



FINDINGS AND ORDERS

HEARING BOARD
SacMetro AQMD
777 12th Street, 3rd Floor
Sacramento, California 95814

Tuesday

May 2, 2017

4:00 PM

HEARING ITEMS

1. **Petitioner**

Sacramento Area Flood Control Agency (SAFCA)

Petition Number

2017-004

Petitioner's Address

1007 7th Street, 7th Floor
Sacramento, CA 95814

Equipment Location

5334 East Levee Road, Sacramento.

Hearing

The Petitioner made a presentation, but the Board found that the request for a regular variance was premature and required additional information. The Board continued the item over to the June 20, 2017, hearing to allow Petitioner to provide the Board with further information.

Motion

Motion to continue hearing until June 20, 2017, to allow petitioner time to produce requested information.

Action

John German Moved /Darrel Woo Seconded

Ayes: German, Olson, Weyers, Woo

Order

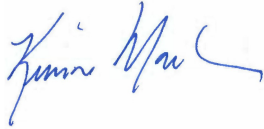
It is ORDERED that the Petition for a Regular Variance by Sacramento Area Flood Control Agency be continued until June 20, 2017, when the Hearing Board will reconvene to consider the matter.

Report Approved May 23, 2017



Dr. Stephen Weyers, Chairman of the
Hearing Board

Approved as to Form May 22, 2017



Kimon Manolius, Hearing Board Counsel

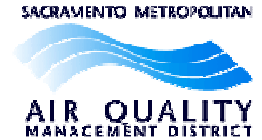
BOARD IDEAS AND COMMENTS

No additional ideas or comments were made at this meeting.



Attest by Virginia Muller

Hearing Date 5/2/2017
Petitioner Sacramento Area Flood Control Agency (SAFCA)
Petition Type Regular Variance
Petition Number 2017-004



Petitioner Request

SAFCA is requesting relief from Condition No. 7 of Permits to Operate numbers 12018, 12019 and 12020 to be allowed to operate over their permitted limits of 200 hours/year for each engine.

Recommendation

Staff recommends that the Board grant the requested variance.

Petitioner Address

1007 7th Street, 7th Floor
Sacramento, CA 95814

Equipment Location

5334 East Levee Road, Sacramento.

Discussion

No variance may be granted unless the Hearing Board makes all of the six findings set forth under section 42352 (a). It is Petitioner's burden to prove, by a preponderance of the evidence, facts sufficient to support the mandatory findings.

BACKGROUND

The Sacramento Area Flood Control Agency (SAFCA) was formed in 1989 to address the Sacramento area's vulnerability to catastrophic flooding. This vulnerability was exposed during the record flood of 1986 when Folsom Dam exceeded its normal flood control storage capacity and several area levees nearly collapsed under the strain of the storm. In response, the City of Sacramento, the County of Sacramento, the County of Sutter, the American River Flood Control District and Reclamation District No. 1000 created SAFCA through a Joint Exercise of Powers Agreement to provide the Sacramento region with increased flood protection along the American and Sacramento Rivers.

SAFCA was granted three permits on 12/29/1997 for three standby engines each directly driving a pump for flood control purposes. The engines are located at the Natomas East Main Drainage Canal (NEMDC) storm water pumping station (D-15). The purpose of the NEMDC station is to reduce the possibility of flooding in Elverta and Western Rio Linda. Each engine is subject to a total operation (maintenance and emergency) time of 200 hours/year. Due to the high amount of rain this season, the engines have come close to these limits. Two of the engines are at or above 140 hour/year of operation, with more anticipated use during the last quarter of this year. The engines must also be operated periodically for maintenance and testing purposes.

FINDINGS

The six findings below are set forth under Health and Safety Code 42352, subs. (a)(1-6).

Finding 1 - Violation

"That the petitioner for a variance is, or will be, in violation of 41701 [opacity] or of any rule, regulation, or order of district."

Petitioner will be in violation of condition 7 of permits 12018 through 12020 that limits the total operation of each engine to 200 hours/year if high rainfall results in potential flooding.

Finding 2 - Reasonable Control

"That, due to conditions beyond the reasonable control of petitioner, requiring compliance would result in either: (A) an arbitrary or unreasonable taking of property, or (B) the practical closing and elimination of a lawful business. In making those findings where the petitioner is a public agency, the hearing board shall consider whether or not immediate compliance would impose an unreasonable burden on an essential public service."

The question here is two-fold:

- i. *Whether the cause of the violation is beyond Petitioner's reasonable control.*

Due to the abnormally high rainfall this season, the engines have accumulated hours that are nearing their yearly threshold of 200 hours. The facility has three engines each serving a flood control pump that they can alternate to avoid exceeding the limits. But if there is a high amount of rainfall, all of the engines will have to be used to avoid flooding.

ii. *Whether, because of its inability to comply, the denial of a variance would result in either an arbitrary or unreasonable taking of property or the practical closing or elimination of its business.*

If the entity requesting a variance is a public agency, the Health and Safety Code permits the Hearing Board to consider whether denying the variance would impact essential public services. SAFCA is a public agency, but does not fall within the facilities listed under the definition of essential public services. They do provide flood control to a considerable population within the District.

This is a flood control pumping station that relies on the emergency pumps to provide essential emergency flood control in the event of heavy rainfall. SAFCA indicates that inability to use the engines could result in safety hazards, up to and including loss of life.

Finding 3 - Relative Benefit to Air Quality

"That the closing or taking would be without a corresponding benefit in reducing air contaminants.";

The purpose of the flood control pumps is to reduce the possibility of flooding and avoid loss of property and life. The acute risk of potential loss of life through flooding outweighs the potential chronic risk of exposure to diesel particulate matter. The cleanup after a flood would result in higher diesel particulate emissions due to the need of construction equipment including the use of trucks to haul the debris.

Finding 4 - Curtailment of Operations

"That the applicant for the variance has given consideration to curtailing operations of the source in lieu of obtaining a variance."

The facility has three engines that they can alternate operation to avoid exceeding the permitted limits. But during a severe storm, the facility will need to operate all of the engines. The engines directly drive the flood control pumps, which makes it infeasible to bring in replacement engines. These engines are also rated at 1,250 hp each, which are not readily available.

Finding 5 - Reduction of Excess Emissions

"During the period the variance is in effect, that the applicant will reduce excess emissions to the maximum extent feasible."

During a severe storm, all three engines will have to be operated. The applicant will minimize the maintenance operation of the engines to the maximum extent possible to reduce excess emissions.

Finding 6 - Monitoring

"During the period the variance is in effect, that the applicant will monitor or otherwise quantify emission levels from the source, if requested to do so by the district, and report these emission levels to the district pursuant to a schedule established by the district."

The District will not request any emissions monitoring, but will require the facility to keep track of the hours operated by each engine.

NUISANCE FINDING

"No variance shall be granted if the operation will result in a violation of Section 41700."

Staff has not identified any violation of 41700 that may result from the granting of this variance.

OTHER REQUIREMENTS

The Hearing Board may prescribe other requirements as set forth under Health and Safety Code 42353.

