission Factors for Uncontrolled Gasoline and Diesel Industrial Engines, revised 10/96. Emission factors are presented as lb/bhp-hr and are converted to g/bhp-hr by multiplying the lb/bhp-hr emission factor by 453.6 g/lb. The applicant will be required to use ultra-low sulfur diesel fuel as currently required by CARB and the SOx emission factor is calculated below.

NO_x:	14.0 g/bhp-hr
CO:	3.03 g/bhp-hr
VOC:	1.14 g/bhp-hr
PM_{10}:	1.0 g/bhp-hr
SO_x:	0.005 g/bhp-hr

SO_x: 0.0015% sulfur in fuel × 7.1 lb fuel/gal fuel × (2 lb SO_2 in exhaust/1 lb S in fuel) × (1 gal/137,000 Btus) x (1 hp input/0.35 hp out) x 2,542.5 Btu/hp-hr x 453.6 g/lb = 0.005 g SOx/hp-hr

C. Calculations:

1. Pre-Project Emissions (PE1)

This emergency engine is considered as a new emissions unit and PE1 emissions will equal zero for all pollutants.

2. Post Project PE (PE2)

The potential to emit for this emergency IC engine is based on the maximum operating capacity of the engine for 24 hours per day. The following calculation for NO_x emissions is representative of emission calculations for all pollutants. Annual emissions are based on 20 hours per year for non-emergency operation.

NO_x: 14.0 g/hp-hr × 741 bhp × lb/453.6 g

NO_x:	22.87 lb/hr, 548.9 lb/day, 457 lb/yr
CO:	4.95 lb/hr, 118.8 lb/day, 99 lb/yr
VOC:	1.86 lb/hr, 44.7 lb/day, 37 lb/yr
PM_{10}:	1.63 lb/hr, 39.2 lb/day, 33 lb/yr
SO_x:	0.01 lb/hr, 0.2 lb/day, 0.2 lb/yr [2]

[2] Per District Policy APR 1105, Use of Significant Figures, annual emissions less than 0.5 lbs are set to zero.

	NO_x	CO	VOC	PM_{10}	SO_x
Daily PE	548.9	118.8	44.7	39.2	0.2
Annual PE	457	99	37	33	0

3. Pre-Project Stationary Source Potential to Emit (SSPE1):

Pursuant to Section 4.9 of District Rule 2201, the Pre-Project Stationary Source Potential to Emit (SSPE1) is the Potential to Emit (PE) from all units with valid ATCs or PTOs at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site. Since this is a new emissions unit at a new facility, SSPE1 will equal zero for all pollutants for this emergency engine.

4. Post Project Stationary Source Potential to Emit (SSPE2):

Pursuant to Section 4.10 of District Rule 2201, the Post Project Stationary Source Potential to Emit (SSPE2) is the Potential to Emit (PE) from all units with valid ATCs or PTOs, except for emissions units proposed to be shut down as part of the Stationary Project, at the Stationary Source and the quantity of Emission Reduction Credits (ERCs) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-site.

Post Project Stationary Source Potential to Emit (SSPE2) (lb/year)					
Permit No.	NOx	CO	VOC	PM_{10}	SOx
N-9212-1-0 (ATC)	***457***	***99***	***37***	***33***	***0***
Total	457	99	37	33	0
Major Source Threshold	20,000	200,000	20,000	140,000	140,000
Existing Major Source?	No	No	No	No	No

5. Major Source Determination:

Pursuant to Section 3.24 of District Rule 2201, a Major Source is a stationary source with post project emissions or a Post Project Stationary Source Potential to Emit (SSPE2), equal to or exceeding one or more of the following threshold values. However, Section 3.24.2 states, "for the purposes of determining major source status, the SSPE2 shall not include the quantity of emission reduction credits (ERC) which have been banked since September 19, 1991 for Actual Emissions Reductions that have occurred at the source, and which have not been used on-

site." This facility does not have ERCs which have been banked at the source; therefore, SSPE2 does not have to be adjusted.

Major Source Determination					
Pollutant	SSPE1 (lb/yr)	SSPE2 (lb/yr)	Major Source Threshold (lb/yr)	Existing Major Source?	Becoming a Major Source?
NO_X	0	457	20,000	No	No
SO_X	0	0	140,000	No	No
PM_{10}	0	33	140,000	No	No
CO	0	99	200,000	No	No
VOC	0	37	20,000	No	No

As seen in the table above, the facility is not an existing Major Source and also is not becoming a Major Source as a result of this project.

Rule 2410 Major Source Determination:

The facility or the equipment evaluated under this project is not listed as one of the categories specified in 40 CFR 52.21 (b) (1) (I). Therefore the following PSD Major Source thresholds are applicable.

PSD Major Source Determination (tons/year)							
	NO_2	VOC	SO_2	CO	PM	PM_{10}	CO_{2e}
Estimated Facility PE before Project Increase	0	0	0	0	0	0	0
PSD Major Source Thresholds	100	100	100	100	100	100	100,000
PSD Major Source ? (Y/N)	N	N	N	N	N	N	N

As shown above, the facility is not an existing major source for PSD for any pollutant. Therefore the facility is not an existing major source for PSD.

6. Baseline Emissions (BE):

The equipment is considered as a new emissions unit and the baseline emissions will equal zero for all pollutants.

