777 12th Street, 3rd Floor Sacramento, California 95814 SACRAMENTO METROPOLITAN



**AGENDA** 

Tuesday

June 20, 2017

4:00 PM

## **Hearing Board Members**

Chair Stephen Weyers MD

John German Stacy Moak Tim Olson Darrel Woo

## CALL TO ORDER

### **HEARING ITEMS**

## 1. Sacramento Area Flood Control Agency (SAFCA)

Regular Variance Recommendation:

ation: Staff recommends that the Board grant the requested variance.

### 2. Clean World SATS, LLC

Regular Variance

Recommendation:

District staff supports approval of the Variance to allow the Petitioner to operate their enclosed flare at a temperature of less than 1,400 °F when in production mode, as measured by the thermocouple. Though this is being treated as a new variance, the request for relief from the current flare temperature requirement is a renewal of a previously approved variance. Since the combined variance period is over one year, increments of progress will be established pursuant to Health & Safety Code §42358. District staff also supports the relief requested for venting biogas and the petitioner's assessment that a tank retrofit is required. Staff has observed major improvements in the operation of the site and a substantial decrease in complaints since March 2017. For these reasons, the District recommends that the Hearing Board:

- 1. Require that Petitioner continue to comply with Condition 4 in the Regular Variance Order by continuing to monitor all operation parameters of the biodigestion system and make the results available to the District upon request.
- 2. Require that Petitioner continue to comply with Condition 5 in the Regular Variance Order by continuing to monitor the facility for leaks and continue regular inspections of the PRVs.
- 3. Direct the Petitioner to continue to immediately check the flare if alarms are triggered within regular working hours (approximately 7 a.m. to 4 p.m.).
- 4. Allow the Petitioner to remotely correct the flare if an alarm is triggered outside of regular working hours and appropriate staff are not onsite, but require that if the issue can't be fixed remotely the petitioner must conduct onsite corrective action in a timely manner.
- 5. Direct the Petitioner to identify tank roof leaks by pressurizing the tanks and patching areas of concern on a monthly basis.

6. Direct the Petitioner to abide by the Increments of Progress (Health & Saf. Code § 42358) set forth below:

a. Provide quarterly updates on the status of the tank replacement/modification, including progress in hiring a contractor to perform the work.

b. Notify the District when the contractor has been selected to perform tank replacement/modifications.

c. Prior to commencing tank replacement/modification, provide the District with a plan for review that details how emissions and odor will be minimized during the project.

### **PUBLIC COMMENTS**

### ANNOUNCEMENTS

### ADJOURN

Agenda Revision: This agenda may be revised. A final agenda will be posted on the website (www.airquality.org) and at the meeting site 72 hours in advance of the meeting. Materials submitted within 72 hours of the meeting and after distribution of the agenda packets will be made available on the SMAQMD website subject to staff's ability to post the documents prior to the meeting. The order of the agenda items are listed for reference and may be taken in any order deemed appropriate by the Hearing Board. The agenda provides a general description and staff recommendation; however, the Hearing Board may take action other than what is recommended.

**Testimony:** The Hearing Board welcomes and encourages participation in Board meetings. When it appears there are several members of the public wishing to address the Board on a specific item, at the outset of the item the Chair of the Board will announce the maximum amount of time that will be allowed for presentation of the testimony. Matters under the jurisdiction of the Board and not on the posted agenda may be addressed by the general public immediately prior to the close of the meeting under Public Comments. The Board limits testimony on matters not on the agenda to five minutes per person and not more than 15 minutes for a particular subject.

Information: Full staff reports are available for public review on the District's website (www.airquality.org), including all attachments and exhibits, or for public inspection at the District's office at 777 12th Street, Suite 300, Sacramento, CA. Copies of items prepared by staff and distributed for the first time at the meeting will be available at the back of the meeting room or may be obtained from the Clerk. Copies of items that were not prepared by staff may be obtained after the meeting from the Clerk. Materials related to an item on this Agenda submitted to SMAQMD after distribution of the agenda packet are available for public inspection in the Clerk of the Board's office during normal business hours. For information regarding this agenda, please contact Virginia Muller, Clerk of the Hearing Board, at 916-874-4809.



## **Petitioner Request**

SAFCA is requesting relief from Condition No. 7 of Permits to Operate Number 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	Туре	Upload Date
Historical Pump Info (rcvd June 2017)	Supporting Documents	6/15/2017
Regular Variance Petition	Petitions	6/14/2017
Pumping Station Operational Parameters	Supporting Documents	6/14/2017
2017 Hours of Operation	Graphs/Charts/Tables	6/14/2017
Table of Required Findings to Grant Variance	Supporting Documents	6/14/2017

## Approvals/Acknowledgements



SACRAMENTO METROPOLITAN JUN 14 2017 AIR QUALITY MANAGEMENT DISTRICT

SacMetro AQMD 777 12<sup>th</sup> Street, 3<sup>rd</sup> Floor Sacramento, CA 95814

## Attention: Clerk of the SMAQMD Hearing Board

SUBJECT: SAFCA VARIANCE PETITIONS FOR STORM WATER PUMPING PLANT

On April 17, 2017, the Sacramento Area Flood Control Agency (SAFCA) submitted a Petition Application to the SMAQMD for a variance for storm water pumping plant permits located in the D-15 NEMDC Storm Water Pumping Station. As the staff report states, the subject pumps are only operated during periods of rainfall where flood protection is needed and periodically for maintenance and testing.