ATTACHMENTS:

Description	Type	Upload Date
Regular Variance Petition	Petitions	4/20/2017
Pumping Station Operational Parameters	Supporting Documents	4/11/2017
2017 Hours of Operation	Graphs/Charts/Tables	4/19/2017
Table of Required Findings to Grant Variance	Supporting Documents	4/20/2017

Approvals/Acknowledgements

Division Manager or Designee: Amy Roberts, Report Approved 4/11/2017

District Counsel or Designee: Kathrine Pittard, Approved as to Form 4/18/2017



BEFORE THE HEARING BOARD
OF THE
SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

PETITION APPLICATION

<p>Petitioner's Name, Business Name, and Address</p> <p>Sacramento Area Flood Control Agency 1007 7th Street, 7th Floor Sacramento, CA 95814</p> <p>Telephone No: (916) 874-7606</p>	<p>For Office Use Only</p> <p>Variance No. <u>2017-004</u></p> <p><input checked="" type="checkbox"/> Filing Fee Received, Receipt No: _____</p> <p><u>30</u> Day Notice of Hearing Required <u>April 2, 2017</u></p> <p><u>Regular Variance</u></p>
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INSTRUCTIONS

- A. Please fill in the petitioner's name, business name, address, and telephone number in the above space.
- B. The petitioner is (check one):
- ☐ Individual ☐ Partnership ☐ Corporation ☒ Other (specify) **Joint Powers Agency**
- C. Please refer to the applicable sections of the California Health & Safety Code (H&S Code) and the Rules and Regulations of the Sacramento Metropolitan Air Quality Management District (SMAQMD) when completing the petition. The SMAQMD staff and the Business Environmental Resource Center are available to assist Small Businesses with the technical aspects of filling out this form and the development of compliance schedules.¹
- D. Please complete attached pages with thorough and documented factual responses. Review Rule 601, Procedure Before the Hearing Board, carefully to ensure the petition is complete. The petition and anything you supply in support of your petition will become part of the public record.
- E. Please submit this form and filing fee to SMAQMD, 777 12th Street, Third Floor, Sacramento, California 95814. The submittal date for a petition shall be the date on the receipt issued by the District acknowledging the petitioner's full payment of the required initial fee and the newspaper publication fee (if required). After receipt, SMAQMD will notify you of the time and date of your hearing.

¹ See Health and Safety Code section 42323. The Business Environmental Resource Center's Telephone number is (916) 649-0225.

TO: Variance Petitioners

DATE: January 22, 2010

FROM: Clerk of the SMAQMD Hearing Board

SUBJECT: Variance Petitions

If your business is or will be in violation of one of the Sacramento Metropolitan Air Quality Management District's (SMAQMD) rules, you may petition the SMAQMD Hearing Board for a variance. If granted, a variance will give you temporary relief from the rule requirements that are being violated. A specified amount of time will be allowed during which you must bring your business into compliance.

A petition form is enclosed. SMAQMD staff will explain the form if requested. We will also assist you in estimating excess emissions. Copies of Rule 601—PROCEDURE BEFORE THE HEARING BOARD and Rule 302—HEARING BOARD FEES are available on the District web site. Please review these documents carefully to familiarize yourself with the hearing process.

You may also use the enclosed petition to appeal the Air Pollution Control Officer's permitting decisions. For instance, if you believe your permit was incorrectly denied, you may petition the Hearing Board to make that determination.

Please be sure to review the findings that the Hearing Board must adopt when making a decision. The findings are in the petition form. **IMPORTANT: You must supply the evidence in support of those findings.** If the Hearing Board cannot make one of the required findings, the Hearing Board must deny the petition.

Anything that you supply in support of your petition, as well as the petition itself, will become part of the public record. If any information included in such materials is confidential information, please contact the SMAQMD Office of District Counsel **before** disclosing the confidential information.

An incomplete or inadequately documented petition or presentation at the hearing may delay the proceedings. Depending upon the complexity and nature of the situation, some petitioners use legal counsel to prepare the petition and hearing presentation.

After you submit your petition, SMAQMD must provide a public notice for the hearing. The length of notice required will depend upon the type of Hearing Board action you request. The Hearing Board has established a regular hearing schedule that is available on the District web site. **Please submit your completed petition and initial filing fee no later than the deadline shown on the schedule.** All regularly scheduled Hearing Board meetings are held in the SMAQMD conference room at 4:00 P.M.

Emergency variances necessitated by the breakdown of emission control equipment are scheduled on an as needed basis. You must contact the SMAQMD office and fill out a separate form to initiate a breakdown procedure.

Information regarding the initial filing fees is on the following pages. You may be charged fees in addition to the initial fee—per Rule 302.

If you have any questions or need assistance, please call the Clerk of the Hearing Board at (916) 874-4809.

- F. Please use a check mark in the ☐ to identify the type of petition being submitted and circle the appropriate fee. Fee amounts include the newspaper publishing fee (when required). Fees in parentheses are for small business as defined by Rule 302:

Variance Petitions		Fee
<input type="checkbox"/> Interim Variance		\$1,024 (\$765)
<input type="checkbox"/> Short-Term Variance		\$1,024 (\$765)
<input checked="" type="checkbox"/> Regular Variance		\$1,084 (\$825)
<input type="checkbox"/> Emergency Variance		\$495 (\$495)

Product Variance Petitions		
<input type="checkbox"/> Interim Product Variance		\$1,024 (\$765)
<input type="checkbox"/> Product Variance		\$1,084 (\$825)

Petition to Modify an Order Permitting a Variance		
<input type="checkbox"/> Interim Variance		\$1,084 (\$825)
<input type="checkbox"/> Short-term Variance		\$1,084 (\$825)
<input type="checkbox"/> Regular Variance		\$1,084 (\$825)
<input type="checkbox"/> Interim Product Variance		\$1,084 (\$825)
<input type="checkbox"/> Product Variance		\$1,084 (\$825)

Petition to Modify Increments of Progress		
<input type="checkbox"/> Interim Authorization—Variance		\$1,024 (\$765)
<input type="checkbox"/> Interim Authorization—Product Variance		\$1,024 (\$765)
<input type="checkbox"/> Variance		\$1,024 (\$765)
<input type="checkbox"/> Product Variance		\$1,024 (\$765)

Petition to Modify a Final Compliance Date		
<input type="checkbox"/> Variance		\$1,084 (\$825)
<input type="checkbox"/> Product Variance		\$1,084 (\$825)

Permit Action Petition		
<input type="checkbox"/> Review of Permit Denial		\$1,084 (\$825)
<input type="checkbox"/> Review of Conditional Approval		\$1,084 (\$825)
<input type="checkbox"/> Review of Permit Suspension		\$1,084 (\$825)

Other Petitions		
<input type="checkbox"/> Rehearing of a Variance Decision		\$1,084 (\$825)
<input type="checkbox"/> Review of an Emission Reduction Credit Refusal		\$1,084 (\$825)
<input type="checkbox"/> Petition by an Aggrieved Party		\$1,084 (\$825)

- G. Please enclose filing fee with each petition. Make checks payable to the SMAQMD. No petition will be processed unless filing fee is submitted with petition.

In addition to the filing fee, SMAQMD may subsequently charge a petitioner a fee for staff time exceeding 7.5 hours and/or an "excess duration fee." See sections 301.2 and 301.4 of Rule 302—HEARING BOARD FEES.

CONTENTS OF PETITION FOR VARIANCE
(Please type or print clearly)

1. Name, title, address, and phone number of person authorized to receive notices regarding the petition:

Name, Title, and Address

Telephone Number

JASON CAMPBELL

(916) 874-7606

Deputy Executive Director, SAFCA

1007 7th Street, 7th Floor

Sacramento, CA 95814

2. Names and addresses of partners or officers:

Name(s)

Address(es)

Richard Johnson

Executive Director

John Bassett

Director of Engineering

3. Name and location of business or activity if different from #1 above:

Same

4. Briefly describe the nature of your business:

A Joint Powers Flood Control Agency comprised of City of Sacramento,
County of Sacramento, Sacramento County Water Agency, Sutter County, Sutter
County Water Agency, Reclamation District No. 1000, and American River Flood
Control District

5. Briefly describe the equipment which is the subject of this petition. List SMAQMD Permit Nos., indicate if equipment is exempt from Permit requirements, or answer No. 6 below:

No. 12018, 12019, 12020

See Permit. Internal combustion diesel engines running standby flood control pumps

6. I have not received permit(s) yet. My application for a Permit To Operate was submitted on

7. Have you been issued a Notice of Violation concerning the operation of this equipment?

☐ YES ☒ NO

8. California Health and Safety Code section 41700 states:

"Except as otherwise provided in Section 41705² no person shall 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, or have a natural tendency to cause, injury or damage to business or property."