7. SB 288 Major Modification:

The purpose of Major Modification calculations is to determine the following:

A. If Best Available Control Technology (BACT) is triggered for a new or modified emission unit that results in a Major Modification (District Rule 2201, Section 4.1.3); and

B. If a public notification is triggered (District Rule 2201, Section 5.4.1).

Based on the pre and post-project stationary source potential to emit calculations (less onsite Emission Reduction Credit's) in this document, the facility is not a Major Source for any pollutant. Therefore, the proposed project cannot trigger a Major modification and no further calculations are required.

8. Federal Major Modification

This facility is not a Major Source for any pollutant. Therefore, this project can not constitute a Federal Major Modification and no further discussion is required.

9. Quarterly Net Emissions Change (QNEC)

The QNEC is calculated solely to establish emissions that are used to complete the District's PAS emissions profile screen. Detailed QNEC calculations are included in Appendix C.

10. Rule 2410 – Prevention of Significant Deterioration (PSD) Applicability Determination:

Rule 2410 applies to pollutants for which the District is in attainment or for unclasssified pollutants. The pollutants addressed in the PSD applicability determination are listed as follows:

- NO_2 (as a primary pollutant)
- SO_2 (as a primary pollutant)
- CO
- PM
- PM_{10}
- Greenhouse gases (GHG): CO_2, N_2O, CH_4, HFCs, PFCs, and SF_6

The first step of this PSD applicability evaluation consists of determining whether the facility is an existing PSD Major Source. This facility is not an existing PSD Major source (See Section VII.C.5 of this document).

In the case the facility is NOT an existing PSD Major Source, the second step of the PSD evaluation is to determine if the project, by itself, would be a PSD major source.

Potential to Emit of attainment/unclassified pollutant for New or Modified Emission Units vs PSD Significant Emission Increase Thresholds

As a screening tool, the potential to emit from all new and modified units is compared to the PSD significant emission increase thresholds, and if total potential to emit from all new and modified units is below this threshold, no futher analysis will be needed.

PSD Major Source Determination: Potential to Emit (tons/yr)						
	NO_2	VOC	SO_2	CO	PM	PM_{10}
Total PE from New and Modified Units	0.23	0.02	0	0.05	0.02	0.02
PSD Major Source threshold	250	250	250	250	250	250
New PSD Major Source?	N	N	N	N	N	N

As demonstrated above, because the project has a total potential to emit from all new and modified emission units below the PSD significant emission increase thresholds, this project is not subject to the requirements of Rule 2410 due to a significant emission increase and no further discussion is required.

VII. Compliance

Rule 2201 New and Modified Stationary Source Review Rule

A. Best Available Control Technology (BACT):

1. BACT Applicability:

BACT requirements are triggered on a pollutant-by-pollutant basis and on an emissions unit-by-emissions unit basis for the following*:

a) Any new emissions unit with a potential to emit exceeding 2.0 pounds per day,
b) The relocation from one Stationary Source to another of an existing emissions unit with a potential to emit exceeding 2.0 pounds per day,
c) Modifications to an existing emissions unit with a valid Permit to Operate resulting in an AIPE exceeding 2.0 pounds per day, and/or
d) Any new or modified emissions unit, in a stationary source project, which results in a Major Modification.

*Except for CO emissions from a new or modified emissions unit at a Stationary Source with an SSPE2 of less than 200,000 pounds per year of CO.

a. New emissions units – PE > 2.0 lb/day

This engine is considered as a new emission units and the daily emissions are compared to the BACT thresholds in the following table:

New Emissions Unit BACT Applicability				
Pollutant	Daily Emissions for unit -1-0 (lb/day)	BACT Threshold (lb/day)	SSPE2 (lb/yr)	BACT Triggered?
NO_X	548.9	> 2.0	N/A	Yes
SO_X	0.2	> 2.0	N/A	No
PM_{10}	39.2	> 2.0	N/A	Yes
CO	118.8	> 2.0 and SSPE2 ≥ 200,000 lb/yr	99	No
VOC	44.7	> 2.0	N/A	Yes

BACT will be triggered for NO_x, VOC and PM_{10} emissions for this engine.

b. Relocation of emissions units – PE > 2.0 lb/day

This engine is not being relocated from one stationary source to another stationary source as a result of this project.

c. Modification of emissions units – Adjusted Increase in Permitted Emissions (AIPE) > 2.0 lb/day

This engine is not being modified. Therefore, BACT is not triggered for the modification of emissions units with an AIPE > 2.0 lb/day.

d. Major Modification

This project does not constitute a Major Modification. Therefore, BACT is not triggered for a Major Modification.

2. BACT Guideline and Top Down Analysis:

At the time of installation this emergency engine would have been required to obtain a permit from the San Joaquin County APCD, which required engines greater than 200 bhp to obtain permits. Based on the information available concerning the BACT requirements from the San Joaquin County APCD, this engine would have met the BACT requirements at the time this emergency engine was installed in 1991. Based on the guidance provided in District Policy FYI-98, the District's BACT analysis is limited to the types of controls that can be applied to this specific engine. Since add-on control technologies are not feasible for diesel-fired emergency IC engines and the proposed emergency engine met BACT at the time of installation in 1991, this engine is considered to meet the District's BACT requirements per FYI-98.

