YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT

1947 Galileo Court, Suite 103; Davis, CA 95618

Emission Evaluation

ATC #	C-13-84
SIC Code #	8221
UTM E	608.8 km
UTM N	4266.2 km

ENGINEER: Eugene Rubin

FACILITY NAME: University of California, Davis

LOCATION: The equipment will be located at Main Campus (Art Building), Zone C033, CAAN 3971 in Davis. The equipment will not be located within 1,000 feet of a K-12 school and is not subject to the requirements of H&S 42301.6

PROPOSAL: The applicant is proposing to install a new woodworking operation for an art classroom. This is a significant Title V permit modification.

The facility is currently operating under Title V Operating Permit F-00454-21, effective September 25, 2012. This evaluation will serve as both the District emission evaluation and the Title V Statement of Basis. This evaluation reflects only the requirements pertaining to C-13-72. Emission units that are not affected by this proposal were evaluated in the original Statement of Basis or the subsequent iterations and will not be reviewed in this evaluation.

The changes to the Title V permit will only include changes evaluated under ATC C-13-84

PROCESS: Woodworking Operation

FLOW DIAGRAM: none required

IDENTIFICATION: P-43-13 (reserved)

EQUIPMENT: Woodworking Equipment List

Equipment Controlled by Dust Collectors	HP
Band saw	1
Band saw	7.5
Gliding Compound	2.41
Table Saw	3.7
Spindle Sander	1.85
Disk Sander	2.77
Belt Sander	4.13
Miter Saw	2.41
Subtotal =	25.77

Uncontrolled Equipment	HP
Drill Press	2.47
Panel Saw	2.09
Belt Grinder	2
Subtotal =	6.56

		Symbol
Proposed Horsepower Total =	32.33	PHP
Ratio of Uncontrolled Horsepower to Total Horsepower =	0.20	UT
Overall Horsepower Cap Total =	49.9	CAP

CONTROL EQUIPMENT: Donaldson Torit Unimaster Dust Collector, Model No. 450 (5000 CFM)

APPLICATION DATA:

		Units	Formula Symbol	Reference
Daily Throughput =	24	hours	Td	Applicant
1st Quarter Throughput =	2,160	hours	T1	Applicant
2nd Quarter Throughput =	2,184	hours	T2	Applicant
3rd Quarter Throughput =	2,208	hours	T3	Applicant
4th Quarter Throughput =	2,208	hours	T4	Applicant
Yearly Throughput =	8,760	hours	Ty	Applicant

Dust Collector		Units	Formula Symbol	Reference
Blower Capacity =	5,000	SCFM	CF	Applicant

ASSUMPTIONS:

		Units	Formula Symbol	Reference
Grain conversion factor =	7,000	grain/lb	GR	District
Minutes per hour =	60	min/hr	TC	District
Ratio of uncontrolled vs. controlled =	0.25		RC	Calculated
Dust Collector Control =	0.05	grain/scf	EF	SJVAPCD woodworking GEAR
PM10 Faction =	40	% of TSP (by volume)	PF	SJVAPCD woodworking GEAR

EMISSION FACTORS:

PM10 *:		Units	Formula Symbol	Reference
Dust Collector Control =	0.0004	grain/scf	EFPM1	SJVAPCD woodworking GEAR
Uncontrolled =	0.55	lb/hr	EFPM2	Calculated **

* It is assumed that all particulate matter is less than 10 micrometer aerodynamic diameter.

** It will be assumed that emissions generated from process equipment are proportional to the speed of operation and size of cutting area of the processing equipment and that these characteristics are directly related to the rating of the motor powering such equipment. Therefore, an emissions factor will be calculated based on the ratio of uncontrolled process equipment horsepower to dust collector-controlled process equipment horsepower, taking into consideration the difference in grain loading for the uncontrolled emissions vs. the exhaust served by a dust collector.

[EFpm2 = EFpm1 * CF * TC / GR * (EF / EFpm1) * RC]

EMISSION CALCULATIONS:

1. Determine Uncontrolled TSP Emissions:

Max. Daily TSP Emissions = Td * EFPM2 / PF =	32.7 lb/day
1st Quarter TSP Emissions = T1 * EFtsp / PF =	2946 lb/quarter
2nd Quarter TSP Emissions = T2 * EFtsp / PF =	2978 lb/quarter
3rd Quarter TSP Emissions = T3 * EFtsp / PF =	3011 lb/quarter
4th Quarter TSP Emissions = T4 * EFtsp / PF =	3011 lb/quarter
Max. Yearly TSP Emissions = (Ty * EFtsp)*(1 ton/2,000 lb) / PF =	5.97 tons/year

2. Determine Controlled TSP Emissions:

Max. Daily PM10 Emissions = Td * EFpm * TC * CF / GR / PF =	1.0 lb/day
1st Quarter PM10 Emissions = T1 * EFpm * TC * CF / GR / PF =	93 lb/quarter
2nd Quarter PM10 Emissions = T2 * EFpm * TC * CF / GR / PF =	94 lb/quarter
3rd Quarter PM10 Emissions = T3 * EFpm * TC * CF / GR / PF =	95 lb/quarter
4th Quarter PM10 Emissions = T4 * EFpm * TC * CF / GR / PF =	95 lb/quarter
Max. Yearly PM10 Emissions = (Ty * EFpm)* TC * CF / GR / PF *(1 ton/2,000 lb) =	0.19 tons/year

3. Determine Uncontrolled PM10 Emissions:

Max. Daily TSP Emissions = Td * EFtsp =	13.1 lb/day
1st Quarter TSP Emissions = T1 * EFtsp =	1178 lb/quarter
2nd Quarter TSP Emissions = T2 * EFtsp =	1191 lb/quarter
3rd Quarter TSP Emissions = T3 * EFtsp =	1204 lb/quarter
4th Quarter TSP Emissions = T4 * EFtsp =	1204 lb/quarter
Max. Yearly TSP Emissions = (Ty * EFtsp)*(1 ton/2,000 lb) =	2.39 tons/year

4. Determine Controlled PM10 Emissions:

Max. Daily PM10 Emissions = Td * EFpm * TC * CF / GR =	0.4 lb/day
1st Quarter PM10 Emissions = T1 * EFpm * TC * CF / GR =	37 lb/quarter
2nd Quarter PM10 Emissions = T2 * EFpm * TC * CF / GR =	37 lb/quarter
3rd Quarter PM10 Emissions = T3 * EFpm * TC * CF / GR =	38 lb/quarter
4th Quarter PM10 Emissions = T4 * EFpm * TC * CF / GR =	38 lb/quarter
Max. Yearly PM10 Emissions = (Ty * EFpm)* TC * CF / GR* (1 ton/2,000 lb) =	0.08 tons/year

6. Determine Total PM10 Emissions:

Max. Daily PM10 Emissions = uncontrolled + controlled =	13.5 lb/day
1st Quarter PM10 Emissions = uncontrolled + controlled =	1215 lb/quarter
2nd Quarter PM10 Emissions = uncontrolled + controlled =	1229 lb/quarter
3rd Quarter PM10 Emissions = uncontrolled + controlled =	1242 lb/quarter
4th Quarter PM10 Emissions = uncontrolled + controlled =	1242 lb/quarter
Max. Yearly PM10 Emissions = uncontrolled + controlled =	2.46 tons/year

3. Determine Particulate Matter Emission Concentration:

PM Concentration (as TSP) = EF * (1/PF) =	0.001 gr/scf

District Rule 2.3-Ringelmann

This rule specifies the allowable opacity limit for all sources operating in the District.

Compliance Status: The rule applies to any visible emissions at the stationary source. The version of the rule used in this evaluation is the rule adopted on January 13, 2010, and is part of the California State Implementation Plan (SIP). The source is currently in compliance with the requirements of the rule.

Requirement: The permit holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one hour which is:

a. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or
b. Greater than 20% opacity. [District Rule 2.3]

Permit Condition: The permit holder shall not discharge into the atmosphere from any single source of emission whatsoever, any air contaminant for a period or periods aggregating more than three (3) minutes in any one hour which is:

a. As dark or darker in shade as that designated as No. 1 on the Ringelmann Chart; or
b. Greater than 20% opacity. [District Rule 2.3]

District Rule 2.5-Nuisance

This rule requires that sources are not a public nuisance.

Compliance Status: The rule applies to all emission units at the stationary source. The source is currently in compliance with the requirements of the rule.