Is your company or agency (or will your company or agency be) in violation of California Health and Safety Code section 41700?

☐ YES ☒ NO

If yes, please explain:

If yes, please also attach the name(s) and address(es) of any complainant(s).

² Among other things, section 41705 exempts (from section 41700) odors from agricultural operations. See section 41705 for details.

9. Is your company or agency (or will your company or agency be) in violation of:

- a. California Health and Safety Code section 41701³ or
- b. Any Sacramento Metropolitan Air Quality Management District (SMAQMD) Rule, regulation, order, and/or Permit condition?

If so, please explain the violation and please cite the statute, Rule, regulation, order, and/or Permit condition that is being, or will be, violated.

No.

Please attach a copy of the pertinent Permit(s) to this petition. Remember, if any Permit or other information you supply as part of this variance petition process contains confidential information, please contact SMAQMD Office of District Counsel before disclosing such confidential material.

10. If you are required to comply immediately with the statute, Rule, regulation, order, or Permit condition (cited in your response to Question No. 9 above), are there conditions beyond your reasonable control that would result in any of the following situations:

- a. An arbitrary or unreasonable taking of your property; or
- b. The practical closing or elimination of a lawful business; or
- c. An unreasonable burden on a publicly owned or operated "essential public service," i.e., a prison, detention facility, police or fire fighting facility, school, health care facility, landfill, gas control or processing facility, sewage treatment works, or water delivery operation?

Please discuss the evidence supporting your conclusion:

Yes - C. Inability to run flood control pumps resulting in flooding of private property (homes, roadways, commercial businesses, etc.)

Please be prepared to supply documentation or other proof of your evidence to the Hearing Board or the SMAQMD staff.

³ Among other things, section 41701 pertains to the opacity of visible air pollution such as smoke. The section specifies that emissions shall not be as dark as, or darker than, the No. 2 shade designation on a Ringelmann Chart.

11. Would the taking of property, closing or elimination of a lawful business, or unreasonable burden on an essential public service be without a corresponding benefit in reducing air contaminants?

Please discuss your evidence:

Yes. The cost of flood damage as described above would exceed benefit of reducing air contaminants. Rerouting of traffic due to flooded road may increase air contaminants as would hauling personal property.

Please be prepared to supply documentation or other proof of your evidence to the Hearing Board or the SMAQMD staff.

12. Please discuss the consideration your company or agency has given to:

- Curtailing the operation of the source in lieu of obtaining a variance, and
- Enacting other alternatives to the variance (besides curtailment), and
- Why operation curtailment or other alternatives are less desirable or feasible than seeking this variance.

Pumps are needed for community health and safety for reducing impact of flood waters.

13. During the period the variance is in effect, do you agree to monitor or otherwise quantify emission levels from the source, if requested to do so, and report these emission levels to SMAQMD pursuant to a schedule established by the District?

☒ YES ☐ NO

Monitoring of emission levels is often necessary while a variance is in effect. Monitoring helps to guarantee minimal environmental consequences while a source is out of compliance with District regulations. In the absence of a monitoring program, the Hearing Board may be unable to find that a non-compliant activity will not be a public nuisance.

If you are unwilling to monitor emission levels, please explain why not and describe why your non-compliant activity will not create a public nuisance:

This image shows a single sheet of white paper with horizontal black ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

14. Estimate the *excess emissions* that may occur while your requested variance is in effect. *Excess emissions* are emissions of air pollutants beyond the emissions allowed by SMAQMD Rules, regulations, orders or Permit conditions. SMAQMD staff may be able to assist you with this estimate:

POLLUTANT(S) (e.g., VOC, NO _x , PM ₁₀ , PM _{2.5} , Hexavalent Chromium)	LBS. PER DAY OF EXCESS EMISSIONS	NO. OF DAYS EXCESS EMISSIONS PRODUCED	% OPACITY (If Applicable)
See table in permits. Actual emissions			
will depend on needed operating hours.			

Please Note: SMAQMD will charge a petitioner an "excess duration fee" for a variance that:

- Is in effect for more than 3 months, and
- Is issued for equipment identified by SMAQMD staff report as an excess emissions source.

The excess duration fee is:

- \$165 per month exceeding 3 months for small businesses, or
- \$275 per month exceeding 3 months for large businesses.

See section 301.4 in Rule 302—HEARING BOARD FEES. SMAQMD will charge the "excess duration fee" following completion of the staff report for the variance. The fee is in addition to the initial filing fees collected by SMAQMD.

15. Please describe the action you will take to reduce *excess emissions* to the maximum extent feasible. If you considered a specific course of action, but excluded it as infeasible, please list the action and explain why it is infeasible.

Pumps will only run when needed. Gravity flow parameters will be optimized.

16. What are the advantages and disadvantages to the residents of the District from requiring compliance or resulting from granting this petition request?

The Advantages:

Advantages to the residents of the community if the petition is granted include the continued protection from flooding of property and infrastructure. In addition, should there be a flood, the cleanup activities required would likely result in increased air emissions resulting from cleanup and construction related repair activities resulting from flood damage.

The Disadvantages:

Disadvantages for the granting of the petition include a slight increase in runtime for the flood control pumps resulting in slightly higher levels of emissions from the permitted stationary units.

17. Please discuss your past diligence in complying with the applicable standards:

Station has been in operation since 1997 and operated within permit conditions.

18. Describe your method of achieving compliance, detailing any equipment to be installed or modifications to be made:

19. Fill in the date on which you expect to be in compliance with the rules and/or regulations:

January 1, 2018

If more than one year, attach a schedule of increments of progress, identifying the dates of each milestone. The schedule shall include, but not be limited to, the date for (a) submitting plans, (b) awarding contracts, (c) commencing construction, (d) completing construction, and (e) achieving final compliance.

NOTE: Do not overly rely on a potential future change in the law, including SMAQMD Rules and regulations, as a means of coming into compliance. The Hearing Board may not and does not control the regulatory agenda of any law-making body such as the District's Board of Directors.

Any Additional Information:

This application has been amended to reflect changes in the original emergency variance request submitted on February 17, 2017.

Any person who knowingly provides false information in this petition or any supporting documentation may be subject to penalties up to \$35,000 under Health and Safety Code Section 42402.4.

I declare under penalty of perjury that the foregoing is true and correct.