B. Offsets:

Since emergency standby IC engines are exempt from the offset requirements of Rule 2201, per Section 4.6.2, offsets are not required for this engine, and offset calculations are not required.

C. Public Notification:

1. Applicability:

Public noticing is required for:
a. New Major Sources, which is a new facility that also becomes a Major Source,
b. Major Modifications,
c. Any new emissions unit with a Potential to Emit greater than 100 pounds during any one day for any one pollutant,
d. Any project which results in the offset thresholds being surpassed, and/or
e. Any project with an SSIPE of greater than 20,000 lb/year for any pollutant,
f. Title V Significant Modification.

a. New Major Source

A New Major Source is a new facility, which also becomes a major source. This is a new facility and does not become a Major Source from this project; public noticing is not required for this project for New Major Source purposes.

b. Major Modification

As demonstrated previously in Sections VII.C.7 and VII.C.8, this project does not constitute a Major Modification; therefore, public noticing for Major Modification purposes is not required.

c. PE > 100 lb/day

The Daily PE for this new emission unit is compared to the daily PE Public Notice Thresholds in the following table:

PE > 100 lb/day Public Notice Thresholds			
Pollutant	Daily PE for unit -1-0 (lb/day)	Public Notice Threshold (lb/day)	Public Notice Triggered?
NO_X	548.9	100	Yes
SO_X	0.2	100	No
PM_{10}	39.2	100	No
CO	118.8	100	No
VOC	44.7	100	No

As detailed in the preceding table, NOx and CO emissions exceed the 100-lb/day threshold and public noticing is required for this project.

d. Offset Threshold

The following table compares the SSPE1 and SSPE2 with the offset thresholds to determine if any offset thresholds have been surpassed.

Offset Threshold				
Pollutant	SSPE1 (lb/yr)	SSPE2 (lb/yr)	Offset Threshold (lb/yr)	Public Notice Required?
NO_X	0	457	20,000	No
SO_X	0	0	54,750	No
PM_{10}	0	33	29,200	No
CO	0	99	200,000	No
VOC	0	37	20,000	No

As detailed in the preceding table, there are no offset thresholds surpassed with this project. Therefore, public noticing is not required for this project

e. SSIPE > 20,000 lb/year

Public notification is required for any permitting action that results in a Stationary Source Increase in Permitted Emissions (SSIPE) of more than 20,000 lb/year of any affected pollutant. According to District policy, the SSIPE is calculated as the Post Project Stationary Source Potential to Emit (SSPE2) minus the Pre-Project Stationary Source Potential to Emit (SSPE1), i.e. SSIPE = SSPE2 – SSPE1. The values for SSPE2 and SSPE1 are calculated according to Rule 2201, Sections 4.9 and 4.10, respectively. The SSIPE is compared to the SSIPE Public Notice thresholds in the following table:

SSIPE Public Notice Threshold					
Pollutant	SSPE2 (lb/yr)	SSPE1 (lb/yr)	SSIPE (lb/yr)	SSIPE Threshold (lb/yr)	Public Notice Required?
NO_X	457	0	457	20,000	No
SO_X	0	0	0	20,000	No
PM_{10}	33	0	33	20,000	No
CO	99	0	99	20,000	No
VOC	37	0	37	20,000	No

As detailed in the preceding table, there are no SSIPE thresholds surpassed with this project. Therefore, public noticing is not required for exceeding the SSIPE thresholds.

f. Title V Significant Modification:

This facility is not a Major Source and has not been issued a Title V permit. Therefore, public noticing for a Title V Significant Modification is not required.

2. Public Notice Action

As discussed above, this project will result in NOx emissions exceeding the 100-lb/day threshold from this engine, which would subject the project to the noticing requirements listed above. Therefore, public notice will be required for this project.

D. Daily Emissions Limits

Daily Emissions Limitations (DELs) and other enforceable conditions are required by Section 3.15 to restrict a unit's maximum daily emissions, to a level at or below the emissions associated with the maximum design capacity. Per Sections 3.15.1 and 3.15.2, the DEL must be contained in the latest ATC and contained in or enforced by the latest PTO and enforceable, in a practicable manner, on a daily basis. DELs are also required to enforce the applicability of BACT. For this emergency standby IC engine, the DELs are stated in the form of emission factors, the maximum engine horsepower rating, and the maximum operational time of 24 hours per day. The emission factors are the same for each engine. Therefore, the following conditions will be listed on each ATC to ensure compliance:

N-9212-1-0:

- Emissions from this IC engine shall not exceed any of the following limits: 14.0 g-NOx/bhp-hr, 3.03 g-CO/bhp-hr, or 1.14 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]

- Emissions from this IC engine shall not exceed 1.0 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 17 CCR 93115]

- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801 and 17 CCR 93115]

E. Compliance Assurance:

1. Source Testing

Pursuant to District Policy APR 1705, source testing is not required for emergency standby IC engines to demonstrate compliance with Rule 2201.

2. **Monitoring**
   Monitoring is not required to demonstrate compliance with Rule 2201.

3. **Recordkeeping**
   Recordkeeping is required to demonstrate compliance with the offset, public notification, and daily emission limit requirements of Rule 2201. As required by District Rule 4702, *Stationary Internal Combustion Engines - Phase 2*, this IC engine is subject to recordkeeping requirements. Recordkeeping requirements, in accordance with District Rule 4702, will be discussed in Section VIII, *District Rule 4702*, of this evaluation.