On May 2, 2017, the SMAQMD Hearing Board continued the item requesting additional information regarding historical pump operation times and supporting information regarding Finding 1 – Violation.

The following letter provides supporting information regarding the request for variance of permits 12018, 12019 & 12020. The permitted operating hours are limited to 200 hours per year for each storm water pump engine.

In accordance with Health and Safety Code Section 42352, SAFCA presents the following information as it relates to the required six findings necessary to grant the variance.

# Finding 1 – Violation "The petitioner is, or will be, in violation of, a rule or permit condition."

As indicated in the variance petition, during the period of January 8, 2017 and February 25, 2017, the three subject pumps operated for a combined 400.1 hours. Weather data from the National Oceanic & Atmospheric Administration (NOAA) provides that 15.49 inches of precipitation occurred during this period. The amount of rainfall for this period in a normal season is 6.83 inches. The extremely wet season in January and February resulted in excessive run times for each pump. Existing Engine Run Time totals can be found in (Exhibit 1) along with totals for the previous five years (Exhibit 2) to this letter.

The sequence of operation for the plant typically calls for more than one pump to run during a storm event. Depending on the availability of each pump the runtime for any one pump could be required to go beyond the permitted 200

Office 916-874-7606 Fax 916-874-8289

1007 - 7th Street, 7th Floor Sacramento, CA 95814-3407 hours. Based on historical normal rainfall, SAFCA anticipates an estimated additional 180 hours of runtime for the months of October, November and December of 2017. Furthermore, historical NOAA data indicates that rainfall totals exceed the normal levels for periods of 2 to 3 years following a drought season, and the fall of 2017 would be the second year following a drought period. Should Sacramento receive above normal rainfall this fall, the pump station will exceed the permitted operating hours for the permit period from January 1 to December 31, 2017.

SAFCA would like to also submit the processing time for future variance requests may not be adequate should the variance request be denied or continued to a future date when a violation is certain. Because the operation of the storm water pump station is weather dependent, forecasting of a violation is likely limited to a 10-day period. As presented in Exhibit 1, the pumps operated for 337 hours within a 30-day period. The period to have a hearing and avoid being in violation may not be feasible. SAFCA requests that the variance be approved to avoid being in violation should weather events requiring the D-15 Pumps Station to operate this fall.

#### Please refer to the Petition and Staff report regarding Findings 2 through 6.

The Hearing Board's consideration of this request is greatly appreciated.

Respectfully,

Jason D. Compbell Deputy Executive Director

D-15 NEMDC Stormw Summary of Engine R			· · ·	3/21/2017
2017 Calendar Year			• • • •	
SMAQMD Permit Engine Serial No. Engine Model # Engine BHP	Pump #1 12018 33134474 KTA50-01600 1250	Pump #2 12019 33134476 KTA50-01600 1250	Pump #3 12020 33134465 KTA50-01600 1250	Generator 13366 45394771 6BT5.9-G2 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	0.0	0.0	0.0	0.0
3/26 - 4/1	0.0	0.0	0.0	0.0
4/2 - 4/8	0.0	0.0	0.0	0.0
4/9 - 4/15	0.0	0.0	0.0	0.0
4/16 - 4/22	0.0	0.0	0.0	0.0
4/23 - 4/29	0.0	0.0	0.0	0.0
· ·	146.1	144.9	109.1	0.3

EXHIBIT 1

## D-15 NEMDC Stormwater Pumping Station Yearly Summary of Engine Run Times

2016

#### Pump #1 Pump #2 Pump #3 Generator 12019 12020 13366 **SMAQMD** Permit 12018 33134474 33134476 33134465 45394771 Engine Serial No. KTA50-01600 6BT5.9-G2 Engine Model # KTA50-01600 KTA50-01600 1250 1250 1250 166 Engine BHP 20.0 2012 48.9 21.5 16.8 14.1 2013 13.3 13.2 13.3 13.9 14.4 2014 25.1 14.7 9.0 8.5 14.3 2015 8.7

33.8

17.2

SMAQMD permits require records to be retained for 5 years. Therefore, no records are available prior to 2012.

7.5

## 5/11/2017

18.6

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

## **PETITION APPLICATION**

Petitioner's Name, Business Name, and Address Sacramento Area Flood Control Agency	For Office Use Only
1007 7th Street, 7th Floor Sacramento, CA 95814	Variance No
Telephone No: (916) 874-7606	Day Notice of Hearing Required

## **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	X 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.<sup>1</sup>
- 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 12<sup>th</sup> 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.