Signature: _____

Date: _____

Name (Print): _____

Title: _____

JASON CAMPBELL
DEPUTY EXECUTIVE DIRECTOR

D-15 NEMDC Stormwater Pumping Station									
Summary of Engine Run Times									2/27/2017
2017 Calendar Year									
		Pump #1	Pump #2	Pump #3					Generator
SMAQMD Permit		12018	12019	12020					13366
Engine Serial No.		33134474	33134476	33134465					45394771
Engine Model #		KTA50-01600	KTA50-01600	KTA50-01600					6BT5.9-G2
Engine BHP		1250	1250	1250					166
1/1 - 1/7									
		0.0	0.0	0.0					0.0
1/8 - 1/14									
		13.3	143.5	84.8					0.0
1/15 - 1/21									
		0.0	0.0	0.0					0.0
1/22 - 1/28									
		0.0	0.0	0.0					0.0
1/19 - 2/4									
		0.0	0.0	0.0					0.0
2/5 - 2/11									
		71.8	1.4	23.1					0.0
2/12 - 2/18									
		12.3	0.0	0.0					0.3
2/19 - 2/25									
		48.7	0.0	1.2					0.0
2/26 - 3/4									
3/5 - 3/11									
3/12 - 3/18									
3/19 - 3/25									
3/26 - 4/1									
		146.1	144.9	109.1					0.3



AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: SACRAMENTO AREA FLOOD

EQUIPMENT LOCATION: 5334 EAST LEVEE RD, SACRAMENTO

PERMIT NO.: EQUIPMENT DESCRIPTION:

12018 IC ENGINE STANDBY, MAKE: CUMMINS, MODEL: KTA50-01600, SERIAL
NO.: 33134474, 1250 BHP, DIESEL FIRED, DRIVING AN EMERGENCY
STANDBY FLOOD CONTROL PUMP

SUBJECT TO THE FOLLOWING CONDITIONS

GENERAL

1. THE EQUIPMENT SHALL BE PROPERLY MAINTAINED
2. THE AIR POLLUTION CONTROL OFFICER AND/OR AUTHORIZED REPRESENTATIVES, UPON THE PRESENTATION OF CREDENTIALS, SHALL BE PERMITTED:
 - A. TO ENTER UPON THE PREMISES WHERE THE SOURCE IS LOCATED OR IN WHICH ANY RECORDS ARE REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26, PART 4, CHAPTER 3, OF THE CALIFORNIA HEALTH AND SAFETY CODE OR THE RULES AND REGULATIONS OF THE AIR QUALITY MANAGEMENT DISTRICT.
4. A LEGIBLE COPY OF THIS PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSION LIMITATIONS

5. THE IC ENGINE SHALL NOT DISCHARGE INTO THE ATMOSPHERE ANY VISIBLE AIR CONTAMINANTS OTHER THAN UNCOMBINED WATER VAPOR, FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR, WHICH IS AS DARK OR DARKER THAN RINGELMANN 1 OR EQUIVALENT TO OR GREATER THAN 20% OPACITY.

DATE ISSUED: 12/29/1997
DATE AMENDED: 12/31/05
EXPIRATION DATE: 8/6/2006 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY:

Julie Lukarevsky

REVOCABLE AND NON-TRANSFERABLE

PERMIT NO.: 12018

8. THE IC ENGINE SHALL BE EQUIPPED WITH A NON-RESETTING HOUR METER, WITH A MINIMUM DISPLAY CAPABILITY OF 999 HOURS, TO ENSURE COMPLIANCE WITH CONDITION NUMBERS 6 AND 7.
9. UPON REQUEST OF THE AIR POLLUTION CONTROL OFFICER OR DESIGNEE, ONCE EACH YEAR, DURING DAYLIGHT HOURS, THE IC ENGINE SHALL BE RUN AT MAXIMUM ANTICIPATED LOAD, FROM A COLD START CONDITION, FOR OBSERVATION OF COMPLIANCE WITH OPACITY LIMITATIONS.
10. THE IC ENGINE SHALL BE FUELED WITH CARB DIESEL FUEL, OR AN ALTERNATIVE DIESEL FUEL THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE (AS CODIFIED IN TITLE 13, CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FUEL, OR CARB DIESEL FUEL USED WITH FUEL ADDITIVES THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE, OR ANY COMBINATION OF FUELS LISTED IN THIS CONDITION.

TYPE OF OPERATIONAL HOURS		MAXIMUM ALLOWABLE OPERATION	
MAINTENANCE PURPOSES (A)		HOURS/QUARTER	HOURS/YEAR
ALL OPERATION - MAINTENANCE (A) AND EMERGENCY (B)		30	30
(A) MAINTENANCE PURPOSES IS DEFINED AS: THE OPERATION OF AN IC ENGINE IN ORDER TO PRESERVE THE INTEGRITY OF THE IC ENGINE, ITS ASSOCIATED GENERATOR OR THE FACILITY'S ELECTRICAL DISTRIBUTION SYSTEM, OR WHEN REQUIRED BY THE SMOAD TO VERIFY COMPLIANCE WITH THE APPLICABLE RULES AND REGULATIONS.		200	200
(B) EMERGENCY IS DEFINED AS: WHEN ELECTRICAL SERVICE FROM THE SERVING UTILITY IS INTERRUPTED BY AN UNFORESEEABLE EVENT.		200	200

7. THE IC ENGINE SHALL OPERATE ONLY FOR THE FOLLOWING PURPOSES AND SHALL NOT OPERATE MORE THAN THE FOLLOWING HOURS:

EQUIPMENT OPERATION

(A) EMISSIONS ARE BASED ON 1250 BHP, 200 HOURS/QUARTER AND 200 HOURS/YEAR OF OPERATION.				
POLLUTANT	EMISSION FACTOR (GRAMS/HP-HR)	BASIS FOR EMISSION FACTOR	MAXIMUM ALLOWABLE EMISSIONS (A)	
CO	2.3	MFR'S DATA	1,268	N/A
PM10	0.24	AP-42	132	132
SOx	0.1645	0.05% SULFUR CONTENT	91	91
NOx	10.3	MFR'S DATA	5,677	5,677
ROC	0.22	MFR'S DATA	121	121
			POUNDS/QUARTER	POUNDS/YEAR

6. THE EMISSIONS FROM THE IC ENGINE SHALL NOT EXCEED THE FOLLOWING LIMITS:

RECORD KEEPING

11. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ONSITE FOR THE MOST RECENT THREE YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. MONTHLY, QUARTERLY, AND YEARLY RECORDS SHALL BE MADE AVAILABLE WITHIN 30 DAYS OF END OF REPORTING PERIOD.

FREQUENCY	INFORMATION TO BE RECORDED
WHEN OPERATED	A. DATE. B. PURPOSE – EITHER MAINTENANCE (M) OR EMERGENCY POWER (E) C. NUMBER OF HOURS OF OPERATION.
MONTHLY	D. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
QUARTERLY	E. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
YEARLY	F. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/YEAR).
ALL FUEL DELIVERIES	G. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE: 1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATE DIESEL, ETC.) 2. QUANTITY OF FUEL PURCHASED. 3. DATE OF FUEL PURCHASE. 4. SIGNATURE OF PERSON RECEIVING FUEL. 5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.

YOUR APPLICATION FOR THIS AIR QUALITY PERMIT TO OPERATE WAS EVALUATED FOR COMPLIANCE WITH SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT (AQMD), STATE AND FEDERAL AIR QUALITY RULES. THE FOLLOWING LISTED RULES ARE THOSE THAT ARE MOST APPLICABLE TO THE OPERATION OF YOUR EQUIPMENT. OTHER RULES MAY ALSO BE APPLICABLE.

<u>AQMD RULE NUMBER</u>	<u>RULE TITLE</u>
201	GENERAL PERMIT REQUIREMENTS
202	NEW SOURCE REVIEW
401	RINGELMANN CHART
406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
904	AIR TOXICS CONTROL MEASURES - STATIONARY COMPRESSION IGNITION ENGINES

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE MAY REFLECT SOME, BUT NOT ALL, REQUIREMENTS OF THESE RULES. THERE MAY BE OTHER CONDITIONS THAT ARE APPLICABLE TO THE OPERATION OF YOUR EQUIPMENT. FUTURE CHANGES IN PROHIBITORY RULES MAY ESTABLISH MORE STRINGENT REQUIREMENTS WHICH MAY SUPERSEDE THE CONDITIONS LISTED HERE. FOR FURTHER INFORMATION PLEASE CONSULT YOUR AQMD RULEBOOK OR CONTACT THE AQMD FOR ASSISTANCE.