Permit Condition: The Permit Holder shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public or which endanger the comfort, repose, health, or safety of any such persons or the public or which cause to have a natural tendency to cause injury or damage to business or property.

A condition will not be placed on the ATC, but will be added to the PTO upon implementation.

[The permit condition is federally enforceable because it derives from District Rule 2.5 - Nuisance which is currently part of the SIP. The District is taking steps to remove District Rule 2.5 from the SIP. Once the U.S. Environmental Protection Agency (EPA) has taken final action to remove District Rule 2.5 from the SIP, this permit condition will become State-enforceable only.]

District Rule 2.11 - Particulate Matter

This rule specifies the allowable particulate matter (PM) emission rate at standard conditions..

Compliance Status: The dust collecting system for the woodworking operation is subject to this rule. The version of the rule used in this evaluation is the rule adopted on January 13, 2010 and included in the current SIP. The proposed operation is currently in compliance with the requirements of the rule.

Requirement: A person shall not release or discharge into the atmosphere, from any single source operation, dust fumes or total suspended particulate matter emissions in excess of 0.1 grain per cubic foot of gas at dry standard conditions. [District Rule 2.11]

As shown above in Emission Calculations #7, the PM concentration is expected to be in compliance with this requirement.

Emission Rate (gr/dscf)	Allowable Rate (gr/dscf)	Compliance
0.001	0.1	Yes

Permit Condition: The permit holder shall not release or discharge into the atmosphere, from any single source operation, dust fumes or total suspended particulate matter emissions in excess of 0.1 grain per cubic foot of gas at dry standard conditions. [District Rule 2.3]

District Rule 2.19 Particulate Emission Rate

This rule limits the pound per hour particulate matter emission rate based on the amount of material processed.

Compliance Status: The rule applies to the woodworking operations. The version of the rule used in this evaluation is the rule adopted on October 1, 1971, and is part of the SIP. The source is currently in compliance with the rule.

Requirement: No person shall discharge in any one hour from any process unit except for motor vehicles, implements of husbandry, and certain agricultural facilities as given in b. and c. particulate matter of a weight in excess of the amount shown for the corresponding process weight per hour in the following table. Use the process weight per hour as defined in Rule I.2.y. to find the corresponding allowable process emission rate. [SIP approved version of District Rule 2.19]

Compliance Demonstration: Because the applicant has does not have a specific hourly process rate the District will conservatively assume that the shop must be operating at full capacity to emit 33.7 lb/day of TSP. This 33.7 lb/day equates to 1.4 lb/hr. The minimum allowable emission rate of 1 lb/hr occurs at a process weight at or below a process weight of 400 lb/hr. 400 lb/hr equates to only 8.8 sheets of 1/2 plywood with a density of 1.42 lb/cubic foot. The District will conservatively assume that an art class can process more than 8.8 sheets of plywood per hour when operating at maximum capacity. Therefore the District will assume that the minimum hourly process weight will be greater than 400 lb per hour and as such the minimum emission rate is 2.0 lb/hr. The applicant is in compliance with the requirements of this rule.

Permit Condition: PM10 emissions shall not exceed 13.4 lb/day, 34 lb/1st, 2nd, 3rd, and 4th calendar quarter, and 0.07 tons/year. [District Rule 3.4/C-13-84]

District Rule 3.4-New Source Review

This rule applies to all new stationary sources and emissions units and all modifications to existing stationary sources and emissions units which are subject to Rule 3.1, General Permit Requirements, and which, after construction or modification, emit or may emit any affected pollutants. This rule shall not apply to prescribed burning of forest, agriculture or range land, road construction or any other non-point source common to timber harvesting or agricultural practices. The purpose of this rule is to provide for the review of new and modified stationary air pollution sources and to provide mechanisms, including emission offsets,

by which authorities to construct to such sources may be granted without interfering with the attainment or maintenance of ambient air quality standards.

Compliance Status: The source has satisfied the provisions of New Source Review. The New Source Review requirements will be imposed on the Authority to Construct (ATC) issued to the source. The version of the rule used in this evaluation was adopted on August 13, 1997 and is part of the current SIP.

PROPOSED EMISSION SUMMARY FOR NEW OR MODIFIED PERMIT

	Daily	*Yearly*	
VOC	0.0 lb	0.00 tons	Use for annual billing
CO	0.0 lb	0.00 tons	Use for annual billing
NOx	0.0 lb	0.00 tons	Use for annual billing
SOx	0.0 lb	0.00 tons	Use for annual billing
PM10	13.5 lb	2.46 tons	Use for annual billing

	Quarterly			
	1st	2nd	3rd	4th
VOC (lb)	0	0	0	0
CO (lb)	0	0	0	0
NOx (lb)	0	0	0	0
SOx (lb)	0	0	0	0
PM10 (lb)	1,215	1,229	1,242	1,242

Previous quarterly potential to emit for modified permit*

	1st	2nd	3rd	4th
VOC (lb)	0	0	0	0
CO (lb)	0	0	0	0
NOx (lb)	0	0	0	0
SOx (lb)	0	0	0	0
PM10 (lb)	0	0	0	0

* This is a new unit. Therefore the previous potential to emit is 0.

Historic potential emissions for modified permit*

	1st	2nd	3rd	4th
VOC (lb)	0	0	0	0
CO (lb)	0	0	0	0
NOx (lb)	0	0	0	0
SOx (lb)	0	0	0	0
PM10 (lb)	0	0	0	0

* This is a new unit. Therefore the historic potential to emit is 0.

		BACT		
Pollutant	**Trigger (lb/day)**	**Proposed (lb/day)**	**Quarterly Increase**	**BACT**
VOC	10	0	No	No
CO	250	0	No	No
NOx	10	0	No	No
SOx	80	0	No	No
PM10	80	14	Yes	No

OFFSETS

Quarterly permitted emissions for other permits at the stationary source*

	1st	2nd	3rd	4th
VOC (lb)	13,219	13,318	13,430	13,450

CO (lb)	207,696	209,617	211,794	212,064
NOx (lb)	51,157	51,306	51,724	52,020
SOx (lb)	7,548	7,555	7,563	7,564
PM10 (lb)	10,572	10,630	10,711	10,738

* See attached QPTE sheet

Quarterly permitted emissions for the stationary source including proposed emissions

	1st	2nd	3rd	4th
VOC (lb)	13,219	13,318	13,430	13,450
CO (lb)	207,696	209,617	211,794	212,064
NOx (lb)	51,157	51,306	51,724	52,020
SOx (lb)	7,548	7,555	7,563	7,564
PM10 (lb)	11,787	11,859	11,953	11,980

Offset triggers

	1st	2nd	3rd	4th
VOC (lb)	7,500	7,500	7,500	7,500
CO (lb)	49,500	49,500	49,500	49,500
NOx (lb)	7,500	7,500	7,500	7,500
SOx (lb)	13,650	13,650	13,650	13,650
PM10 (lb)	13,650	13,650	13,650	13,650

Quantity of offsets required

	1st	2nd	3rd	4th
VOC (lb)	0	0	0	0
CO (lb)	0	0	0	0
NOx (lb)	0	0	0	0
SOx (lb)	0	0	0	0
PM10 (lb)	0	0	0	0

MAJOR MODIFICATION

Facility Total Potential to Emit	***Major Source Thresholds***
26.11 TPY VOC	25 TPY VOC
404.05 TPY CO	100 TPY CO
87.24 TPY NOx	25 TPY NOx
5.08 TPY SOx	100 TPY SOx
20.28 TPY PM10*	100 TPY PM10

* As of December 14, 2009 the District is required to evaluate emissions of PM2.5 under Appendix S to 40 CFR 51. Under Appendix S, the major source threshold for PM2.5 is 100 tpy, the same as the major source threshold for PM10. Since PM2.5 is a subset of PM10, and this facility is not a major source for PM10, it is

Last five year emission aggregate	***Major Modification Thresholds***
2.13 TPY VOC	25 TPY VOC
4.18 TPY CO	100 TPY CO
10.46 TPY NOx	25 TPY NOx
0.03 TPY SOx	40 TPY SOx
2.89 TPY PM10	25 TPY PM10

Result: The proposed modification is not a major modification

PUBLIC NOTICE

"Increase in historic potential to emit" ***Exemption level for notification***

0 lb VOC/quarter	7,500 lb VOC/quarter
0 lb CO/quarter	49,500 lb CO/quarter
0 lb NOx/quarter	7,500 lb NOx/quarter
0 lb SOx/quarter	13,650 lb SOx/quarter
1,242 lb PM10/quarter	13,650 lb PM10/quarter