<sup>&</sup>lt;sup>1</sup> 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. <u>IMPORTANT: You must supply the evidence in support of those</u> <u>findings.</u> 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 <u>before</u> 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. <u>Please submit your</u> <u>completed petition and initial filing fee no later than the deadline shown on the schedule.</u> 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 into 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 Interim Variance\$1,024 Short-Term Variance\$1,024 Regular Variance\$1,084 Emergency Variance\$1,084	(\$765) (\$825)
Product Variance Petitions Interim Product Variance\$1,024 Product Variance\$1,084	(\$765)
Petition to Modify an Order Permitting a Variance       \$1,084         Interim Variance       \$1,084         Short-term Variance       \$1,084         Regular Variance       \$1,084         Interim Product Variance       \$1,084         Product Variance       \$1,084         \$1,084       \$1,084	(\$825) (\$825) (\$825)
Petition to Modify Increments of Progress       \$1,024         Interim Authorization—Variance       \$1,024         Interim Authorization—Product Variance       \$1,024         Variance       \$1,024         Product Variance       \$1,024         \$1,024       \$1,024	(\$765) (\$765)
Petition to Modify a Final Compliance Date Variance	
Permit Action Petition Review of Permit Denial\$1,084 Review of Conditional Approval\$1,084 Review of Permit Suspension\$1,084	(\$825)
Other Petitions       \$1,084         Rehearing of a Variance Decision       \$1,084         Review of an Emission Reduction Credit Refusal       \$1,084         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 Direct	or, SAFCA			
1007 7th Street, 7th Floo	r			
Sacramento, CA 95814				
Manufacture of the second s				
Names and addresses of p	artners or officers:	·		
	artners or officers: <u>Address(es)</u>			
Names and addresses of p <u>Name(s)</u> Richard Johnson				

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

## Same

2.

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:

See	Permit. Int	ternal comb	ustion di	esel eng	ines runn	ing stan	dby floo	d contro	ol pumps
						100001-001-000-001-000-000-000-000-000-			Animent by the function of the Addition of the
l have	not receive	ed permit(s)	yet. My a	application	n for a Per	mit To O	perate w	as subm	itted on
			.,,						
Have	you been is	sued a Noti	ce of Viola	ation cond	cerning the	) operati	on of this	equipm	ent?
	S	X NO							
Califo	<b>rnia Healt</b> h	and Safety	Code sec	tion 4170	0 states:				
wh nui en	atsoever su sance, or a danger the o	erwise provi ich quantitie nnoyance to comfort, rep a natural te	s of air co any cons ose, healt	ntaminan siderable h, or safe	its or other number of ity of any s	materia persons such pers	l which ca or to the sons or th	ause inju public, o e public	iry, detrime or which , or which
		or agency (d ion 41700?	or will you	r compan	y or ageno	;y be) in	violation	of Califo	rnia Health
	YES	X NO							

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

<sup>&</sup>lt;sup>2</sup> 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 41701<sup>3</sup> 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, commerical businesses, etc.)

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

<sup>&</sup>lt;sup>3</sup> 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:
  - a. Curtailing the operation of the source in lieu of obtaining a variance, and
  - b. Enacting other alternatives to the variance (besides curtailment), and
  - c. 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?
  - X 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 noncompliant activity will not create a public nuisance:

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 <sub>X</sub> , PM10, PM2.5, 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.

	$\langle \rho \rangle$
Signature	
Date:	( 1/13/17
Name (P	rint): <u>MSON OKMPBELL</u>
Title:	DEPUTY EXECUTIVE DIRECTOR

un Times			2/27/2017
		· · ·	Generator
			13366
			45394771
			6BT5.9-G2
1250	1250	1250	166
0.0	0.0	0.0	0.0
13.3	143.5	84.8	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
0.0	0.0	0.0	0.0
71.8	1.4	23.1	0.0
12.3	0.0	0.0	0.3
48.7	0.0	1.2	0.0
146.1	144.9	109.1	0.3
	13.3 0.0 0.0 71.8 12.3 48.7	12018       12019         33134474       33134476         KTA50-01600       KTA50-01600         1250       1250         0.0       0.0         13.3       143.5         0.0       0.0         0.0       0.0         13.3       143.5         0.0       0.0         13.3       143.5         0.0       0.0         0.0       0.0         13.3       143.5         0.0       0.0         13.3       143.5         0.0       0.0         12.3       0.0         12.3       0.0         48.7       0.0         12.3       0.0         12.3       0.0         12.3       0.0         12.3       0.0         12.3       0.0         13.3       1.4         14.3       1.4         12.3       1.4         13.4       1.4         14.5       1.4         12.3       1.4         13.4       1.4         14.5       1.4         15.5       1.4         16.5	12018       12019       12020         33134474       33134476       33134465         KTA50-01600       KTA50-01600       KTA50-01600         1250       1250       1250         0.0       0.0       0.0         0.0       0.0       0.0         13.3       143.5       84.8         0.0       0.0       0.0         0.0       0.0       0.0         0.0       0.0       0.0         0.0       0.0       0.0         0.0       0.0       0.0         0.0       0.0       0.0         0.0       0.0       0.0         0.0       0.0       0.0         12.3       0.0       0.0         12.3       0.0       0.0         12.3       0.0       0.0         12.3       0.0       1.2         12.4       1.4       1.2         12.3       1.4       1.4         12.3       1.4       1.4         12.3       1.4       1.4         12.3       1.4       1.4         12.4       1.4       1.4         12.5       1.4       1.4     <