PERMIT TO OPERATE

ISSUED TO: SACRAMENTO AREA FLOOD

EQUIPMENT LOCATION: 5334 EAST LEVEE RD, SACRAMENTO

PERMIT NO.: EQUIPMENT DESCRIPTION:

12019 IC ENGINE STANDBY, MAKE: CUMMINS, MODEL: KTA50-01600, SERIAL
NO.: 33134476, 1250 BHP, DIESEL FIRED, DRIVING AN EMERGENCY
STANDBY FLOOD CONTROL PUMP

SUBJECT TO THE FOLLOWING CONDITIONS

GENERAL

1. THE EQUIPMENT SHALL BE PROPERLY MAINTAINED
2. THE AIR POLLUTION CONTROL OFFICER AND/OR AUTHORIZED REPRESENTATIVES, UPON THE PRESENTATION OF CREDENTIALS, SHALL BE PERMITTED:
 - A. TO ENTER UPON THE PREMISES WHERE THE SOURCE IS LOCATED OR IN WHICH ANY RECORDS ARE REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26, PART 4, CHAPTER 3, OF THE CALIFORNIA HEALTH AND SAFETY CODE OR THE RULES AND REGULATIONS OF THE AIR QUALITY MANAGEMENT DISTRICT.
4. A LEGIBLE COPY OF THIS PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSION LIMITATIONS

5. THE IC ENGINE SHALL NOT DISCHARGE INTO THE ATMOSPHERE ANY VISIBLE AIR CONTAMINANTS OTHER THAN UNCOMBINED WATER VAPOR, FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR, WHICH IS AS DARK OR DARKER THAN RINGELMANN 1 OR EQUIVALENT TO OR GREATER THAN 20% OPACITY.

DATE ISSUED: 12/29/1997
DATE AMENDED: 12/31/05
EXPIRATION DATE: 8/6/2006 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY:

Julie Lukashovsky

6. THE EMISSIONS FROM THE IC ENGINE SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTOR (GRAMS/HP-HR)	BASIS FOR EMISSION FACTOR	MAXIMUM ALLOWABLE EMISSIONS (A)	
			POUNDS/QUARTER	POUNDS/YEAR
ROC	0.22	MFR'S DATA	121	121
NOx	10.3	MFR'S DATA	5,677	5,677
SOx	0.1645	0.05% SULFUR CONTENT	91	91
PM10	0.24	AP-42	132	132
CO	2.3	MFR'S DATA	1,268	1,268
HC+NOx	N/A	N/A	N/A	N/A

(A) EMISSIONS ARE BASED ON 1250 BHP, 200 HOURS/QUARTER AND 200 HOURS/YEAR OF OPERATION.

EQUIPMENT OPERATION

7. THE IC ENGINE SHALL OPERATE ONLY FOR THE FOLLOWING PURPOSES AND SHALL NOT OPERATE MORE THAN THE FOLLOWING HOURS:

TYPE OF OPERATIONAL HOURS	MAXIMUM ALLOWABLE OPERATION	
	HOURS/QUARTER	HOURS/YEAR
MAINTENANCE PURPOSES (A)	30	30
ALL OPERATION - MAINTENANCE (A) AND EMERGENCY (B)	200	200

(A) MAINTENANCE PURPOSES IS DEFINED AS: THE OPERATION OF AN IC ENGINE IN ORDER TO PRESERVE THE INTEGRITY OF THE IC ENGINE, ITS ASSOCIATED GENERATOR OR THE FACILITY'S ELECTRICAL DISTRIBUTION SYSTEM, OR WHEN REQUIRED BY THE SMAQMD TO VERIFY COMPLIANCE WITH THE APPLICABLE RULES AND REGULATIONS.

(B) EMERGENCY IS DEFINED AS: WHEN ELECTRICAL SERVICE FROM THE SERVING UTILITY IS INTERRUPTED BY AN UNFORESEEABLE EVENT.

8. THE IC ENGINE SHALL BE EQUIPPED WITH A NON-RESETTING HOUR METER, WITH A MINIMUM DISPLAY CAPABILITY OF 999 HOURS, TO ENSURE COMPLIANCE WITH CONDITION NUMBERS 6 AND 7.
9. UPON REQUEST OF THE AIR POLLUTION CONTROL OFFICER OR DESIGNEE, ONCE EACH YEAR, DURING DAYLIGHT HOURS, THE IC ENGINE SHALL BE RUN AT MAXIMUM ANTICIPATED LOAD, FROM A COLD START CONDITION, FOR OBSERVATION OF COMPLIANCE WITH OPACITY LIMITATIONS.
10. THE IC ENGINE SHALL BE FUELED WITH CARB DIESEL FUEL, OR AN ALTERNATIVE DIESEL FUEL THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE (AS CODIFIED IN TITLE 13, CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FUEL, OR CARB DIESEL FUEL USED WITH FUEL ADDITIVES THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE, OR ANY COMBINATION OF FUELS LISTED IN THIS CONDITION.

RECORD KEEPING

11. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ONSITE FOR THE MOST RECENT THREE YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. MONTHLY, QUARTERLY, AND YEARLY RECORDS SHALL BE MADE AVAILABLE WITHIN 30 DAYS OF END OF REPORTING PERIOD.

FREQUENCY	INFORMATION TO BE RECORDED
WHEN OPERATED	A. DATE. B. PURPOSE – EITHER MAINTENANCE (M) OR EMERGENCY POWER (E) C. NUMBER OF HOURS OF OPERATION.
MONTHLY	D. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
QUARTERLY	E. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
YEARLY	F. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/YEAR).
ALL FUEL DELIVERIES	G. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE: 1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATE DIESEL, ETC.) 2. QUANTITY OF FUEL PURCHASED. 3. DATE OF FUEL PURCHASE. 4. SIGNATURE OF PERSON RECEIVING FUEL. 5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.

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420	SULFUR CONTENT OF FUELS
904	AIR TOXICS CONTROL MEASURES - STATIONARY COMPRESSION IGNITION ENGINES

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AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: SACRAMENTO AREA FLOOD

EQUIPMENT LOCATION: 5334 EAST LEVEE RD, SACRAMENTO

PERMIT NO.: EQUIPMENT DESCRIPTION:

12020 IC ENGINE STANDBY, MAKE: CUMMINS, MODEL: KTA50-01600, SERIAL
NO.: 33134465, 1250 BHP, DIESEL FIRED, DRIVING AN EMERGENCY
STANDBY FLOOD CONTROL PUMP

SUBJECT TO THE FOLLOWING CONDITIONS

GENERAL

1. THE EQUIPMENT SHALL BE PROPERLY MAINTAINED
2. THE AIR POLLUTION CONTROL OFFICER AND/OR AUTHORIZED REPRESENTATIVES, UPON THE PRESENTATION OF CREDENTIALS, SHALL BE PERMITTED:
 - A. TO ENTER UPON THE PREMISES WHERE THE SOURCE IS LOCATED OR IN WHICH ANY RECORDS ARE REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - C. TO INSPECT ANY EQUIPMENT, OPERATION, OR METHOD REQUIRED IN THIS PERMIT TO OPERATE, AND
 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26, PART 4, CHAPTER 3, OF THE CALIFORNIA HEALTH AND SAFETY CODE OR THE RULES AND REGULATIONS OF THE AIR QUALITY MANAGEMENT DISTRICT.
4. A LEGIBLE COPY OF THIS PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSION LIMITATIONS

5. THE IC ENGINE SHALL NOT DISCHARGE INTO THE ATMOSPHERE ANY VISIBLE AIR CONTAMINANTS OTHER THAN UNCOMBINED WATER VAPOR, FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR, WHICH IS AS DARK OR DARKER THAN RINGELMANN 1 OR EQUIVALENT TO OR GREATER THAN 20% OPACITY.