Result: Public notice is not required

Permit Condition: PM10 emissions shall not exceed 13.5 lb/day, 1215 lb/1st calendar quarter, 1229 lb/2nd calendar quarter, 1242 lb/3rd calendar quarter,1242 lb/4th calendar quarter and 2.46 tons/year. [District Rule 3.4/C-13-84]

Permit Condition: The permit holder shall not discharge into the atmosphere from the dust collection system, any air contaminant for a period or periods aggregating more than three (3) minutes in any one hour which is:
a. As dark or darker in shade as that designated as No. 1/4 on the Ringelmann Chart; or
b. Greater than 5% opacity. [District Rule 3.4]

Permit Condition: All control equipment, including ducts, shall be properly maintained, kept in good operating condition per manufacturer's specifications, and be operated at all times in conjunction with its associated process. [District Rule 3.4]

Permit Condition: The Permit Holder shall dispose of all material collected in the control equipment in a manner to minimize the release of the collected material into the atmosphere. [District Rule 3.4]

Permit Condition: The Permit Holder shall maintain a complete list of all equipment associated with the process, which includes a description and horsepower rating for each piece of woodworking equipment and the rating of the associated the control equipment in cubic feet per minute (CFM). This list shall be maintained with the Permit to Operate and shall be made available to the District upon request. [District Rule 3.4]

Permit Condition: The Permit Holder shall maintain quarterly and yearly records of the operational hours for the dust collection system. Historic data shall be retained for the five (5) previous calendar years and made available to the District upon request. [District Rule 3.4]

District Rule 3.8-Federal Operating Permits

This rule implements the requirements of Title V of the Federal Clean Air Act as amended in 1990 (CAA) for permits to operate. Title V provides for the establishment of operating permit programs for sources which emit regulated air pollutants, including attainment and non-attainment pollutants.

Compliance Status: The Rule was originally adopted on January 26, 1994. The most recent revision dated April 11, 2001and is part of the current SIP. The source is currently in compliance with the requirements of the rule.

Per Section 102, this rule applies to all major sources, acid rain units subject to Title IV of the Federal Clean Air Act (CAA), solid waste incinerators, and any other sources specifically designated by the rule or US EPA.

The facility is a federal major source due to potential to emit over 25 tons VOC per year, 100 tons CO per year, and 25 tons NOx per year. The facility has an existing Title V Permit. Revisions to the Title V permit will be processed immediately following the approval of this evaluation. The proposed revisions to the Title V permit previously had a 30-day public comment period and a 45-day EPA comment period. The requirements of this ATC will be incorporated into the Title V permit upon written request from the applicant after all noticing has been done and the project is completed. The facility's Title V Permit will be issued with all applicable operating, monitoring, and recordkeeping requirements. Per Section 302.6, the source will be required to maintain all required records for a period of five (5) years.

Title V General Requirements - Permit Conditions

The following conditions will not be placed on the ATC or PTO. These requirements will be included in the Title V Operating Permit only.

Permit Condition -Right of Entry:

The permit shall require that the source allow the entry of the District, ARB, or U.S. EPA officials for the purpose of inspection and

sampling, including:
a. Inspection of the stationary source, including equipment, work practices, operations, and emissions-related activity;
b. Inspection and duplication of records required by the permit to operate; and
c. Source sampling or other monitoring activities. [District Rule 3.8, §302.10]

Permit Condition -Compliance with Permit Conditions:
The Permit Holder shall comply with all Title V permit conditions. [District Rule 3.8, §302.11a]

The permit does not convey property rights or exclusive privilege of any sort. [District Rule 3.8, §302.11b]

Non-compliance with any permit condition is grounds for permit termination, revocation and reissuance, modification, enforcement action, or denial of permit renewal. [District Rule 3.8, §302.11c]

The Permit Holder shall not use the "need to halt or reduce a permitted activity in order to maintain compliance" as a defense for non-compliance with any permit condition. [District Rule 3.8, §302.11d]

A pending permit action or notification of anticipated non-compliance does not stay any permit condition. [District Rule 3.8, §302.11e]

Within a reasonable time period, the Permit Holder shall furnish any information requested by the APCO, in writing, for the purpose of determining:
a. Compliance with the permit; or
b. Whether or not cause exists for a permit or enforcement action. [District Rule 3.8, §302.11f]

Permit Condition -Emergency Provisions:
Within two weeks of an emergency event, the owner or operator shall submit to the District a properly signed contemporaneous log or other relevant evidence demonstrating that:
a. An emergency occurred;
b. The Permit Holder can identify the cause(s) of the emergency;
c. The facility was being properly operated at the time of the emergency;
d. All steps were taken to minimize the emissions resulting from the emergency; and
e. Within two working days of the emergency event, the Permit Holder provided the District with a description of the emergency and any mitigating or corrective actions taken; and
In any enforcement proceeding, the Permit Holder has the burden of proof for establishing that an emergency occurred. [District Rule 3.8, §302.12]

Permit Condition -Severability:
If any provision, clause, sentence, paragraph, section or part of these conditions for any reason is judged to be unconstitutional or invalid, such judgment shall not affect or invalidate the remainder of these conditions. [District Rule 3.8, §302.13]

Compliance Certification:
Requirement: Section 302.14(a) of Rule 3.8 requires "the responsible official shall submit a compliance certification to the U.S. EPA and the APCO every twelve (12) months unless required more frequently by an applicable requirement. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete."

Streamlining Demonstration: As shown in the following permit conditions, the standard annual compliance certification reporting language of Rule 3.8 (Federal Operating Permits), will be streamlined under the provisions of Rule 3.4 to include specific reporting and submittal dates:

Permit Condition -Compliance Certification:
The Responsible Official shall submit a compliance certification to the U.S. EPA and the APCO every twelve (12) months unless required more frequently by an applicable requirement. The twelve (12) month period will begin on January 1 and end on

December 31, and will be due by January 31 for the previous reporting year, unless otherwise approved in writing by the District. All compliance reports and other documents required to be submitted to the District by the responsible official shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

The compliance certification shall identify the basis for each permit term or condition (e.g., specify the emissions limitation, standard, or work practice) and a means of monitoring compliance with the term or condition consistent with Sections 302.5, 302.6, and 302.7 of Rule 3.8. [District Rule 3.8, §302.14b]

The compliance certification shall include a statement of the compliance status, whether compliance was continuous or intermittent, and method(s) used to determine compliance for the current time period and over the entire reporting period. [District Rule 3.8, §302.14c]

The compliance certification shall include any additional inspection, monitoring, or entry requirement that may be promulgated pursuant to Sections 114(a) and 504(b) of the Federal Clean Air Act. [District Rule 3.8, §302.14d]

Permit Condition -Permit Life:
The Title V permit shall expire five years from the date of issuance. Title V permit expiration terminates the stationary source's right to operate unless a timely and complete Title V permit application for renewal has been submitted. [District Rule 3.8, §302.15]
Permit Condition -Payment of Fees:
An owner or operator shall pay the appropriate Title V permit fees on schedule. If fees are not paid on schedule, the permit is forfeited. Operation without a permit subjects the source to potential enforcement action by the District and the U.S. EPA pursuant to Section 502(a) of the CAA. [District Rule 3.8, §302.16]

Permit Condition -Permit Revision Exemption:
No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit. [District Rule 3.8, §302.22]

Permit Condition -Application Requirements:
An owner or operator shall submit a standard District application for renewal of the Title V permit, no earlier than 18 months and no later than six months before the expiration date of the current permit to operate. [District Rule 3.8, §402.2]

An owner or operator shall submit a standard District application for each emissions unit affected by a proposed permit revision that qualifies as a significant Title V permit modification. The application shall be submitted after obtaining any required preconstruction permits. Upon request by the APCO, the owner or operator shall submit copies of the latest preconstruction permit for each affected emissions unit. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. [District Rule 3.8, §402.3]

An owner or operator shall submit a standard District application for each emissions unit affected by the proposed permit revision that qualifies as a minor permit modification. The application shall be submitted after obtaining any required preconstruction permits. The emissions unit(s) shall not commence operation until the APCO approves the permit revision. In the application, the owner or operator shall include the following:
a. A description of the proposed permit revision, any change in emissions, and additional applicable federal requirements that will apply;
b. Proposed permit terms and conditions; and
c. A certification by a responsible official that the permit revision meets criteria for use of minor permit modification procedures and a request that such procedures be used. [District Rule 3.8, §402.4]