777 12TH STREET, 3RD FLOOR SACRAMENTO, CA 95814-1908

1

SACRAMENTO METROPOLITAN

(916) 874-4800 FAX: (916) 874-4899



## 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

Julio Lukanerok BY:

PERMIT NO.:

12018

PAGE 1 OF 3 PAGE(S)

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

	EMISSION FACTOR		MAXIMUM ALLOWABLE EMISSIONS (A)		
POLLUTANT	(GRAMS/HP-HR)	EMISSION FACTOR	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

PAGE

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 ALLOWABL	E OPERATION
		HOURS/QUARTER	HOURS/YEAR
	MAINTENANCE PURPOSES (A)	30	30
	ALL OPERATION - MAINTENANCE (A) AND EMERGENCY (B)	200	200
	<ul> <li>(A) MAINTENANCE PURPOSES IS DEFINED AS: THE OPRESERVE THE INTEGRITY OF THE IC ENGINE, I FACILITY'S ELECTRICAL DISTRIBUTION SYSTEM, VERIFY COMPLIANCE WITH THE APPLICABLE RU</li> <li>(B) EMERGENCY IS DEFINED AS: WHEN ELECTRICAL INTERRUPTED BY AN UNFORESEEABLE EVENT.</li> </ul>	TS ASSOCIATED GENERATOR , OR WHEN REQUIRED BY TH JLES AND REGULATIONS	R OR THE E SMAQMD TO
8.	THE IC ENGINE SHALL BE EQUIPPED WITH A NON-RED DISPLAY CAPABILITY OF 999 HOURS, TO ENSURE CO	ESETTING HOUR METER, WIT	H A MINIMUM NUMBERS 6 AND 7.
9.	UPON REQUEST OF THE AIR POLLUTION CONTROL ( DURING DAYLIGHT HOURS, THE IC ENGINE SHALL BI A COLD START CONDITION, FOR OBSERVATION OF (	E RUN AT MAXIMUM ANTICIPA	TEDIOAD EPOM
10.	THE IC ENGINE SHALL BE FUELED WITH CARB DIESE THAT MEETS THE REQUIREMENTS OF THE VERIFICA CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FU ADDITIVES THAT MEETS THE REQUIREMENTS OF TH COMBINATION OF FUELS LISTED IN THIS CONDITION	TION PROCEDURE (AS CODI) EL, OR CARB DIESEL FUEL U	FIED IN TITLE 13,
20	F 3 PAGE(S) REVOCABLE AND NON-		PERMIT NO.: 120 <sup>-</sup>

#### **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	<ul> <li>G. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE:</li> <li>1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATE DIESEL, ETC.)</li> <li>2. QUANTITY OF FUEL PURCHASED.</li> <li>3. DATE OF FUEL PURCHASE.</li> <li>4. SIGNATURE OF PERSON RECEIVING FUEL.</li> <li>5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.</li> </ul>

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.

AQMD RULE NUMBER	RULE TITLE
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
	HIS PERMIT TO OPERATE MAY REFLECT SOME, BUT NOT ALL, THERE MAY BE OTHER CONDITIONS THAT ARE APPLICABLE TO THE

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.

PAGE 3 OF 3 PAGE(S)

PERMIT NO.: 12018

777 12TH STREET, 3RD FLOOR (916) 874-4800 SACRAMENTO, CA 95814-1908 FAX: (916) 874-4899 SACRAMENTO METROPOLITAN AIR OUALITY MANAGEMENT DISTRICT 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 THE AIR POLLUTION CONTROL OFFICER AND/OR AUTHORIZED REPRESENTATIVES, UPON THE 2. 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 LARRY GREENE DATE AMENDED: 12/31/05 AIR POLLUTION CONTROL OFFICER **EXPIRATION DATE:** 8/6/2006 (UNLESS RENEWED) Julie Lukaneroky BY: PAGE 1 OF 3 PAGE(S) PERMIT NO .: 12019 **REVOCABLE AND NON-TRANSFERABLE** 

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

DOLLUTANT	EMISSION FACTOR		MAXIMUM ALLOWABLE EMISSIONS (A)	
POLLUTANT	(GRAMS/HP-HR)	EMISSION FACTOR	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**