4. **Reporting**
   Reporting is not required to ensure compliance with Rule 2201.

F. Ambient Air Quality Analysis (AAQA)

An AAQA shall be conducted for the purpose of determining whether a new or modified Stationary Source will cause or make worse a violation of an air quality standard. The District's Technical Services Division conducted the required analysis. Refer to **Appendix E** of this document for the AAQA summary sheet.

The proposed location is in an attainment area for NO_X, CO, and SO_X. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for NO_X, CO, or SO_X.

The proposed location is in a non-attainment area for the state's PM_{10} as well as federal and state $PM_{2.5}$ thresholds. As shown by the AAQA summary sheet the proposed equipment will not cause a violation of an air quality standard for PM_{10} and $PM_{2.5}$.

Rule 2520 Federally Mandated Operating Permits

Since this facility's potential to emit does not exceed any major source thresholds of Rule 2201, this facility is not a major source, and Rule 2520 does not apply.

Rule 4001 New Source Performance Standards (NSPS)

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

Pursuant to § 60.4200 of Subpart IIII, this engine is subject to this federal regulation. However, the District has not been delegated authorization to enforce the requirements of this regulation. The applicant will be so notified in a permit condition.

Rule 4002 National Emission Standards for Hazardous Air Pollutants

40 CFR 63 Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Emissions (RICE)

Pursuant to § 63.6585 of Subpart ZZZZ, this engine is subject to this federal regulation. However, the District has not been delegated authorization to enforce the requirements of 40 CFR 63 Subpart ZZZZ for non-Part 70 sources (Major Sources). The applicant will be so notified in a permit condition.

Rule 4101 Visible Emissions

Rule 4101 states that no air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. Therefore, the following condition will be listed on the ATC to ensure compliance:

- {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]

Rule 4102 Nuisance

Rule 4102 states that no air contaminant shall be released into the atmosphere which causes a public nuisance. Public nuisance conditions are not expected as a result of these operations provided the equipment is well maintained. Therefore, the following condition will be listed on the ATC to ensure compliance:

- {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]

California Health & Safety Code 41700 (Health Risk Assessment)

District Policy APR 1905 - Risk Management Policy for Permitting New and Modified Sources (dated 3/2/01) specifies that for an increase in emissions associated with a proposed new source or modification, the District perform an analysis to determine the possible impact to the nearest resident or worksite.

Technical Services received a request on December 22, 2015, to perform an Ambient Air Quality Analysis and a Risk Management Review for a Detroit Diesel Model 123-7305 diesel-fired emergency IC engine rated at 741 bhp and powering an electrical generator. (See RMR Summary in Appendix D).

RMR Summary			
Categories	**Diesel-Fired IC Engine (Unit 1-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	N/A[1]	N/A[1]	N/A[1]
Acute Hazard Index	N/A[2]	N/A[2]	N/A[2]
Chronic Hazard Index	N/A[2]	N/A[2]	N/A[2]
Maximum Individual Cancer Risk (10^{-6})	1.28	1.28	1.28
T-BACT Required?	Yes		
Special Permit Conditions?	**Yes**		

1 Prioritization for this unit was not conducted since it has been determined that all diesel-fired IC engines will result in a prioritization score greater than 1.0.

2 Acute and Chronic Hazard Indices were not calculated since there is no risk factor, or the risk factor is so low that the risk has been determined to be insignificant for this type of unit.

The acute and chronic indices are below 1.0 and the cancer risk associated with the project is greater than 1.0 in a million, but less than 20 in a million. **In accordance with the District's Risk Management Policy, the project is approved with Toxic Best Available Control Technology (T-BACT).**

The following conditions will be listed on the ATC to ensure compliance with the RMR:

Units N-9212-1-0:

1. The PM10 emissions rate of each engine shall not exceed 1.0 g/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102]
2. The exhaust stack of each engine shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
3. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115]

BACT for toxic emission control (T-BACT) is required if the cancer risk exceeds one in one million. As demonstrated above, T-BACT is required for this project because the HRA indicates that the risk is above the District's thresholds for triggering T-BACT requirements.

For this project T-BACT is triggered for PM_{10}. At the time of installation this emergency engine would have meet the BACT requirements of San Joaquin County APCD. Therefore, BACT is satisfied for this existing emergency engine. Therefore, compliance with the District's Risk Management Policy is expected.

Rule 4201 Particulate Matter Concentration

The engine manufacturer does not have any source test results for PM10 emissions for this engine. Section 3.1 of this rule requires emissions to be at or below 0.1 grains of particulate matter per dry standard cubic foot of exhaust gas. Results from source tests of diesel-fired

internal combustion (IC) engines generally indicate emissions rates are less than the allowable limit of 0.1 grain/dscf. Of the test data available, most were in the range of 0.042 to 0.061 grain/dscf with a high of 0.092 grain/dscf. As stated in the Emission Factors section of the document, the PM_{10} emission factor is the default PM10 emission factor of AP-42 since the engine manufacturer did not perform emissions testing for this model of diesel-fired engines. Based on the emission concentrations for other diesel-fired emergency, this engine should meet the particulate matter concentration of this rule. Therefore, as long as equipment is properly maintained and operated, the engine should comply with all the requirements of this rule. The following permit condition will appear on the ATC permit.