Permit Condition -Permit Reopening for Cause:
Circumstances that are cause for reopening and revision of a permit include, but are not limited to, the following:
a. The need to correct a material mistake or inaccurate statement;
b. The need to revise or revoke a permit to operate to assure compliance with applicable federal requirements;
c. The need to incorporate any new, revised, or additional applicable federal requirements, if the remaining authorized life of the permit is 3 years or greater, no later than 18 months after the promulgation of such requirement (where less than 3 years remain

in the authorized life of the permit, the APCO shall incorporate the requirements into the permit to operate upon renewal); or
d. Additional requirements promulgated pursuant to Title IV as they become applicable to any acid rain unit governed by the permit. [District Rule 3.8, §413.1]

Permit Condition -Recordkeeping:
The permit holder shall record maintenance of all monitoring and support information required by any applicable federal requirement, including:
a. Date, place, and time of sampling;
b. Operating conditions at the time of sampling;
c. Date, place, and method of analysis; and
d. Results of the analysis. [District Rule 3.8, §302.6a]

The permit holder shall retain records of all required monitoring data and support information for a period of at least five years from the date of sample collection, measurement, report, or application. [District Rule 3.8 §302.6b]

Permit Condition -Reporting Requirements:
Any deviation from permit requirements, including that attributable to upset conditions (as defined in the permit), shall be promptly reported to the APCO. For the purpose of this condition prompt means as soon as reasonably possible, but no later than 10 days after detection.[District Rule 3.8, §302.7a]

A semi-annual monitoring report shall be submitted at least once every six (6) consecutive calendar months and shall identify any deviation from permit requirements, including that previously reported to the APCO pursuant to Section 302.7(a) of Rule 3.8. Unless otherwise approved in writing by the District, the following shall apply:
a. The first six (6) month monitoring period will begin on January 1 and end on June 30, and the report will be due by July 31 of the reporting year; and
b. The second six (6) month period will begin on July 1 and end on December 31, and the report will be due on January 31 of the following calendar year.

All reports of deviation from permit requirements shall include the probable cause of the deviation and any preventive or corrective action taken. [District Rule 3.8, §302.7c]

Each monitoring report shall be accompanied by a written statement from the responsible official that certifies the truth, accuracy, and completeness of the report. [District Rule 3.8, §302.7e]

District Rule 3.20-Ozone Transport Mitigation
This emissions unit does not emit VOCs nor NOx, and therefore, per section 110.2, this application is exempt from this rule.

District Risk Management Plan and Risk Assessment Guidelines
The process does not emit any hazardous air pollutants and therefore health risk assessment is required.

COMMENTS: The application does not trigger BACT, T-BACT, offsets, or public notice.

RECOMMENDATIONS: Issue the Authority to Construct.

Engineer: _____ **Date:** 8/9/13

Reviewed by: _____ **Date:** 8/9/2013

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YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT
1947 Galileo Court, Suite 103, Davis, CA 95618

New Source Review
Last Five Year Activity

Evaluator: Eugene Rubin

Facility Name: UC Davis

Location: UC Davis Main Campus

List of Activities: C-13-84

SIC Code # 8221
Date of Initial Five Year Determination: 5/22/1998
Date of Previous Five Year Determination: 5/31/2013
Date of Current Five Year Determination: 8/8/2013

Equipment	Issued Permits	Date PTO issued	ATC	Date ATC Issued	VOC (tpy)	CO (tpy)	NOx (tpy)	SOx (tpy)	PM10 (tpy)
Boilers	P-67-00(a)	4/8/2009	C-08-61	1/8/2009	0.06	0.88	1.05	0.01	0.08
GDF	P-84-93(a1)	4/8/2009	C-08-97	1/8/2009	0.00	0.00	0.00	0.00	0.00
Emergency ICE	P-2-09	4/2/2010	C-08-110	1/8/2009	0.00	0.02	0.06	0.00	0.00
Emergency ICE	P-3-09	6/18/2009	C-08-193	1/8/2009	0.17	0.34	0.07	0.01	0.01
Emergency ICE	P-4-09	4/2/2010	C-08-232(rev)	1/8/2009	0.01	0.07	0.22	0.00	0.01
Emergency ICE	P-16-09	4/2/2010	C-08-254	5/1/2009	0.03	0.17	0.88	0.00	0.01
Emergency ICE	P-17-09	3/17/2010	C-09-16	5/1/2009	0.00	0.02	0.18	0.00	0.00
GDF	P-42-76(a2)	4/1/2010	C-09-57	3/5/2009	0.44	0.00	0.00	0.00	0.00
Emergency ICE	P-66-09	5/24/2010	C-09-127	9/18/2009	0.00	0.04	0.08	0.00	0.00
Emergency ICE	P-67-09	5/24/2010	C-09-128	9/18/2009	0.00	0.05	0.10	0.00	0.00
Emergency ICE	P-68-09	5/24/2010	C-09-129	9/18/2009	0.01	0.07	0.24	0.00	0.01
Emergency ICE	P-54-09	4/2/2010	C-09-139	9/18/2009	0.01	0.08	0.82	0.00	0.01
Emergency ICE	P-69-09	9/9/2010	C-09-161	9/18/2009	0.02	0.06	0.84	0.00	0.01
Boilers	P-63-06(a)	9/24/2010	C-09-210	6/3/2010	0.16	0.50	0.51	0.00	0.04
Emergency ICE	P-42-10	4/20/2011	C-10-17	9/8/2010	0.00	0.03	0.18	0.00	0.00
Emergency ICE	P-43-10	6/1/2011	C-10-38	9/8/2010	0.00	0.02	0.00	0.00	0.00
Emergency ICE	P-44-10	4/20/2011	C-10-45	9/8/2010	0.04	0.18	0.87	0.00	0.03
Emergency ICE	P-7-11	8/2/2011	C-10-105	3/25/2011	0.01	0.08	0.35	0.00	0.01
Boiler	P-54-00(a)	8/9/2011	C-10-93	3/25/2011	0.07	0.58	0.48	0.01	0.10
Boiler	P-44-11	1/9/2012	C-11-62	8/23/2011	0.02	0.15	0.07	0.00	0.02
GDF	P-1-81(a3)	5/1/2012	C-11-80	3/5/2012	0.95	0.00	0.00	0.00	0.00
Emergency ICE	P-72-11	9/27/2012	C-11-89	3/5/2012	0.03	0.31	1.08	0.00	0.03
Emergency ICE	(P-39-12)	-	C-12-89	12/10/2012	0.02	0.11	0.30	0.00	0.02
Emergency ICE	(P-51-12)	-	C-12-125	2/26/2013	0.04	0.06	0.41	0.00	0.00
Emergency ICE	(P-52-12)	-	C-12-126	2/26/2013	0.00	0.05	0.10	0.00	0.00
Emergency ICE	(P-55-12)	-	C-12-129	2/26/2013	0.01	0.05	0.28	0.00	0.01
Emergency ICE	(P-56-12)	-	C-12-130	2/26/2013	0.01	0.06	0.22	0.00	0.01
Emergency ICE	(P-4-13)	-	C-13-06	4/10/2013	0.02	0.20	1.07	0.00	0.02
Woodworking	(P-44-13)	-	C-13-84	8/8/2013	0.00	0.00	0.00	0.00	2.46
	TOTAL				**2.13**	**4.18**	**10.46**	**0.03**	**2.89**

COMMENTS: These permits are sorted by date the ATC was issued. According to Rule 3.4 Section 221, a major modification is calculated based on all creditable increases and decreases from the source over the period of five consecutive years before the application, including the calendar year of the most recent application. Therefore the applicable years are August 2008 through August 2013.

The following changes were made to this worksheet from the last update (12/20/2012):
(1) Only active PTOs and ATC with ATC issue dates within the applicable period have been considered.
(2) Added emissions from C-13-84.

Engineer: _____ Typed Initials: ER **Date:** 8/8/2013

Reviewed by: _____ **Date:** 8/8/2013

YOLO-SOLANO AIR QUALITY MANAGEMENT DISTRICT
1947 Galileo Court, Suite 103, Davis, CA 95618

New Source Review
Quarterly Potential To Emit Determination
NSR Version 8/13/98

Evaluation to be used on existing permits to obtain their quarterly PTE.