DATE ISSUED: 12/29/1997
DATE AMENDED: 12/31/05
EXPIRATION DATE: 8/6/2006 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY: *Julie Lukashovsky*

6. THE EMISSIONS FROM THE IC ENGINE SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTOR (GRAMS/HP-HR)	BASIS FOR EMISSION FACTOR	MAXIMUM ALLOWABLE EMISSIONS (A)	
			POUNDS/QUARTER	POUNDS/YEAR
ROC	0.22	MFR'S DATA	121	121
NOx	10.3	MFR'S DATA	5,877	5,877
SOx	0.1645	0.05% SULFUR CONTENT	91	91
PM10	0.24	AP-42	132	132
CO	2.3	MFR'S DATA	1,268	1,268
HC+NOx	N/A	N/A	N/A	N/A

(A) EMISSIONS ARE BASED ON 1250 BHP, 200 HOURS/QUARTER AND 200 HOURS/YEAR OF OPERATION.

EQUIPMENT OPERATION

7. THE IC ENGINE SHALL OPERATE ONLY FOR THE FOLLOWING PURPOSES AND SHALL NOT OPERATE MORE THAN THE FOLLOWING HOURS:

TYPE OF OPERATIONAL HOURS	MAXIMUM ALLOWABLE OPERATION	
	HOURS/QUARTER	HOURS/YEAR
MAINTENANCE PURPOSES (A)	30	30
ALL OPERATION - MAINTENANCE (A) AND EMERGENCY (B)	200	200

(A) MAINTENANCE PURPOSES IS DEFINED AS: THE OPERATION OF AN IC ENGINE IN ORDER TO PRESERVE THE INTEGRITY OF THE IC ENGINE, ITS ASSOCIATED GENERATOR OR THE FACILITY'S ELECTRICAL DISTRIBUTION SYSTEM, OR WHEN REQUIRED BY THE SMAQMD TO VERIFY COMPLIANCE WITH THE APPLICABLE RULES AND REGULATIONS.

(B) EMERGENCY IS DEFINED AS: WHEN ELECTRICAL SERVICE FROM THE SERVING UTILITY IS INTERRUPTED BY AN UNFORESEEABLE EVENT.

8. THE IC ENGINE SHALL BE EQUIPPED WITH A NON-RESETTING HOUR METER, WITH A MINIMUM DISPLAY CAPABILITY OF 999 HOURS, TO ENSURE COMPLIANCE WITH CONDITION NUMBERS 6 AND 7.
9. UPON REQUEST OF THE AIR POLLUTION CONTROL OFFICER OR DESIGNEE, ONCE EACH YEAR, DURING DAYLIGHT HOURS, THE IC ENGINE SHALL BE RUN AT MAXIMUM ANTICIPATED LOAD, FROM A COLD START CONDITION, FOR OBSERVATION OF COMPLIANCE WITH OPACITY LIMITATIONS.
10. THE IC ENGINE SHALL BE FUELED WITH CARB DIESEL FUEL, OR AN ALTERNATIVE DIESEL FUEL THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE (AS CODIFIED IN TITLE 13, CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FUEL, OR CARB DIESEL FUEL USED WITH FUEL ADDITIVES THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE, OR ANY COMBINATION OF FUELS LISTED IN THIS CONDITION.

RECORD KEEPING

11. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ONSITE FOR THE MOST RECENT THREE YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. MONTHLY, QUARTERLY, AND YEARLY RECORDS SHALL BE MADE AVAILABLE WITHIN 30 DAYS OF END OF REPORTING PERIOD.

FREQUENCY	INFORMATION TO BE RECORDED
WHEN OPERATED	A. DATE. B. PURPOSE – EITHER MAINTENANCE (M) OR EMERGENCY POWER (E) C. NUMBER OF HOURS OF OPERATION.
MONTHLY	D. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
QUARTERLY	E. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
YEARLY	F. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/YEAR).
ALL FUEL DELIVERIES	G. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE: 1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATE DIESEL, ETC.) 2. QUANTITY OF FUEL PURCHASED. 3. DATE OF FUEL PURCHASE. 4. SIGNATURE OF PERSON RECEIVING FUEL. 5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.

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<u>AQMD RULE NUMBER</u>	<u>RULE TITLE</u>
201	GENERAL PERMIT REQUIREMENTS
202	NEW SOURCE REVIEW
401	RINGELMANN CHART
406	SPECIFIC CONTAMINANTS
420	SULFUR CONTENT OF FUELS
904	AIR TOXICS CONTROL MEASURES - STATIONARY COMPRESSION IGNITION ENGINES

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE MAY REFLECT SOME, BUT NOT ALL, REQUIREMENTS OF THESE RULES. THERE MAY BE OTHER CONDITIONS THAT ARE APPLICABLE TO THE OPERATION OF YOUR EQUIPMENT. FUTURE CHANGES IN PROHIBITORY RULES MAY ESTABLISH MORE STRINGENT REQUIREMENTS WHICH MAY SUPERSEDE THE CONDITIONS LISTED HERE. FOR FURTHER INFORMATION PLEASE CONSULT YOUR AQMD RULEBOOK OR CONTACT THE AQMD FOR ASSISTANCE.



AIR QUALITY
MANAGEMENT DISTRICT

PERMIT TO OPERATE

ISSUED TO: SACRAMENTO AREA FLOOD

EQUIPMENT LOCATION: 5334 EAST LEVEE RD, SACRAMENTO

PERMIT NO.: EQUIPMENT DESCRIPTION:

13366 IC ENGINE STANDBY, MAKE: CUMMINS, MODEL: 6BT5.9-G2, SERIAL
NO.: 45394771, 166 BHP, DIESEL FIRED, DRIVING AN EMERGENCY
STANDBY GENERATOR

SUBJECT TO THE FOLLOWING CONDITIONS

GENERAL

1. THE EQUIPMENT SHALL BE PROPERLY MAINTAINED
2. THE AIR POLLUTION CONTROL OFFICER AND/OR AUTHORIZED REPRESENTATIVES, UPON THE PRESENTATION OF CREDENTIALS, SHALL BE PERMITTED:
 - A. TO ENTER UPON THE PREMISES WHERE THE SOURCE IS LOCATED OR IN WHICH ANY RECORDS ARE REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
 - B. AT REASONABLE TIMES TO HAVE ACCESS TO AND COPY ANY RECORDS REQUIRED TO BE KEPT UNDER THE TERMS AND CONDITIONS OF THIS PERMIT TO OPERATE, AND
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 - D. TO SAMPLE EMISSIONS FROM THE SOURCE OR REQUIRE SAMPLES TO BE TAKEN.
3. THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26, PART 4, CHAPTER 3, OF THE CALIFORNIA HEALTH AND SAFETY CODE OR THE RULES AND REGULATIONS OF THE AIR QUALITY MANAGEMENT DISTRICT.
4. A LEGIBLE COPY OF THIS PERMIT SHALL BE MAINTAINED ON THE PREMISES WITH THE EQUIPMENT.

EMISSION LIMITATIONS

5. THE IC ENGINE SHALL NOT DISCHARGE INTO THE ATMOSPHERE ANY VISIBLE AIR CONTAMINANTS OTHER THAN UNCOMBINED WATER VAPOR, FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR, WHICH IS AS DARK OR DARKER THAN RINGELMANN 1 OR EQUIVALENT TO OR GREATER THAN 20% OPACITY.