- {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]

Rule 4701 Internal Combustion Engines – Phase 1

District Rule 4701 is applicable to diesel-fired emergency standby or emergency IC engines. Rule 4702 is at least as stringent as this rule in all aspects; therefore, compliance with that rule will ensure compliance with Rule 4701.

Rule 4702 Internal Combustion Engines – Phase 2

The following table demonstrates how the proposed engine will comply with the requirements of District Rule 4702.

District Rule 4702 Requirements Emergency Standby IC Engines	Proposed Method of Compliance with District Rule 4702 Requirements
Operation of emergency standby engines is limited to 100 hours or less per calendar year for non-emergency purposes, verified through the use of a non-resettable elapsed operating time meter.	The Air Toxic Control Measure for Stationary Compression Ignition Engines (Stationary ATCM) limits this engine maintenance and testing to 20 hours/year. Thus, compliance is expected.
Emergency standby engines cannot be used to reduce the demand for electrical power when normal electrical power line service has not failed, or to produce power for the electrical distribution system, or in conjunction with a voluntary utility demand reduction program or interruptible power contract.	The following conditions will be included on this permit: • {3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rules 4701 and 4702] • {3808} This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rules 4701 and 4702]
The owner/operator must monitor the operational characteristics of each engine as recommended	The following condition will be included on this permit:

by the engine manufacturer or emission control system supplier.	• {3478} During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rules 4701 and 4702]
Records of the total hours of operation of the emergency standby engine, type of fuel used, purpose for operating the engine, all hours of non-emergency and emergency operation, and support documentation must be maintained. All records shall be retained for a period of at least five years, shall be readily available, and be made available to the APCO upon request.	The following conditions will be included on this permit: • {3496} The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115] • The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115] • {3475} All records shall be maintained and retained on-site for a minimum of five years, and shall be made available for District inspection upon request. [District Rules 4701 and 4702 and 17 CCR 93115]

Rule 4801 Sulfur Compounds

Rule 4801 requires that sulfur compound emissions (as SO_2) shall not exceed 0.2% by volume. Using the ideal gas equation, the sulfur compound emissions are calculated as follows:

Volume SO_2 = (n x R x T) ÷ P
n = moles SO_2
T (standard temperature) = 60 °F or 520 °R

$$R \text{ (universal gas constant)} = \frac{10.73\,\text{psi} \cdot \text{ft}^3}{\text{lb} \cdot \text{mol} \cdot {}^\circ\text{R}}$$

$$\frac{0.000015\,lb-S}{lb-fuel} \times \frac{7.1\,\text{lb}}{\text{gal}} \times \frac{64\,\text{lb}-SO_2}{32\,\text{lb}-S} \times \frac{1\,\text{MMBtu}}{9{,}051\,\text{scf}} \times \frac{1\,\text{gal}}{0.137\,\text{MMBtu}} \times \frac{\text{lb}-\text{mol}}{64\,\text{lb}-SO_2} \times \frac{10.73\,\text{psi}-\text{ft}^3}{\text{lb}-\text{mol}-{}^\circ\text{R}} \times \frac{520{}^\circ\text{R}}{14.7\,\text{psi}} \times 1{,}000{,}000 = 1.0\ \text{ppmv}$$

Since 1.0 ppmv is ≤ 2,000 ppmv, this engine is expected to comply with Rule 4801. Therefore, the following condition will be listed on the ATC to ensure compliance:

- Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115]

California Health & Safety Code 42301.6 (School Notice)

The District has verified that this site is not located within 1,000 feet of a school. Therefore, pursuant to California Health and Safety Code 42301.6, a school notice is not required.

Title 13 California Code of Regulations (CCR), Section 2423 – Exhaust Emission Standards and Test Procedures, Heavy-Duty Off-Road Diesel Cycle Engines

Particulate Matter and VOC + NO_x, and CO Exhaust Emissions Standards:

This regulation applies to new heavy-duty off-road compression ignition engines, produced on or after January 1, 1996, and all other new 2000 and later model year off-road compression engines. Since this engine was manufactured prior to January 1, 1996, it is not subject to this regulation. (The year of manufacture for this engine is 1991, or earlier, per the information submitted by the applicant.)

Title 17 California Code of Regulations (CCR), Section 93115 - Airborne Toxic Control Measure (ATCM) for Stationary Compression Ignition (CI) Engines

Fuel and Fuel Additive Requirements:

This regulation stipulates that as of January 1, 2006 no owner or operator of a new stationary compression ignition (CI) engine or an in-use prime stationary diesel-fueled CI engine shall fuel the engine with any fuel unless the fuel is one of the following:

1. CARB Diesel Fuel, or
2. An alternative diesel fuel that meets the requirements of the Verification Procedure, or
3. An alternative fuel, or
4. CARB Diesel Fuel used with fuel additives that meets the requirements of the Verification Procedure, or
5. Any combination of the preceding fuels.