Engineer: Eugene Rubin

Facility Name: University of California, Davis (UCD)

Location: Main UCD Campus

SIC Code # 8221

Date of Initial Quarterly PTE Determination: 04/13/1998
Date of Previous Quarterly PTE Determination: 05/31/2013
Date of Current Quarterly PTE Determination: 08/08/2013

CURRENT APPLICATIONS: **ATC's** C-13-84 **PTO's**

Process Description	Current Permits	VOC Emissions					CO Emissions					NOx Emissions					SOx Emissions					PM10 Emissions				
		QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)
Gasoline Storage & Dispensing	P-1-81(a3)	475	475	475	475	0.85	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00
Cooling Towers	P-101-02	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00
Boiler, NG Fired	P-101-03	5	5	5	5	0.01	29	29	29	29	0.06	53	53	54	54	0.11	1	1	1	1	0.00	7	7	8	8	0.01
Landfill Gas Collection & SVE	P-14-98	6,089	6,157	6,225	6,225	12.31	902	912	922	922	1.82	907	917	927	927	1.83	47	47	48	48	0.09	0	0	0	0	0.00
Boiler (2.1 MMBtu/hr)	P-16-08	25	25	26	26	0.05	90	91	92	92	0.18	132	133	135	135	0.27	3	3	3	3	0.01	34	35	35	35	0.07
Wastewater Treatment Plant (WWTP)	P-22-00(a)	78	78	78	78	0.16	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00
Boiler, NG Fired	P-28-03	124	63	64	127	0.19	466	238	238	477	0.71	511	258	261	522	0.78	3	1	1	3	0.00	32	16	16	33	0.05
Boiler, NG Fired	C-13-72	28	14	14	29	0.04	429	217	219	438	0.65	511	258	261	522	0.78	3	2	2	3	0.00	39	20	20	40	0.06
Boilers (10)	P-3-00	43	44	44	44	0.09	664	672	679	679	1.35	791	800	808	808	1.60	5	5	5	5	0.01	60	61	61	61	0.12
Gasoline Storage & Dispensing	P-42-76(a3)	220	220	220	220	0.44	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00
Boilers, NG Fired	P-44-11	11	6	6	11	0.02	99	49	49	99	0.15	49	24	24	49	0.07	1	1	1	1	0.00	15	8	8	15	0.02
Boiler - Steam Generation	P-44-96	33	34	34	34	0.07	145	147	148	148	0.29	691	699	707	707	1.40	5	5	5	5	0.01	83	84	85	85	0.17
Boiler - Steam Generation	P-45-96	14	15	15	15	0.03	62	63	63	63	0.13	297	300	304	304	0.60	2	2	2	2	0.00	36	36	37	37	0.07
Boiler - Steam Generation	P-47-96	39	39	40	40	0.08	170	172	174	174	0.34	810	819	828	828	1.64	5	5	5	5	0.01	97	98	99	99	0.20
Boiler - Steam Generation	P-48-96	13	13	13	13	0.03	54	55	55	55	0.11	259	262	265	265	0.52	2	2	2	2	0.00	32	32	32	32	0.06
Boiler	P-5-00	12	12	12	12	0.02	69	69	69	69	0.14	328	328	328	328	0.66	2	2	2	2	0.00	39	39	39	39	0.08
Boiler -Natural Gas for Steam	P-52-00	24	24	24	24	0.05	150	152	154	154	0.31	602	608	615	615	1.22	3	3	3	3	0.01	33	33	34	34	0.07
Boiler	P-54-00(a)	36	36	36	36	0.07	287	290	293	293	0.58	236	238	241	241	0.48	4	4	4	4	0.01	49	50	50	50	0.10
Woodworking (Silo)	P-54-90(a)	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	34	34	35	35	0.07
Boilers - Natural Gas	P-54-96	17	17	17	17	0.03	68	69	70	71	0.14	324	328	331	331	0.66	2	2	2	2	0.00	39	39	40	40	0.08
Boilers - Natural Gas	P-55-00	13	13	13	13	0.03	69	70	71	71	0.14	330	334	338	338	0.67	2	2	2	2	0.00	40	40	41	41	0.08
Boiler - Steam Generation	P-62-96	23	24	24	24	0.05	101	102	103	103	0.20	480	485	490	490	0.97	3	3	3	3	0.01	58	58	59	59	0.12
Boilers	P-63-06(a)	78	79	79	79	0.16	248	251	254	254	0.50	251	254	256	256	0.51	2	2	2	2	0.00	21	21	21	21	0.04
Boilers	P-64-03(a)	19	19	19	19	0.04	1,015	1,027	1,038	1,038	2.06	104	105	107	107	0.21	2	2	2	2	0.00	26	26	27	27	0.05
Boiler, NG Fired	P-65-03	27	27	28	28	0.05	218	221	223	223	0.44	119	121	122	122	0.24	3	3	3	3	0.01	37	38	38	38	0.08
Boilers	P-67-00(a)	28	29	29	29	0.06	433	438	443	443	0.83	516	522	527	527	1.05	3	3	3	3	0.01	39	40	40	40	0.08
Boiler #2	P-67-98	81	82	83	83	0.20	8,292	8,384	8,476	8,476	16.80	1,022	1,033	1,044	1,044	2.10	38	38	38	38	0.10	388	393	397	397	0.80
Incinerator Vet. Lab.	P-81-89(a)	34	34	34	34	0.07	84	84	84	84	0.17	1,053	1,053	1,053	1,053	2.10	3	3	3	3	0.01	87	87	87	87	0.18
Boiler (180 MMBtu/hr)	P-83-06	1,667	1,686	1,704	1,704	3.38	1,517	1,533	1,549	1,549	3.07	2,565	2,591	2,617	2,617	5.20	253	256	258	258	0.51	2,943	2,974	3,000	3,000	5.96
Boiler (180 MMBtu/hr)	C-13-75	1,667	1,686	1,704	1,704	3.38	1,517	1,533	1,549	1,549	3.07	2,565	2,591	2,617	2,617	5.20	253	256	258	258	0.51	2,948	2,974	3,000	3,000	5.96
Gasoline Storage & Dispensing	P-84-93(a1)	3	3	3	3	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00
Boiler	P-89-00	154	156	158	158	0.31	8,380	8,473	8,565	8,565	16.86	1,384	1,398	1,407	1,407	2.25	261	261	261	261	0.16	242	244	246	248	0.45
Boiler #1	P-90-00	558	563	567	567	0.86	81,719	82,613	83,506	83,506	163.74	13,587	13,697	13,807	13,807	21.93	2,601	2,603	2,605	2,605	1.55	1,721	1,730	1,739	1,739	2.11
Boiler, NG Fired	P-90-02	11	12	12	12	0.02	199	202	204	204	0.40	98	99	100	100	0.20	2	2	2	2	0.00	21	21	21	21	0.04
Boiler #2	P-91-00	558	563	567	567	0.86	81,719	82,613	83,506	83,506	163.74	13,587	13,697	13,807	13,807	21.93	2,601	2,603	2,605	2,605	1.55	1,721	1,730	1,739	1,739	2.11
Boiler, NG Fired	P-91-02	11	12	12	12	0.02	199	202	204	204	0.40	98	99	100	100	0.20	2	2	2	2	0.00	21	21	21	21	0.04
Woodworking (Physical Plant)	P-95-80(a1)	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	407	412	418	416	0.83
Boiler #3	P-96-00	1,077	1,089	1,101	1,101	2.18	20,295	20,418	20,551	20,551	28.40	9,973	10,052	10,131	10,131	15.83	1,688	1,688	1,690	1,690	1.02	1,992	2,009	2,025	2,025	3.26
Paint Booth	P-96-80(a1)	1,715	1,715	1,715	1,715	3.37	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	54	54	54	54	0.11
Woodworking (art building)	C-13-84	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	0	0	0	0	0.00	1,215	1,229	1,242	1,242	2.46
Pre-project SSPE (lb/year)						52,020										174,480										
Post-project SSPE (lb/year)						52,220										174,480										
Pre-project Policy 28 PTE		13,315	13,367	13,480	13,548	26.26	207,739	209,638	211,813	212,103	404.11	51,157	51,308	51,734	52,020	87.24	7,548	7,554	7,562	7,564	5.08	10,565	10,626	10,707	10,731	17.81
Post-project Policy 28 PTE		13,219	13,318	13,430	13,450	26.11	207,890	209,617	211,794	212,084	404.05	51,157	51,306	51,724	52,020	87.24	7,548	7,552	7,562	7,564	5.08	11,787	11,859	11,953	11,980	20.25
Emergency IC Engine (440 BHP)	P-1-00	2	2	2	2	0.00	163	163	163	163	0.08	1,275	1,275	1,275	1,275	0.64	36	36	36	36	0.02	62	62	62	62	0.03
Emergency IC Engine (560 BHP)	P-100-94(a)	282	282	282	282	0.14	748	748	748	748	0.37	3,472	3,472	3,472	3,472	1.74	45	45	45	45	0.02	246	246	246	246	0.12
Emergency IC Engine (750 BHP)	P-101-94(a)	119	119	119	119	0.06	417	417	417	417	0.21	3,767	3,767	3,767	3,767	1.88	61	61	61	61	0.03	40	40	40	40	0.02
Emergency IC Engine (1,200 BHP)	P-102-03	108	108	108	108	0.05	179	179	179	179	0.09	3,508	3,508	3,508	3,508	1.75	97	97	97	97	0.05	25	25	25	25	0.01
Emergency IC Engine (643 BHP)	P-102-94(a)	94	94	94	94	0.05	680	680	680	680	0.34	3,086	3,086	3,086	3,086	1.54	52	52	52	52	0.03	283	283	283	283	0.14
Emergency IC Engine (228 BHP)	P-103-94(a)	115	115	115	115	0.06	305	305	305	305	0.15	1,414	1,414	1,414	1,414	0.71	18	18	18	18	0.01	100	100	100	100	0.05
Emergency IC Engine (227 BHP)	P-107-95(a)	17	17	17	17	0.01	167	167	167	167	0.08	636	636	636	636	0.32	18	18	18	18	0.01	25	25	25	25	0.01
Emergency IC Engine (68 BHP)	P-108-01	34	34	34	34	0.02	91	91	91	91	0.05	207	207	207	207	0.10	6	6	6	6	0.00	30	30	30	30	0.01