4 3

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 ALLOWAB	E OPERATION
		HOURS/QUARTER	HOURS/YEAR
	MAINTENANCE PURPOSES (A)	30	30
	ALL OPERATION - MAINTENANCE (A) AND EMERGENCY (B)	200	200
	<ul> <li>(A) MAINTENANCE PURPOSES IS DEFINED AS: THE PRESERVE THE INTEGRITY OF THE IC ENGINE, I FACILITY'S ELECTRICAL DISTRIBUTION SYSTEM, VERIFY COMPLIANCE WITH THE APPLICABLE RU</li> <li>(B) EMERGENCY IS DEFINED AS: WHEN ELECTRICAL INTERRUPTED BY AN UNFORESEEABLE EVENT.</li> </ul>	TS ASSOCIATED GENERATO , OR WHEN REQUIRED BY TH ILES AND REGULATIONS.	R OR THE IE SMAQMD TO
8.	THE IC ENGINE SHALL BE EQUIPPED WITH A NON-RI DISPLAY CAPABILITY OF 999 HOURS, TO ENSURE CO	ESETTING HOUR METER, WI DMPLIANCE WITH CONDITION	TH A MINIMUM N NUMBERS 6 AND 7.
9.	UPON REQUEST OF THE AIR POLLUTION CONTROL ( DURING DAYLIGHT HOURS, THE IC ENGINE SHALL BE A COLD START CONDITION, FOR OBSERVATION OF (	OFFICER OR DESIGNEE, ONG E RUN AT MAXIMUM ANTICIP	E EACH YEAR,
10.	THE IC ENGINE SHALL BE FUELED WITH CARB DIESE THAT MEETS THE REQUIREMENTS OF THE VERIFICA CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FU ADDITIVES THAT MEETS THE REQUIREMENTS OF TH COMBINATION OF FUELS LISTED IN THIS CONDITION	TION PROCEDURE (AS COD EL, OR CARB DIESEL FUEL L E VERIFICATION PROCEDUR	FIED IN TITLE 13,
PAGE 2 O	F 3 PAGE(S)		PERMIT NO.: 120
	REVOCABLE AND NON-		

**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	<ul> <li>G. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE:</li> <li>1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATE DIESEL, ETC.)</li> <li>2. QUANTITY OF FUEL PURCHASED.</li> <li>3. DATE OF FUEL PURCHASE.</li> <li>4. SIGNATURE OF PERSON RECEIVING FUEL.</li> <li>5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.</li> </ul>

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.

AQMD RULE NUMBER 201	RULE TITLE 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.

PAGE 3 OF 3 PAGE(S)

PERMIT NO.: 12019

777 12TH STREET, 3RD FLOOR SACRAMENTO, CA 95814-1908

1

SACRAMENTO METROPOLITAN

(916) 874-4800 FAX: (916) 874-4899



## 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

10

- 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

Julie Lukanersky BY.

PERMIT NO.:

12020

PAGE 1 OF 3 PAGE(S)

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

	<b>EMISSION FACTOR</b>		MAXIMUM ALLOWABLE EMISSIONS (A)	
POLLUTANT	(GRAMS/HP-HR)	EMISSION FACTOR	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**

1 N

PAGE

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	
	<ul> <li>(A) MAINTENANCE PURPOSES IS DEFINED AS: THE ( PRESERVE THE INTEGRITY OF THE IC ENGINE, I' FACILITY'S ELECTRICAL DISTRIBUTION SYSTEM, VERIFY COMPLIANCE WITH THE APPLICABLE RU</li> <li>(B) EMERGENCY IS DEFINED AS: WHEN ELECTRICAL INTERRUPTED BY AN UNFORESEEABLE EVENT.</li> </ul>	TS ASSOCIATED GENERATOR OR WHEN REQUIRED BY TH LES AND REGULATIONS.	R OR THE E SMAQMD TO	
8.	THE IC ENGINE SHALL BE EQUIPPED WITH A NON-RE DISPLAY CAPABILITY OF 999 HOURS, TO ENSURE CO	ESETTING HOUR METER, WIT	H A MINIMUM I NUMBERS 6 AND 7.	
9.	UPON REQUEST OF THE AIR POLLUTION CONTROL ODURING DAYLIGHT HOURS, THE IC ENGINE SHALL BE A COLD START CONDITION, FOR OBSERVATION OF O	E RUN AT MAXIMUM ANTICIP	ATED LOAD, FROM	
10.	THE IC ENGINE SHALL BE FUELED WITH CARB DIESE THAT MEETS THE REQUIREMENTS OF THE VERIFICA CCR, SECTIONS 2700-2710), OR AN ALTERNATIVE FU ADDITIVES THAT MEETS THE REQUIREMENTS OF TH COMBINATION OF FUELS LISTED IN THIS CONDITION	TION PROCEDURE (AS CODI IEL, OR CARB DIESEL FUEL U IE VERIFICATION PROCEDUR	FIED IN TITLE 13, ISED WITH FUEL	
2 0	F 3 PAGE(S)	I	PERMIT NO.: 1202	
	REVOCABLE AND NON-	TRANSFERABLE		

#### **RECORD KEEPING**

-16

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	<ul> <li>G. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE:</li> <li>1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATE DIESEL, ETC.)</li> <li>2. QUANTITY OF FUEL PURCHASED.</li> <li>3. DATE OF FUEL PURCHASE.</li> <li>4. SIGNATURE OF PERSON RECEIVING FUEL.</li> <li>5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.</li> </ul>

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.