The District will require the use of ultra-low sulfur diesel in this emergency engine since CAARB requires the use of this fuel after September 1, 2006. The following conditions will be listed on the ATC to ensure compliance:

- Only CARB certified fuel containing no more than 0.0015% sulfur by weight shall be used. However, any remaining fuel in a fuel tank permanently attached to the engine may be used until depleted. [Title 17 CCR, §93115 and District Rule 2201] N

At-School and Near-School Provisions:

This regulation stipulates that no owner or operator shall operate an in-use stationary emergency standby diesel-fueled CI engine for non-emergency use, including maintenance and testing, during the following periods:

1. Whenever there is a school sponsored activity, if the engine is located on school grounds, and
2. Between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds.

The applicant has stated that the engine is not located within 500 feet of a K-12 school. Therefore, conditions prohibiting non-emergency usage of the engine during school hours will not be placed on the permit (see site map).

PM Emissions and Hours of Operation Requirements for In-Use Diesel Emergency Engines:

This regulation stipulates that no owner or operator shall operate any in-use stationary emergency standby diesel-fueled CI engine with a brake horsepower rating greater than 50 unless it meets, in accordance with the applicable compliance schedules specified in sections (f) and (g) and the following requirements. See Table 2 from Section 93115, Title 17.

1. For engines with diesel PM standards (g/bhp-hr) of greater than 0.40 g/bhp-hr, the emergency engine shall be limited to operated 20 hours per year for maintenance and testing purposes. PM10 emission factor for this emergency is greater than 0.40 g/bhp-hr.
2. Engine operation is not limited during emergency use and during emissions source testing to show compliance with the ATCM.

The proposed engine meets all of the above requirements.

IX. RECOMMENDATION:

Compliance with all applicable prohibitory rules and regulations is expected. Issue the Authority to Construct permit subject to the conditions on the attached permit.

X. BILLING INFORMATION:

Permit Number	Fee Schedule	Fee Description
N-9212-1-0	3020-10-D	741 bhp ($502)

Appendix A – Authority to Construct permit N-9212-1-0
Appendix B – AP-42 Table 3.3-1, Emission Factors for diesel engines
Appendix C - QNEC Calculations
Appendix D - RMR Summary

Appendix A

Authority to Construct Permit
N-9212-1-0

San Joaquin Valley
Air Pollution Control District

AUTHORITY TO CONSTRUCT

PERMIT NO: N-9212-1-0

ISSUANCE DATE: DRAFT

LEGAL OWNER OR OPERATOR: SAN JOAQUIN COUNTY
MAILING ADDRESS: 44 N SAN JOAQUIN ST STE 590
STOCKTON, CA 95202

LOCATION: 161 S SUTTER ST
STOCKTON, CA

EQUIPMENT DESCRIPTION:
741 BHP DETROIT MODEL 81237305 DIESEL-FIRED EMERGENCY ENGINE (TIER 0) POWERING AN ELECTRICAL GENERATOR.

CONDITIONS

1. {98} No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]
2. {15} No air contaminant shall be discharged into the atmosphere for a period or periods aggregating more than three minutes in any one hour which is as dark as, or darker than, Ringelmann 1 or 20% opacity. [District Rule 4101]
3. {14} Particulate matter emissions shall not exceed 0.1 grains/dscf in concentration. [District Rule 4201]
4. {1898} The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
5. This engine shall be equipped with an operational non-resettable elapsed time meter or other APCO approved alternative. [District Rule 4702 and 17 CCR 93115]
6. {4258} Only CARB certified diesel fuel containing not more than 0.0015% sulfur by weight is to be used. [District Rules 2201 and 4801, and 17 CCR 93115]
7. Emissions from this IC engine shall not exceed any of the following limits: 14.0 g-NOx/bhp-hr, 3.03 g-CO/bhp-hr, or 1.14 g-VOC/bhp-hr. [District Rule 2201 and 17 CCR 93115]
8. Emissions from this IC engine shall not exceed 1.0 g-PM10/bhp-hr based on USEPA certification using ISO 8178 test procedure. [District Rules 2201 and 4102 and 17 CCR 93115]
9. {4261} This engine shall be operated and maintained in proper operating condition as recommended by the engine manufacturer or emissions control system supplier. [District Rule 4702]

CONDITIONS CONTINUE ON NEXT PAGE

YOU MUST NOTIFY THE DISTRICT COMPLIANCE DIVISION AT (209) 557-6400 WHEN CONSTRUCTION IS COMPLETED AND PRIOR TO OPERATING THE EQUIPMENT OR MODIFICATIONS AUTHORIZED BY THIS AUTHORITY TO CONSTRUCT. This is NOT a PERMIT TO OPERATE. Approval or denial of a PERMIT TO OPERATE will be made after an inspection to verify that the equipment has been constructed in accordance with the approved plans, specifications and conditions of this Authority to Construct, and to determine if the equipment can be operated in compliance with all Rules and Regulations of the San Joaquin Valley Unified Air Pollution Control District. Unless construction has commenced pursuant to Rule 2050, this Authority to Construct shall expire and application shall be cancelled two years from the date of issuance. The applicant is responsible for complying with all laws, ordinances and regulations of all other governmental agencies which may pertain to the above equipment.