Emergency IC Engine (636 BHP)	P-108-95(a)	25	25	25	25	0.01	3,132	3,132	3,132	3,132	1.57	1,861	1,861	1,861	1,861	0.93	0	0	0	0	0.00	8	8	8	8	0.00
Emergency IC Engine (68 BHP)	P-109-01	34	34	34	34	0.02	91	91	91	91	0.05	207	207	207	207	0.10	6	6	6	6	0.00	30	30	30	30	0.01
Emergency IC Engine (111 BHP)	P-109-95(a)	5	5	5	5	0.00	662	662	662	662	0.33	393	393	393	393	0.20	0	0	0	0	0.00	2	2	2	2	0.00
Emergency IC Engine (400 BHP)	P-110-95(a)	16	16	16	16	0.01	2,016	2,016	2,016	2,016	1.01	1,198	1,198	1,198	1,198	0.60	0	0	0	0	0.00	5	5	5	5	0.00
Emergency IC Engine (1,135 BHP)	P-111-01	70	70	70	70	0.04	250	250	250	250	0.13	2,652	2,652	2,652	2,652	1.33	92	92	92	92	0.05	60	60	60	60	0.03
Emergency IC Engine (52 BHP)	P-112-95(a)	2	2	2	2	0.00	294	294	294	294	0.15	175	175	175	175	0.09	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (124 BHP)	P-113-95(a)	3	3	3	3	0.00	383	383	383	383	0.19	228	228	228	228	0.11	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (170 BHP)	P-114-02	30	30	30	30	0.01	100	100	100	100	0.05	450	450	450	450	0.22	14	14	14	14	0.01	24	24	24	24	0.01
Emergency IC Engine (111 BHP)	P-114-95(a)	5	5	5	5	0.00	595	595	595	595	0.30	354	354	354	354	0.18	0	0	0	0	0.00	2	2	2	2	0.00
Emergency IC Engine (755 BHP)	P-115-03	47	47	47	47	0.02	133	133	133	133	0.07	1,897	1,897	1,897	1,897	0.95	61	61	61	61	0.03	27	27	27	27	0.01
Emergency IC Engine (207 BHP)	P-117-03	16	16	16	16	0.01	306	306	306	306	0.15	628	628	628	628	0.31	17	17	17	17	0.01	81	81	81	81	0.04
Emergency IC Engine (64 BHP)	P-117-95(a)	4	4	4	4	0.00	446	446	446	446	0.22	265	265	265	265	0.13	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (764 BHP)	P-118-03	10	10	10	10	0.01	83	83	83	83	0.04	1,691	1,691	1,691	1,691	0.85	62	62	62	62	0.03	8	8	8	8	0.00
Emergency IC Engine (82 BHP)	P-118-95(a)	3	3	3	3	0.00	383	383	383	383	0.19	228	228	228	228	0.11	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (207 BHP)	P-119-03	16	16	16	16	0.01	306	306	306	306	0.15	628	628	628	628	0.31	17	17	17	17	0.01	81	81	81	81	0.04
Emergency IC Engine (82 BHP)	P-119-95(a)	3	3	3	3	0.00	435	435	435	435	0.22	259	259	259	259	0.13	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (1,120 BHP)	P-120-01	74	74	74	74	0.04	212	212	212	212	0.11	2,044	2,044	2,044	2,044	1.02	91	91	91	91	0.05	44	44	44	44	0.02
Emergency IC Engine (2,935 BHP)	P-120-03	324	324	324	324	0.16	647	647	647	647	0.32	7,765	7,765	7,765	7,765	3.88	237	237	237	237	0.12	130	130	130	130	0.06
Emergency IC Engine (52 BHP)	P-120-95(a)	2	2	2	2	0.00	294	294	294	294	0.15	175	175	175	175	0.09	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (1,120 BHP)	P-121-03	75	75	75	75	0.04	212	212	212	212	0.11	2,046	2,046	2,046	2,046	1.02	91	91	91	91	0.05	45	45	45	45	0.02
Emergency IC Engine (124 BHP)	P-121-95(a)	3	3	3	3	0.00	383	383	383	383	0.19	228	228	228	228	0.11	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (64 BHP)	P-122-95(a)	4	4	4	4	0.00	450	450	450	450	0.23	267	267	267	267	0.13	0	0	0	0	0.00	1	1	1	1	0.00
Emergency IC Engine (160 BHP)	P-123-95(a)	10	10	10	10	0.00	1,224	1,224	1,224	1,224	0.61	727	727	727	727	0.36	0	0	0	0	0.00	3	3	3	3	0.00
Emergency IC Engine (189 BHP)	P-124-95(a)	8	8	8	8	0.00	1,049	1,049	1,049	1,049	0.52	623	623	623	623	0.31	0	0	0	0	0.00	3	3	3	3	0.00
Emergency IC Engine (166 BHP)	P-125-95(a)	7	7	7	7	0.00	885	885	885	885	0.44	526	526	526	526	0.26	0	0	0	0	0.00	2	2	2	2	0.00
Emergency IC Engine (380 BHP)	P-126-95(a)	80	80	80	80	0.04	168	168	168	168	0.08	1,558	1,558	1,558	1,558	0.78	31	31	31	31	0.02	84	84	84	84	0.04
Emergency IC Engine (1,120 BHP)	P-15-04	128	128	128	128	0.06	316	316	316	316	0.16	3,146	3,146	3,146	3,146	1.57	91	91	91	91	0.05	25	25	25	25	0.01
Standby IC Engine (380 BHP)	P-15-98	84	84	84	84	0.04	275	275	275	275	0.14	1,558	1,558	1,558	1,558	0.78	94	94	94	94	0.05	84	84	84	84	0.04
Emergency IC Engine (998 BHP)	P-16-09	53	53	53	53	0.03	330	330	330	330	0.17	1,756	1,756	1,756	1,756	0.88	2	2	2	2	0.00	26	26	26	26	0.01
Standby IC Engine (345 BHP)	P-16-98	47	47	47	47	0.02	73	73	73	73	0.04	888	888	888	888	0.44	85	85	85	85	0.04	76	76	76	76	0.04
Emergency IC Engine (170 BHP)	P-17-02	75	75	75	75	0.04	637	637	637	637	0.32	517	517	517	517	0.26	0	0	0	0	0.00	30	30	30	30	0.01
Emergency IC Engine (297 BHP)	P-17-09	6	6	6	6	0.00	48	48	48	48	0.02	356	356	356	356	0.18	1	1	1	1	0.00	5	5	5	5	0.00
Standby IC Engine (82 BHP)	P-17-98	40	40	40	40	0.02	80	80	80	80	0.04	380	380	380	380	0.19	6	6	6	6	0.00	20	20	20	20	0.01
Standby IC Engine (53 BHP)	P-18-98	20	20	20	20	0.01	60	60	60	60	0.03	240	240	240	240	0.12	1	1	1	1	0.00	1	1	1	1	0.00
Emergency IC Engine (423 BHP)	P-2-00	16	16	16	16	0.01	617	617	617	617	0.31	2,002	2,002	2,002	2,002	1.00	283	283	283	283	0.14	186	186	186	186	0.09
Emergency IC Engine (80 BHP)	P-2-09	2	2	2	2	0.00	31	31	31	31	0.02	121	121	121	121	0.06	0	0	0	0	0.00	4	4	4	4	0.00
Emergency IC Engine (207 BHP)	P-209-95(a)	64	64	64	64	0.03	183	183	183	183	0.09	1,004	1,004	1,004	1,004	0.50	17	17	17	17	0.01	23	23	23	23	0.01
Emergency IC Engine (390 BHP)	P-29-96(a)	196	196	196	196	0.10	521	521	521	521	0.26	2,418	2,418	2,418	2,418	1.21	32	32	32	32	0.02	86	86	86	86	0.04
Emergency IC Engine (770 BHP)	P-3-09	340	340	340	340	0.17	679	679	679	679	0.34	149	149	149	149	0.07	20	20	20	20	0.01	15	15	15	15	0.01
Standby IC Engine (535 BHP)	P-31-98	73	73	73	73	0.04	354	354	354	354	0.18	1,323	1,323	1,323	1,323	0.66	139	139	139	139	0.07	45	45	45	45	0.02
Standby IC Engine (465 BHP)	P-32-98	64	64	64	64	0.03	307	307	307	307	0.15	1,150	1,150	1,150	1,150	0.58	121	121	121	121	0.06	39	39	39	39	0.02
Emergency IC Engine (535 BHP)	P-32-99	73	73	73	73	0.04	354	354	354	354	0.18	1,322	1,322	1,322	1,322	0.66	139	139	139	139	0.07	45	45	45	45	0.02
Emergency IC Engine (317 BHP)	P-38-05	20	20	20	20	0.01	66	66	66	66	0.03	512	512	512	512	0.26	26	26	26	26	0.01	20	20	20	20	0.01
Emergency IC Engine (453.8 BHP)	P-4-09	16	16	16	16	0.01	131	131	131	131	0.07	431	431	431	431	0.22	1	1	1	1	0.00	13	13	13	13	0.01
Emergency IC Engine (315 BHP)	P-42-10	7	7	7	7	0.00	60	60	60	60	0.03	376	376	376	376	0.19	1	1	1	1	0.00	8	8	8	8	0.00
Standby IC Engine (207 BHP)	P-42-97	27	27	27	27	0.01	55	55	55	55	0.03	456	456	456	456	0.23	51	51	51	51	0.03	24	24	24	24	0.01
Emergency IC Engine (97.5BHP)	P-43-10	2	2	2	2	0.00	43	43	43	43	0.02	6	6	6	6	0.00	2	2	2	2	0.00	2	2	2	2	0.00
Emergency IC Engine (896 BHP)	P-44-10	87	87	87	87	0.04	363	363	363	363	0.18	1,730	1,730	1,730	1,730	0.87	2	2	2	2	0.00	55	55	55	55	0.03
Emergency IC Engine (900 BHP)	P-49-07	20	20	20	20	0.01	171	171	171	171	0.09	1,656	1,656	1,656	1,656	0.83	2	2	2	2	0.00	21	21	21	21	0.01
Emergency IC Engine (1,490 BHP)	P-50-07	85	85	85	85	0.04	343	343	343	343	0.17	2,950	2,950	2,950	2,950	1.47	4	4	4	4	0.00	54	54	54	54	0.03
Portable Emergency ICE (118 BHP)	P-50-99(a)	59	59	59	59	0.03	158	158	158	158	0.08	732	732	732	732	0.37	10	10	10	10	0.00	52	52	52	52	0.03
Emergency IC Engine (64 BHP)	P-51-07	10	10	10	10	0.01	31	31	31	31	0.02	131	131	131	131	0.07	0	0	0	0	0.00	3	3	3	3	0.00
Portable Emergency ICE (118 BHP)	P-51-99(a)	59	59	59	59	0.03	158	158	158	158	0.08	732	732	732	732	0.37	10	10	10	10	0.00	52	52	52	52	0.03
Emergency IC Engine (1,207 BHP)	P-52-07	213	213	213	213	0.11	319	319	319	319	0.16	2,714	2,714	2,714	2,714	1.36	3	3	3	3	0.00	80	80	80	80	0.04
Portable Emergency ICE (118 BHP)	P-52-99(a)	59	59	59	59	0.03	158	158	158	158	0.08	732	732	732	732	0.37	10	10	10	10	0.00	52	52	52	52	0.03
Emergency IC Engine (1,207 BHP)	P-53-07	213	213	213	213	0.11	319	319	319	319	0.16	2,714	2,714	2,714	2,714	1.36	3	3	3	3	0.00	80	80	80	80	0.04
Emergency IC Engine (923 BHP)	P-54-09	21	21	21	21	0.01	165	165	165	165	0.08	1,645	1,645	1,645	1,645	0.82	2	2	2	2	0.00	21	21	21	21	0.01
Emergency IC Engine (1,252 BHP)	P-54-97	73	73	73	73	0.04	1,573	1,573	1,573	1,573	0.79	5,604	5,604	5,604	5,604	2.80	871	871	871	871	0.44	418	418	418	418	0.21
Emergency IC Engine (145 BHP)	P-59-05	12	12	12	12	0.01	48	48	48	48	0.02	275	275	275	275	0.14	12	12	12	12	0.01	2	2	2	2	0.00
Emergency IC Engine (364 BHP)	P-59-07	26	26	26	26	0.01	384	384	384	384	0.19	429	429	429	429	0.21	1	1	1	1	0.00	19	19	19	19	0.01
Emergency IC Engine (415 BHP)	P-61-00	55	55	55	55	0.03	1,366	1,366	1,366	1,366	0.68	79	79	79	79	0.04	11	11	11	11	0.01	8	8	8	8	0.00
Emergency IC Engine (380 BHP)	P-63-03	45	45	45	45	0.02	106	106	106	106	0.05	1,032	1,032	1,032	1,032	0.52	31	31	31	31	0.02	27	27	27	27	0.01
Emergency IC Engine (126 BHP)	P-66-09	6	6	6	6	0.00	89	89	89	89	0.04	150	150	150	150	0.08	0	0	0	0	0.00	8	8	8	8	0.00
Emergency IC Engine (158 BHP)	P-67-09	7	7	7	7	0.00	91	91	91	91	0.05	195	195	195	195	0.10	0	0	0	0	0.00	10	10	10	10	0.00
Emergency IC Engine (453.8 BHP)	P-68-09	20	20	20	20	0.01	140	140	140	140	0.07	480	480	480	480	0.24	1	1	1	1	0.00	16	16	16	16	0.01
Emergency IC Engine (904 BHP)	P-69-09	33	33	33	33	0.02	122	122	122	122	0.06	1,675	1,675	1,675	1,675	0.84	2	2	2	2	0.00	23	23	23	23	0.01
Emergency IC Engine (166 BHP)	P-69-96(a)	22	22	22	22	0.01	241	241	241	241	0.12	779	779	779	779	0.39	13	13	13	13	0.01	18	18	18	18	0.01
Emergency IC Engine (465 BHP)	P-7-01	14	14	14	14	0.01	246	246	246	246	0.12	1,819	1,819	1,819	1,819	0.91	129	129	129	129	0.06	62	62	62	62	0.03
Emergency IC Engine (617 BHP)	P-7-11	27	27	27	27	0.01	162	162	162	162	0.08	703	703	703	703	0.35	1	1	1	1	0.00	24	24	24	24	0.01
Emergency IC Engine (465 BHP)	P-71-00	14	14	14	14	0.01	246	246	246	246	0.12	1,819	1,819	1,819	1,819	0.91	129	129	129	129	0.06	62	62	62	62	0.03
Emergency IC Engine (1,194 BHP)	P-72-11	67	67	67	67	0.03	628	628	628	628	0.31	2,159	2,159	2,159	2,159	1.08	3	3	3	3	0.00	63	63	63	63	0.03
Emergency IC Engine (470 BHP)	P-74-05	21	21	21	21	0.01	110	110	110	110	0.05	682	682	682	682	0.34	38	38	38	38	0.02	21	21	21	21	0.01
Emergency IC Engine (227 BHP)	P-8-01(a)	119	119	119	119	0.06	417	417	417	417	0.21	3,767	3,767	3,767	3,767	1.88	61	61	61	61	0.03	40	40	40	40	0.02
Emergency IC Engine (490 BHP)	P-82-02	15	15	15	15	0.01	84	84	84	84	0.04	1,417	1,417	1,417	1,417	0.71	40	40	40	40	0.02	78	78	78	78	0.04
Emergency IC Engine (207 BHP)	P-83-02	14	14	14	14	0.01	78	78	78	78	0.04	598	598	598	598	0.30	55	55	55	55	0.03	25	25	25	25	0.01
Emergency IC Engine (635 BHP)	P-84-02	7	7	7	7	0.00	728	728	728	728	0.36	1,758	1,758	1,758	1,758	0.88	260	260	260	260	0.13	32	32	32	32	0.02
Portable Emergency ICE (311 BHP)	P-86-01	55	55	55	55	0.03	110	110	110	110	0.05	727	727	727	727	0.36	25	25	25	25	0.01	14	14	14	14	0.01
Portable Emergency ICE (311 BHP)	P-87-01	55	55	55	55	0.03	110	110	110	110	0.05	727	727	727	727	0.36	25	25	25	25	0.01	14	14	14	14	0.01
Emergency IC Engine (1,550 BHP)	P-88-99	44	44	44	44	0.02	2,866	2,866	2,866	2,866	1.43	8,157	8,157	8,157	8,157	4.08	1,145	1,145	1,145	1,145	0.57	217	217	217	217	0.11