AQMD RULE NUMBER	<b>RULE TITLE</b>
------------------	-------------------

- 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.

PAGE 3 OF 3 PAGE(S)

PERMIT NO.: 12020

777 12TH STREET, 3RD FLOOR SACRAMENTO, CA 95814-1908

SACRAMENTO METROPOLITAN

(916) 874-4800 FAX (916) 874-4899



## 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
  - 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:
 11/13/1997

 DATE AMENDED:
 12/31/05

 EXPIRATION DATE:
 8/6/2006 (UNLESS RENEWED)

LARRY GREENE AIR POLLUTION CONTROL OFFICER

Julie Lukameroky BY:

PAGE 1 OF 3 PAGE(S)

PERMIT NO.: 13366

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

POLLUTANT	EMISSION FACTOR (GRAMS/HP-HR)	EMISSION FACTOR	MAXIMUM ALLOWABLE EMISSIONS (A)	
	(GRAMS/HP-HR)		POUNDS/QUARTER	POUNDS/YEAR
ROC	0.3	MFR'S DATA	22	22
NOx	10.65	MFR'S DATA	779	779
SOx	0.1645	0.05% SULFUR CONTENT	12	12
PM10	0.25	MFR'S DATA	18	and the second se
00	3.29	MFR'S DATA	241	18
HC+NOx	N/A	N/A	N/A	241 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: Г

TVBC OF OPERATION				
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		
<ul> <li>(A) MAINTENANCE PURPOSES IS DEFINED AS PRESERVE THE INTEGRITY OF THE IC ENC FACILITY'S ELECTRICAL DISTRIBUTION SY VERIFY COMPLIANCE WITH THE APPLICAE (B) EMERGENCY IS DEFINED AS: WHEN ELEC INTERRUPTED BY AN UNFORESEEABLE ENC INTERRUPTED BY AN UNFORESEEABLE ENC (A) MAINTENANCE PURPOSES IS DEFINED AS INTERRUPTED BY AN UNFORESEEABLE ENC INTERRUPTED BY AN UNFORESEEABLE BY AN UNFORE</li></ul>	GINE, ITS ASSOCIATED GENERATO (STEM, OR WHEN REQUIRED BY TH BLE RULES AND REGULATIONS. TRICAL SERVICE EDOMATIC SERVICE	R OR THE IE SMAQMD TO		
8. THE IC ENGINE SHALL BE EQUIPPED WITH A N DISPLAY CAPABILITY OF 999 HOURS, TO ENSU	ION-RESETTING HOUR METER, WIT			
9. UPON REQUEST OF THE AIR POLLUTION CONT DURING DAYLIGHT HOURS, THE IC ENGINE SH A COLD START CONDITION, FOR OBSERVATION	TROL OFFICER OR DESIGNEE, ONC	E EACH YEAR,		
10. THE IC ENGINE SHALL BE FUELED WITH CARB THAT MEETS THE REQUIREMENTS OF THE VEF CCR, SECTIONS 2700-2710), OR AN ALTERNATI ADDITIVES THAT MEETS THE REQUIREMENTS COMBINATION OF FUELS LISTED IN THIS COND	DIESEL FUEL, OR AN ALTERNATIV RIFICATION PROCEDURE (AS CODI IVE FUEL, OR CARB DIESEL FUEL U OF THE VERIEICATION PROCESSIO	E DIESEL FUEL FIED IN TITLE 13,		
PAGE 2 OF 3 PAGE(S)		PERMIT NO.: 13366		
REVOCABLE AND N	NON-TRANSFERABLE			

#### **RECORD KEEPING**

- 65

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 FUËL DELIVERIES	<ul> <li>G. RETAIN FUEL PURCHASE RECORDS THAT ACCOUNT FOR ALL FUEL PURCHASED FOR USE IN THE ENGINE. FUEL PURCHASE RECORDS SHALL INCLUDE:</li> <li>1. IDENTIFICATION OF TYPE OF FUEL (I.E. CARB DIESEL, ALTERNATE DIESEL, ETC.)</li> <li>2. QUANTITY OF FUEL PURCHASED.</li> <li>3. DATE OF FUEL PURCHASE.</li> <li>4. SIGNATURE OF PERSON RECEIVING FUEL.</li> <li>5. SIGNATURE OF FUEL PROVIDER INDICATING THAT FUEL WAS DELIVERED.</li> </ul>

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.

AQMD RULE NUMBERRULE TITLE201GENERAL PERMIT REQUIREMENTS202NEW SOURCE REVIEW401RINGELMANN CHART406SPECIFIC CONTAMINANTS420SULFUR CONTENT OF FUELS904AIR TOXICS CONTROL MEASURES - STATIONARY COMPRESSION<br/>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.