Seyed Sadredin, Executive Director / APCO

Arnaud Marjollet, Director of Permit Services
N-9212-1-0 : Jan 7 2016 8:29AM – CRUZF : Joint Inspection NOT Required

10. {3478} During periods of operation for maintenance, testing, and required regulatory purposes, the permittee shall monitor the operational characteristics of the engine as recommended by the manufacturer or emission control system supplier (for example: check engine fluid levels, battery, cables and connections; change engine oil and filters; replace engine coolant; and/or other operational characteristics as recommended by the manufacturer or supplier). [District Rule 4702]

11. {3807} An emergency situation is an unscheduled electrical power outage caused by sudden and reasonably unforeseen natural disasters or sudden and reasonably unforeseen events beyond the control of the permittee. [District Rule 4702]

12. {3808} This engine shall not be used to produce power for the electrical distribution system, as part of a voluntary utility demand reduction program, or for an interruptible power contract. [District Rule 4702]

13. {3496} The permittee shall maintain monthly records of emergency and non-emergency operation. Records shall include the number of hours of emergency operation, the date and number of hours of all testing and maintenance operations, the purpose of the operation (for example: load testing, weekly testing, rolling blackout, general area power outage, etc.) and records of operational characteristics monitoring. For units with automated testing systems, the operator may, as an alternative to keeping records of actual operation for testing purposes, maintain a readily accessible written record of the automated testing schedule. [District Rule 4702 and 17 CCR 93115]

14. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rules 2201 and 4702, and 17 CCR 93115]

15. {4263} The permittee shall maintain monthly records of the type of fuel purchased. [District Rule 4702 and 17 CCR 93115]

16. {3475} All records shall be maintained and retained on-site for a minimum of five (5) years, and shall be made available for District inspection upon request. [District Rule 4702 and 17 CCR 93115]

17. U.S. EPA administers the requirements of 40 CFR Part 60 Subpart IIII and 40 CFR Part 63 Subpart ZZZZ. The owner or operator shall comply with the emission and operating limitations, testing requirements, initial and continuous compliance requirements as specified in these subparts. The owner or operator shall submit all applicable notifications, reports, and records to the administrator by the required compliance dates. [District Rules 4001 and 4002]

Appendix B

AP-42 Emission Factors

Table 3.3-1. EMISSION FACTORS FOR UNCONTROLLED GASOLINE AND DIESEL INDUSTRIAL ENGINES[a]

Pollutant	Gasoline Fuel (SCC 2-02-003-01, 2-03-003-01)		Diesel Fuel (SCC 2-02-001-02, 2-03-001-01)		EMISSION FACTOR RATING
	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	Emission Factor (lb/hp-hr) (power output)	Emission Factor (lb/MMBtu) (fuel input)	
NO_x	0.011	1.63	0.031	4.41	D
CO	6.96 E-03[d]	0.99[d]	6.68 E-03	0.95	D
SO_x	5.91 E-04	0.084	2.05 E-03	0.29	D
PM-10[b]	7.21 E-04	0.10	2.20 E-03	0.31	D
CO_2[c]	1.08	154	1.15	164	B
Aldehydes	4.85 E-04	0.07	4.63 E-04	0.07	D
TOC					
Exhaust	0.015	2.10	2.47 E-03	0.35	D
Evaporative	6.61 E-04	0.09	0.00	0.00	E
Crankcase	4.85 E-03	0.69	4.41 E-05	0.01	E
Refueling	1.08 E-03	0.15	0.00	0.00	E

[a] References 2,5-6,9-14. When necessary, an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr was used to convert from lb/MMBtu to lb/hp-hr. To convert from lb/hp-hr to kg/kw-hr, multiply by 0.608. To convert from lb/MMBtu to ng/J, multiply by 430. SCC = Source Classification Code. TOC = total organic compounds.

[b] PM-10 = particulate matter less than or equal to 10 μm aerodynamic diameter. All particulate is assumed to be ≤ 1 μm in size.

[c] Assumes 99% conversion of carbon in fuel to CO_2 with 87 weight % carbon in diesel, 86 weight % carbon in gasoline, average BSFC of 7,000 Btu/hp-hr, diesel heating value of 19,300 Btu/lb, and gasoline heating value of 20,300 Btu/lb.

[d] Instead of 0.439 lb/hp-hr (power output) and 62.7 lb/mmBtu (fuel input), the correct emissions factors values are 6.96 E-03 lb/hp-hr (power output) and 0.99 lb/mmBtu (fuel input), respectively. This is an editorial correction. March 24, 2009

Appendix C
QNEC Calculations

Quarterly Net Emissions Change (QNEC)

The Quarterly Net Emissions Change is used to complete the emission profile screen for the District's PAS database. The QNEC shall be calculated as follows:

QNEC = PE2 - PE1, where:

QNEC	=	Quarterly Net Emissions Change for each emissions unit, lb/qtr
PE2	=	Post-Project Potential to Emit for each emissions unit, lb/qtr
PE1	=	Pre-Project Potential to Emit for each emissions unit, lb/qtr

Using the emission calculations in this evaluation, $PE2_{quarterly}$ and $BE_{quarterly}$ can be calculated as follows:

This calculation is required for application emission profile purposes. It is assumed that each unit's annual emissions are evenly distributed throughout the year as follows: ΔPE (lb/qtr) = PE (lb/yr) ÷ 4 qtr/yr

N-9212-1-0:

ΔPE_{NOx}	= 457 lb-NOx/year – 0 lb-NOx/year	= 457 lb/year
ΔPE_{CO}	= 99 lb-CO/year – 0 lb-CO/year	= 99 lb/year
ΔPE_{VOC}	= 37 lb-VOC/year – 0 lb-VOC/year	= 37 lb/year
ΔPE_{PM10}	= 33 lb-PM10/year – 0 lb-PM10/year	= 33 lb/year
ΔPE_{SOx}	= 0 lb-SOx/year – 0 lb-SOx/year	= 0 lb/year

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
NOx	114	114	114	115
CO	24	25	25	25
VOC	9	9	9	10
PM_{10}	8	8	8	9
SOx	0	0	0	0

Appendix D

RMR Summary

San Joaquin Valley Air Pollution Control District
Risk Management Review

To: Fred Cruz, AQE - Permit Services

From: Tadeh Issakhanian, AQS - Permit Services

Date: 12/22/15

Facility Name: San Joaquin County

Location: 161 S. Sutter St. Stockton

Application No: N-9212-1-0

Project No: N-1153213

A. RMR SUMMARY

RMR Summary			
Categories	**Diesel-Fired IC Engine (Unit 1-0)**	**Project Totals**	**Facility Totals**
Prioritization Score	N/A[1]	N/A[1]	N/A[1]
Acute Hazard Index	N/A[2]	N/A[2]	N/A[2]
Chronic Hazard Index	N/A[2]	N/A[2]	N/A[2]
Maximum Individual Cancer Risk (10^{-6})	1.28	1.28	1.28
T-BACT Required?	Yes		
Special Permit Conditions?	**Yes**		

1 Prioritization for this unit was not conducted since it has been determined that all diesel-fired IC engines will result in a prioritization score greater than 1.0.

2 Acute and Chronic Hazard Indices were not calculated since there is no risk factor, or the risk factor is so low that the risk has been determined to be insignificant for this type of unit.

Proposed Permit Conditions

To ensure that human health risks will not exceed District allowable levels; the following permit conditions must be included for:

Unit # 1-0

1. The PM10 emissions rate shall not exceed 1.0 g/bhp-hr based on US EPA certification using ISO 8178 test procedure. [District Rules 2201]
2. The exhaust stack shall vent vertically upward. The vertical exhaust flow shall not be impeded by a rain cap (flapper ok), roof overhang, or any other obstruction. [District Rule 4102]
3. This engine shall be operated only for testing and maintenance of the engine, required regulatory purposes, and during emergency situations. Operation of the engine for maintenance, testing, and required regulatory purposes shall not exceed 20 hours per calendar year. [District Rule 4702 and 17 CCR 93115]

T-BACT is required for this unit because of emissions of DieselExhPM which is a PM-10. In accordance with District policy, BACT for this unit will be considered to be T-BACT.

B. RMR REPORT

I. Project Description

Technical Services received a request on December 22, 2015, to perform an Ambient Air Quality Analysis and a Risk Management Review for a Detroit Diesel Model 123-7305 diesel-fired emergency IC engine rated at 741 bhp and powering an electrical generator.

II. Analysis

Technical Services performed a screening level health risk assessment using the District developed DICE database.

The following parameters were used for the review:

Analysis Parameters Unit 1-0			
Source Type	Point	**Location Type**	Urban
BHP	741	**PM_{10} g/hp-hr**	1.0
Closest Receptor (m)	58	**Quad**	21.
Max Hours per Year	20	**Type of Receptor**	Business

Technical Services performed modeling for criteria pollutants CO, NOx, SOx and PM_{10}; as well as a RMR. The emission rates used for criteria pollutant modeling were 4.95 lb/hr CO, 22.87 lb/hr NOx, 0.01 lb/hr SOx, and 1.63 lb/hr PM_{10}. The engineer supplied the maximum fuel rate for the IC engine used during the analysis.

The results from the Criteria Pollutant Modeling are as follows:

Criteria Pollutant Modeling Results*

Diesel ICE	1 Hour	3 Hours	8 Hours	24 Hours	Annual
CO	NA[1]	X	NA[1]	X	X
NO_x	NA[1]	X	X	X	Pass
SO_x	NA[1]	NA[1]	X	NA[1]	Pass
PM_{10}	X	X	X	NA[1]	Pass[2]
$PM_{2.5}$	X	X	X	NA[1]	Pass[2]

*Results were taken from the attached PSD spreadsheet.
[1]The project is an intermittent source as defined in APR-1920. In accordance with APR-1920, compliance with short-term (i.e., 1-hour, 3-hour,8-hour and 24-hour) standards is not required.
[2]The criteria pollutants are below EPA's level of significance as found in 40 CFR Part 51.165 (b)(2).

III. Conclusion

The acute and chronic indices are below 1.0 and the cancer risk associated with the project is greater than 1.0 in a million, but less than 20 in a million. **In accordance with the District's Risk Management Policy, the project is approved with Toxic Best Available Control Technology (T-BACT).**

To ensure that human health risks will not exceed District allowable levels; the permit conditions listed on page 1 of this report must be included for this proposed unit.

These conclusions are based on the data provided by the applicant and the project engineer. Therefore, this analysis is valid only as long as the proposed data and parameters do not change.

The emissions from the proposed equipment will not cause or contribute significantly to a violation of the State and National AAQS.

Attachments

A. RMR request from the project engineer
B. Additional information from the applicant/project engineer
C. Toxic emissions summary with Prioritization score
D. AAQA
E. Facility Summary