DATE ISSUED: 11/13/1997
DATE AMENDED: 12/31/05
EXPIRATION DATE: 8/6/2006 (UNLESS RENEWED)

LARRY GREENE
AIR POLLUTION CONTROL OFFICER

BY: *Julie Lukashovsky*

6. THE EMISSIONS FROM THE IC ENGINE SHALL NOT EXCEED THE FOLLOWING LIMITS:

POLLUTANT	EMISSION FACTOR (GRAMS/HP-HR)	BASIS FOR EMISSION FACTOR	MAXIMUM ALLOWABLE EMISSIONS (A)	
			POUNDS/QUARTER	POUNDS/YEAR
ROC	0.3	MFR'S DATA	22	22
NO _x	10.65	MFR'S DATA	779	779
SO _x	0.1645	0.05% SULFUR CONTENT	12	12
PM10	0.25	MFR'S DATA	18	18
CO	3.29	MFR'S DATA	241	241
HC+NO _x	N/A	N/A	N/A	N/A

(A) EMISSIONS ARE BASED ON 166 BHP, 200 HOURS/QUARTER AND 200 HOURS/YEAR OF OPERATION.

EQUIPMENT OPERATION

7. THE IC ENGINE SHALL OPERATE ONLY FOR THE FOLLOWING PURPOSES AND SHALL NOT OPERATE MORE THAN THE FOLLOWING HOURS:

TYPE OF OPERATIONAL HOURS	MAXIMUM ALLOWABLE OPERATION	
	HOURS/QUARTER	HOURS/YEAR
MAINTENANCE PURPOSES (A)	30	30
ALL OPERATION - MAINTENANCE (A) AND EMERGENCY (B)	200	200

(A) MAINTENANCE PURPOSES IS DEFINED AS: THE OPERATION OF AN IC ENGINE IN ORDER TO PRESERVE THE INTEGRITY OF THE IC ENGINE, ITS ASSOCIATED GENERATOR OR THE FACILITY'S ELECTRICAL DISTRIBUTION SYSTEM, OR WHEN REQUIRED BY THE SMAQMD TO VERIFY COMPLIANCE WITH THE APPLICABLE RULES AND REGULATIONS.

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9. UPON REQUEST OF THE AIR POLLUTION CONTROL OFFICER OR DESIGNEE, ONCE EACH YEAR, DURING DAYLIGHT HOURS, THE IC ENGINE SHALL BE RUN AT MAXIMUM ANTICIPATED LOAD, FROM A COLD START CONDITION, FOR OBSERVATION OF COMPLIANCE WITH OPACITY LIMITATIONS.
10. THE IC ENGINE SHALL BE FUELED WITH CARB DIESEL FUEL, OR AN ALTERNATIVE DIESEL FUEL THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE (AS CODIFIED IN TITLE 13, CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FUEL, OR CARB DIESEL FUEL USED WITH FUEL ADDITIVES THAT MEETS THE REQUIREMENTS OF THE VERIFICATION PROCEDURE, OR ANY COMBINATION OF FUELS LISTED IN THIS CONDITION.

RECORD KEEPING

11. THE FOLLOWING RECORDS SHALL BE CONTINUOUSLY MAINTAINED ONSITE FOR THE MOST RECENT THREE YEAR PERIOD AND SHALL BE MADE AVAILABLE TO THE AIR POLLUTION CONTROL OFFICER UPON REQUEST. MONTHLY, QUARTERLY, AND YEARLY RECORDS SHALL BE MADE AVAILABLE WITHIN 30 DAYS OF END OF REPORTING PERIOD.

FREQUENCY	INFORMATION TO BE RECORDED
WHEN OPERATED	A. DATE. B. PURPOSE - EITHER MAINTENANCE (M) OR EMERGENCY POWER (E) C. NUMBER OF HOURS OF OPERATION.
MONTHLY	D. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
QUARTERLY	E. TOTAL NUMBER OF HOURS OF OPERATION FOR EACH OPERATING MODE (HOURS/MONTH).
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420	SULFUR CONTENT OF FUELS
904	AIR TOXICS CONTROL MEASURES - STATIONARY COMPRESSION IGNITION ENGINES

IN ADDITION, THE CONDITIONS ON THIS PERMIT TO OPERATE MAY REFLECT SOME, BUT NOT ALL, REQUIREMENTS OF THESE RULES. THERE MAY BE OTHER CONDITIONS THAT ARE APPLICABLE TO THE OPERATION OF YOUR EQUIPMENT. FUTURE CHANGES IN PROHIBITORY RULES MAY ESTABLISH MORE STRINGENT REQUIREMENTS WHICH MAY SUPERSEDE THE CONDITIONS LISTED HERE. FOR FURTHER INFORMATION PLEASE CONSULT YOUR AQMD RULEBOOK OR CONTACT THE AQMD FOR ASSISTANCE.

SUMMARY OF OPERATIONAL PARAMETERS OF THE NEMDC STORMWATER PUMPING STATION (D-15)

January 15, 2004

Updated January 31, 2017

1.0 PURPOSE OF THIS DOCUMENT

The purpose of this document is to clarify and summarize the Operational Parameters of the NEMDC Stormwater Pumping Station (D-15), and to provide the operators with an overview of the purpose of the station. This document presents the reasons for the station and operational parameters and setting as described to plant operators on January 13, 2004, by John Bassett, an engineer with the Sacramento Area Flood Control Agency (SAFCA). Mr. Bassett was the project engineer for the design and construction of the pump station.

2.0 PURPOSE OF THE NEMDC STATION

The purpose of the NEMDC Station is to reduce the possibility of houses flooding in Elverta and Western Rio Linda. During a major storm event the station, in conjunction with the adjacent Dry Creek north levee, will prevent storm water that falls in the very large Dry Creek Watershed from flowing north into the much smaller watersheds that encompass the NEMDC East Stream Group in Elverta and Western Rio Linda. The pumps at the station pump storm water from the Elverta / Western Rio Linda area north of the station into the lower Dry Creek floodplain south of the station.

3.0 BACKGROUND

The Natomas East Main Drainage Canal (NEMDC) Stormwater Pumping Station was designed and constructed by SAFCA. Under an Interagency Agreement, Sacramento County maintains and operates the station for SAFCA.

The station was built to reduce the risk of houses flooding in the Elverta and Western Rio Linda areas during a major storm event. The Dry Creek Watershed is extremely large, approximately 100 sq. miles. The storm water that falls in the Dry Creek Watershed flows to the Natomas East Main Drainage Canal (also known as Steelhead Creek) at a location immediately south of the NEMDC Station. The NEMDC Station structure, and the Dry Creek north levee east of the station, prevents Dry Creek Watershed storm water (from a major storm event) from flowing north and flooding homes in the Elverta and Western Rio Linda areas.

Summary of Operational Parameters of the NEMDC Station

January 15, 2004, updated January 31, 2017

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In a 100-year event, the storm water can build up as high as 40 feet NGVD29 (42.4 ft NAVD88) in elevation against the levee at the south side of the NEMDC Station. Houses in Elverta and Western Rio Linda will start to flood at an elevation of 33 feet NGVD29 (35.4 ft NAVD88). So during a major storm event the radial gate in the bypass channel at the station will close to prevent Dry Creek Watershed storm water from flowing north into the Upper NEMDC floodplain. During a major storm, the pumps at the station pump water from the Elverta and Western Rio Linda watersheds north of the station to the Dry Creek floodplain south of the station.

During normal wet weather periods (non-major storm events) water is allowed to flow from the Dry Creek floodplain northward through the bypass channel at the station. This northward flow of water helps to supply upstream wetland areas with water.

It is important to recognize that the Upper NEMDC channel has little fall from north to south. This translates into a low channel conveyance capacity. Therefore, even with the pump station and the levee in place, there is an extensive inundated floodplain north of the station as a result of the flows from the Elverta and Western Rio Linda watersheds. Roads, properties and garages in this floodplain will continue to flood during major storm events even with the pumps operating.