Emergency IC Engine (277 BHP)	P-89-94(a)	139	139	139	139	0.07	370	370	370	370	0.19	1,717	1,717	1,717	1,717	0.86	22	22	22	22	0.01	122	122	122	122	0.06
Emergency IC Engine (750 BHP)	P-9-01(a)	22	22	22	22	0.01	201	201	201	201	0.10	586	586	586	586	0.29	18	18	18	18	0.01	28	28	28	28	0.01
Emergency IC Engine (290 BHP)	P-90-94(a)	146	146	146	146	0.07	387	387	387	387	0.19	1,798	1,798	1,798	1,798	0.90	23	23	23	23	0.01	128	128	128	128	0.06
Emergency IC Engine (289 BHP)	P-91-94(a)	145	145	145	145	0.07	386	386	386	386	0.19	1,792	1,792	1,792	1,792	0.90	23	23	23	23	0.01	127	127	127	127	0.06
Emergency IC Engine (415 BHP)	P-92-94(a)	209	209	209	209	0.10	554	554	554	554	0.28	2,573	2,573	2,573	2,573	1.29	34	34	34	34	0.02	183	183	183	183	0.09
Emergency IC Engine (150 BHP)	P-94-94(a)	15	15	15	15	0.01	177	177	177	177	0.09	772	772	772	772	0.39	12	12	12	12	0.01	66	66	66	66	0.03
Emergency IC Engine (244 BHP)	P-95-94(a)	123	123	123	123	0.06	326	326	326	326	0.16	1,513	1,513	1,513	1,513	0.76	20	20	20	20	0.01	107	107	107	107	0.05
Emergency IC Engine (740 BHP)	P-96-94(a)	108	108	108	108	0.05	783	783	783	783	0.39	3,552	3,552	3,552	3,552	1.78	60	60	60	60	0.03	326	326	326	326	0.16
Emergency IC Engine (207 BHP)	P-99-94(a)	64	64	64	64	0.03	183	183	183	183	0.09	1,004	1,004	1,004	1,004	0.50	17	17	17	17	0.01	23	23	23	23	0.01
Emergency IC Engine (550 BHP)	C-12-89	32	32	32	32	0.02	211	211	211	211	0.30	604	604	604	604	0.30	1	1	1	1	0.00	34	34	34	34	0.02
Emergency IC Engine (685 BHP)	C-12-125	81	81	81	81	0.04	112	112	112	112	0.06	820	820	820	820	0.41	2	2	2	2	0.00	9	9	9	9	0.00
Emergency IC Engine (158 BHP)	C-12-126	7	7	7	7	0.00	91	91	91	91	0.05	195	195	195	195	0.10	0	0	0	0	0.00	10	10	10	10	0.00
Emergency IC Engine (463 BHP)	C-12-129	16	16	16	16	0.01	92	92	92	92	0.05	563	563	563	563	0.28	1	1	1	1	0.00	16	16	16	16	0.01
Emergency IC Engine (385 BHP)	C-12-130	15	15	15	15	0.01	119	119	119	119	0.06	441	441	441	441	0.22	1	1	1	1	0.00	19	19	19	19	0.01
Emergency IC Engine (1,214 BHP)	C-13-06	48	48	48	48	0.02	401	401	401	401	0.20	2,146	2,146	2,146	2,146	1.07	3	3	3	3	0.00	32	32	32	32	0.02
Emergency IC Engine (314 BHP)	C-13-42	19	19	19	19	0.01	361	361	361	361	0.18	208	208	208	208	0.10	1	1	1	1	0.00	0	0	0	0	0.00
Rule 3.2 Exempt Units Total PTE (lb/year)						5,720										137,620										