PAGE 3 OF 3 PAGE(S)

PERMIT NO.: 13366

## COUNTY OF SACRAMENTO DEPARTMENT OF FINANCE SACRAMENTO, CALIFORNIA

Warrant Number Document	1102353163 Invoice	Date 04/12/2 Di	:017 .scount	Page 1 Net Amount
1905680329	VARIANCEP FDPU SAFC	ETITION A(916)874-8630	0.00	2,757.00
Warrant Total			0.00	2,757.00

Poursont dogument Chook	number Dote	Curronau	Payment amount
2025172563 1102	253163 04/12/2		
2023172303 1102			

QUESTIONS REGARDING PAYMENT - PLEASE CALL THE PAYMENT SERVICES BUREAU AT: 916-874-7411 OR 1-800-735-2929 (TTY)

PRESENT THROU WELLS FARGO BA 115 Hospital Driv Van Wett, OH 458	NK, N.A.	COUNTY OF SACRAMENTO DEPARTMENT OF FINANCE SACRAMENTO, CALIFORNIA		$\begin{array}{c} \frac{56-382}{412} \\ \text{H} \end{array}$ void Six months after date drawn 04/12/2017
van wen, On 458	91		NO.	1102353163
	** TWO THO IFTY-SEVEI		k	********2,757.00*
7	IR QUALITY 77 12TH ST ACRAMENTO	MANAGEMENT DISTRICT	2 211111 C	n Jamera

#1102353163# #041203824# 9600060056#

## 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. 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.



**Main Office**: 827 7<sup>th</sup> Street, Room 301, Sacramento, CA 95814 • Phone: (916) 874-6851 • Fax: (916) 874-8693 **Drainage Operations and Maintenance**: 3847 Branch Center Road, Sacramento, CA 95827 • Phone: (916) 875-7159 • Fax: (916) 875-7160 January 15, 2004, updated January 31, 2017 3 of 5

# 5.0 STATION OPERATIONS

## 5.1 Operation of Bypass Channel Radial Gate

The radial gate condition in the bypass channel at the station is <u>NORMALLY</u> <u>OPEN</u>. 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 <u>NOT</u> be controlled based on level readings collected by the ALERT Stations at the site. Closing of the gate shall <u>NOT</u> 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 <u>27.0 feet NGVD29 (29.4 ft NAVD88)</u>.

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 <u>NOT</u> 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

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	ALERT Level
	(Feet, NGVD29)	(Feet, NAVD88)
	25.0	20.2
Notify Operators of Anticipated Pump Start	27.8	30.2
Call to start Lead Pump	28.0	30.4
Call to start 2 <sup>nd</sup> Pump (Lag)	29.0	31.4
Call to start 3 <sup>rd</sup> Pump (Lag-Lag)	31.0	33.4
Call to stop 3 <sup>rd</sup> Pump	28.0	30.4
Call to stop 2 <sup>nd</sup> 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 dewaters the wet well and causes all three pumps to shut down until the water surfaces recover to the station operating levels.



**Main Office**: 827 7<sup>th</sup> Street, Room 301, Sacramento, CA 95814 • Phone: (916) 874-6851 • Fax: (916) 874-8693 **Drainage Operations and Maintenance**: 3847 Branch Center Road, Sacramento, CA 95827 • Phone: (916) 875-7159 • Fax: (916) 875-7160 5 of 5

## 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



**Main Office**: 827 7<sup>th</sup> Street, Room 301, Sacramento, CA 95814 • Phone: (916) 874-6851 • Fax: (916) 874-8693 **Drainage Operations and Maintenance:** 3847 Branch Center Road, Sacramento, CA 95827 • Phone: (916) 875-7159 • Fax: (916) 875-7160

D-15 NEMDC Stormwa	ater Pumping Static	n			
Summary of Engine Ru				3/21/2017	
2017 Calendar Year					
	D //1	D //0			
	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 notition on has given accordention	
(4) The petitioner has given consideration	
to curtailing operations of the source in lieu of obtaining a variance.	
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.	



#### **Petitioner Request**

CleanWorld SATS Biodigester, LLC. is petitioning for a regular variance from Permit to Operate 23433, Conditions No. 9 and 12. Petitioner operates a biogas flare that is used to burn excess biogas for its facility and requests relief from Condition No. 9 to run the flare at a lower minimum combustion temperature than the minimum temperature of 1400°F until the new authority to construct is issued. In addition, the applicant is requesting relief from Condition No. 12 to allow tanks to continue to operate despite small leaks and design issues that result in untreated biogas venting.