4.0 OPERATION ELEVATIONS

The station operates based on internal bubbler systems that provides water surface stages that are based on the National Geodetic Vertical Datum of 1929 (NGVD29). The ALERT Stations at the site report elevations to the Sacramento County ALERT System that are based on the North American Vertical Datum of 1988 (NAVD88). The NAVD88 datum is also currently used by the State's Department of Water Resources California Data Exchange Center (CDEC), which allows the ALERT data for water surface elevations at the station to be compared to regional data on the Sacramento and American Rivers.

The ALERT Station reliability and accuracy is not nearly as good as that of the bubbler system, as it is more susceptible to wind and other influences. ALERT data points are provided in this document so that those monitoring the station from a remote location can easily relate the ALERT data to the station's operational data.



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5.0 STATION OPERATIONS

5.1 Operation of Bypass Channel Radial Gate

The radial gate condition in the bypass channel at the station is NORMALLY OPEN. The closing of the gate is to be based on the elevation of the water in the bypass channel. Therefore, the bypass channel water elevation shall be sensed by the bubbler located in the channel immediately south of the gate. Closing of the gate shall NOT be controlled based on level readings collected by the ALERT Stations at the site. Closing of the gate shall NOT be based on readings collected from the bubbler located in the station's wet well. The radial gate shall automatically close when the water elevation in the bypass channel (south of the gate) reaches **27.0 feet NGVD29 (29.4 ft NAVD88)**.

The amount of water that can flow through the bypass channel exceeds the total pumping capacity of the station (1,000 cfs), IF the upstream water surface elevation in the bypass channel exceeds the downstream water surface elevation in the bypass channel by 0.5 feet (6 inches) or more. At smaller differences between upstream (north of the station) and downstream (south of the station) water surface elevations, gravity flow will still likely exceed pumping flow, particularly at lower water surface elevations when wet well inflow is limited. Therefore the radial gate should be open if, based on readings of the staff gages in the bypass channel, the upstream water surface elevation is higher than the downstream water surface elevation.

The gate shall be opened manually, only. Bypass channel water surface elevation is NOT the only factor to be used in determining when the gate should be opened. The weather forecast for additional or reduced rainfall along with the bypass channel's upstream and downstream water surface elevations may affect the decision to open the gate. There may be a desire to allow storm water to flow from the Dry Creek floodplain north through the station's bypass channel. Therefore, a SAFCA Engineer should be consulted if there are any questions regarding opening the gate.

5.2 Operations of the Pumps

The following section describes operation of the pumps when the radial gate in the bypass channel is closed. This is assumed to be the condition when the downstream water surface elevation in the bypass channel is higher than the upstream water surface elevation

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in the bypass channel and the downstream water surface in the bypass channel is above elevation 27.0 feet NGVD29 (29.4 ft NAVD88). (See also discussions under Section 5.1 above.)

Each of the three pumps has a capacity of 333 cubic feet per second (cfs). The firm pumping capacity of the station is 666 cfs. One pump is provided for redundancy, and is utilized in extreme flood events (high upstream water surfaces) if it is available. The elevation of the top of the concrete sill between the bypass channel and the pump wet well is 26.0 feet NGVD29 (28.4 ft NAVD88). Automatic starting and stopping of the pumps shall be based on the water elevation in the pump wet well.

CONTROL ACTION	Water Level in Pump Wet Well (Feet, NGVD29)	ALERT Level (Feet, NAVD88)
Notify Operators of Anticipated Pump Start	27.8	30.2
Call to start Lead Pump	28.0	30.4
Call to start 2 nd Pump (Lag)	29.0	31.4
Call to start 3 rd Pump (Lag-Lag)	31.0	33.4
Call to stop 3 rd Pump	28.0	30.4
Call to stop 2 nd Pump	27.0	29.4
Call to stop Lead Pump	26.6	29.0

To assure that level sensors are reading a true water level reading before pumps are turned on, there shall be a 5 minute delay between pump call and pump start. This delay shall be a control set point that the operator can increase (to maximum of 30 minutes) to prevent excessive starting and stopping of the pumps due to minor water surface fluctuations (waves, etc.) in the wet well.

It is important to note that calling the 3rd Pump (Lag-Lag) to operate at an elevation lower than the designated set point elevation does not contribute to lowering the upstream floodplain water surface elevation. Operating the 3rd Pump at lower elevations produces pump discharge flows that exceed the channel and wet well inflow capacity. This dewateres the wet well and causes all three pumps to shut down until the water surfaces recover to the station operating levels.



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5.3 Alarm Set Points

Alarms shall be activated based on readings from the water level bubbler sensor in the wet well.

ALARM STATUS	Wet Well Elevation (Feet, NGVD29)	ALERT Level (Feet, NAVD88)
High Alarm	32.0	34.4
Medium High Alarm	30.0	32.4
Low Alarm	22.0	N/A
No Alarm	between 22.0 and 30.0	

6.0 TOTAL ANNUAL ALLOWED HOURS OF OPERATION

The pumps and the backup power generator at the station are powered by diesel engines. These engines operate under permits issued by the Sacramento Metropolitan Air Quality Management District. The permits allow 30 hours of operation each year for maintenance of each engine and 200 hours of total operation for each engine each year. Therefore, it is important to periodically rotate the lead, lag and lag-lag sequencing of the pumps so that each pump is used on a proportional basis for station operation.

7.0 OPERATIONS AND MAINTENANCE INFORMATION

There are three sources of operational or maintenance information for the NEMDC Station:

- Basis of Design Report
- Operation and Maintenance Manual (Prepared by SAFCA)
- Sacramento County's on-site Maintenance Manual.

Original By: Stephen Kenning, Sacramento County Water Resources

Update By: John Bassett, SAFCA



D-15 NEMDC Stormwater Pumping Station							
Summary of Engine Run Times							3/21/2017
2017 Calendar Year							
	Pump #1	Pump #2	Pump #3	Generator			
SMAQMD Permit	12018	12019	12020	13366			
Engine Serial No.	33134474	33134476	33134465	45394771			
Engine Model #	KTA50-01600	KTA50-01600	KTA50-01600	6BT5.9-G2			
Engine BHP	1250	1250	1250	166			
1/1 - 1/7	0.0	0.0	0.0	0.0			
1/8 - 1/14	13.3	143.5	84.8	0.0			
1/15 - 1/21	0.0	0.0	0.0	0.0			
1/22 - 1/28	0.0	0.0	0.0	0.0			
1/19 - 2/4	0.0	0.0	0.0	0.0			
2/5 - 2/11	71.8	1.4	23.1	0.0			
2/12 - 2/18	12.3	0.0	0.0	0.3			
2/19 - 2/25	48.7	0.0	1.2	0.0			
2/26 - 3/4	0.0	0.0	0.0	0.0			
3/5 - 3/11	0.0	0.0	0.0	0.0			
3/12 - 3/18	0.0	0.0	0.0	0.0			
3/19 - 3/25							
3/26 - 4/1							
4/2 - 4/8							
4/9 - 4/15							
4/16 - 4/22							
4/23 - 4/29							
	146.1	144.9	109.1	0.3			

SACRAMENTO METROPOLITAN
AIR QUALITY MANAGEMENT DISTRICT

Findings Required for Grant of Variance - Checklist

Health and Safety Code section 42352 states that no variance shall be granted unless the hearing board makes all of the following (six) findings:

(1) The petitioner is, or will be, in violation of, a rule or permit condition.	
(2) Due to conditions beyond the reasonable control of the Petitioner, requiring compliance would result in either (A) an arbitrary or unreasonable taking of property, or (B) the practical closing and elimination of a lawful business.	
(3) The closing or taking would be without a corresponding benefit in reducing air contaminates.	
(4) The petitioner has given consideration to curtailing operations of the source in lieu of obtaining a variance.	
(5) During the variance period, the petitioner will reduce excess emissions to the maximum extent feasible.	
(6) If requested by staff, Petitioner will monitor and report excess emissions.	