SUMMARY	VOC Emissions					CO Emissions					NOx Emissions					SOx Emissions					PM10 Emissions				
	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)	QTR 1 (lbs)	QTR 2 (lbs)	QTR 3 (lbs)	QTR 4 (lbs)	Annual (TPY)
Pre-project SSPE (lb/year)					52,520										174,480										
Post-project SSPE (lb/year)					52,220										174,480										
Pre-project Policy 28 PTE	13,315	13,367	13,480	13,548	26.26	207,739	209,636	211,813	212,103	404.11	51,157	51,306	51,734	52,020	87.24	7,548	7,554	7,562	7,564	5.08	10,587	10,626	10,707	10,731	17.81
Post-project Policy 28 PTE	13,219	13,318	13,430	13,450	26.11	207,696	209,617	211,794	212,064	404.05	51,157	51,306	51,724	52,020	87.24	7,548	7,555	7,563	7,564	5.08	11,787	11,859	11,963	11,980	20.28
FACILITY TOTAL PTE	18,986	19,085	19,197	19,217	28.97	247,694	249,615	251,791	252,061	424.24	163,759	168,907	169,325	169,821	156.05	12,854	12,862	12,869	12,870	7.74	16,923	16,994	17,089	17,116	22.74

Facility Policy 28 Post-Project Potential to Emit

	Quarter #1 (lb)	Quarter #2 (lb)	Quarter #3 (lb)	Quarter #4 (lb)	Yearly (lb)	Yearly (tons)
VOC	13,219	13,318	13,430	13,450	52,220	26.11
CO	207,696	209,617	211,794	212,064	808,100	404.05
NOx	51,157	51,306	51,724	52,020	174,480	87.24
SOx	7,548	7,555	7,563	7,564	10,160	5.08
PM10	11,787	11,859	11,953	11,980	40,560	20.28

Post-Project Stationary Source Potential to Emit (SSPE)

	Yearly
VOC	52,220
NOx	174,480

OFFSET THRESHOLDS

(lbs/qtr)
7,500
49,500
7,500
13,650
13,650

MITIGATION THRESHOLDS

(lb/year)
20,000
20,000

PTE Comparison to NSR Triggers

Quarter #1	Quarter #2	Quarter #3	Quarter #4
Above	Above	Above	Above
Above	Above	Above	Above
Above	Above	Above	Above
Below	Below	Below	Below
Below	Below	Below	Below

SSPE Comparison to Rule 3.20 Triggers

Annual
Above
Above

COMMENTS: The following Changes were made to this PTE worksheet from the last update (12/20/2012):
(1) Emissions were added for C-13-06.

Engineer: ER

Date: 8/8/13

Reviewed by: Frank DeRosa

Date: 8/8/2013