#### Recommendation

District staff supports approval of the Variance to allow the Petitioner to operate their enclosed flare at a temperature of less than 1,400 °F when in production mode, as measured by the thermocouple. Though this is being treated as a new variance, the request for relief from the current flare temperature requirement is a renewal of a previously approved variance. Since the combined variance period is over one year, increments of progress will be established pursuant to Health & Safety Code §42358. District staff also supports the relief requested for venting biogas and the petitioner's assessment that a tank retrofit is required. Staff has observed major improvements in the operation of the site and a substantial decrease in complaints since March 2017. For these reasons, the District recommends that the Hearing Board:

- 1. Require that Petitioner continue to comply with Condition 4 in the Regular Variance Order by continuing to monitor all operation parameters of the biodigestion system and make the results available to the District upon request.
- 2. Require that Petitioner continue to comply with Condition 5 in the Regular Variance Order by continuing to monitor the facility for leaks and continue regular inspections of the PRVs.
- 3. Direct the Petitioner to continue to immediately check the flare if alarms are triggered within regular working hours (approximately 7 a.m. to 4 p.m.).
- 4. Allow the Petitioner to remotely correct the flare if an alarm is triggered outside of regular working hours and appropriate staff are not onsite, but require that if the issue can't be fixed remotely the petitioner must conduct onsite corrective action in a timely manner.
- 5. Direct the Petitioner to identify tank roof leaks by pressurizing the tanks and patching areas of concern on a monthly basis.
- 6. Direct the Petitioner to abide by the Increments of Progress (Health & Saf. Code § 42358) set forth below:
  - a. Provide quarterly updates on the status of the tank replacement/modification, including progress in hiring a contractor to perform the work.

b. Notify the District when the contractor has been selected to perform tank replacement/modifications.

c. Prior to commencing tank replacement/modification, provide the District with a plan for review that details how emissions and odor will be minimized during the project.

#### **Petitioner Address**

CleanWorld SATS Biodigester, LLC. 8550 Fruitridge Road Sacramento, CA

#### **Equipment Location**

8550 Fruitridge Road Sacramento, CA

#### Discussion

#### Introduction

Cleanworld SATS Biodigester, LLC, ("CWSATS") is requesting relief from the minimum flare combustion temperature limit of 1,400 degrees Fahrenheit (°F) as required by Section 301 of Rule 202, *New Source Review.* Specifically, relief is requested from Authority to Construct 23433, condition 9. In addition, CWSATS is requesting relief from permit condition 12 that requires all biogas produced be either processed or flared.

#### Background

Until March 14, 2017, Clean World Partners provided the day to day operations and management of the facility. Clean World Partners was also the previous permit holder of all District Permits. Cleanworld SATS Biodigester (CWSATS) is the LLC that owns the physical assets located at 8550 Fruitridge Road in Sacramento, and has hired a new facility operator, ES Engineering Sciences (ES) to replace Clean World Partners as the facility operator. CWSATS has filed change of ownership forms with the District for all permits at 8550 Fruitridge Road.

In 2016, Clean World Partners filed Interim and Regular Variance Petitions to request relief from the minimum flare combustion temperature limit. The Interim Variance was approved on February 25, 2016. On March 15, 2016 the Hearing Board continued the hearing on the Regular Variance. On May 4, 2016 the Regular Variance was granted for 120 days (April 4, 2016 – September 1, 2016) and the Board required Clean World to conduct additional emissions testing, including dioxins, and report back to the board in 90 days. The testing was conducted June 2-3, 2016 and a Health Risk Assessment (HRA) prepared by District staff demonstrated that dioxins and other pollutants were well below accepted limits. On August 16, 2016 Clean World was granted an extension of the Variance, however the notice was deemed defective due to insufficient notification time. Clean World returned to the Hearing Board on January 7, 2017 with proper notice, and the Variance was extended until the Permit to Operate is issued, but not to exceed May 4, 2017. Staff is still in the process of making a BACT (Best Available Control Technology) determination, and consequently has not issued the Authority to Construct (ATC) that would allow CWSATS to operate the flare below 1,400 °F. This Variance is requesting relief until the ATC is issued.

In addition to requesting relief from operating the flare at 1,400 °F, CWSATS is requesting relief from permit condition 12 that requires all biogas be either captured, processed or flared. The new operator, ES, determined that the biodigester tank design was flawed. Specifically the flat top tank roof contributed to dramatic pressure changes that resulted in flare failure and digester gas venting. Also, ES concluded that the roof contains many small leaks and that a roof replacement is the only way to fix the system.

#### Complaints

Since CWSATS took over operation on March 14<sup>th</sup>, 2017, the District has received seven public odor complaints. Six of the seven odor complaints were received during the month of May. ES determined that the odors were caused by food waste deposited in the open loading area and revised its operating parameters to prohibit use of the open loading area for waste deposits until the area can be fully enclosed. As a result, the facility currently accepts only prepackaged food waste and liquid waste delivered by tanker trucks, both of which are immediately loaded in the digester. This prevents food from being left in the loading area, where it can create odors. The District received one additional odor complaint on May 5, 2017. This complaint was related to using the solid separator; ES moved an odor cannon closer to the solid separator to reduce offsite odors.

On of the odor measures required under the prior variance was installation of a flare alarm. Shortly after taking over the facility, ES complied with the order by ensuring that the flare was properly alarmed. Equipping the flare

with an alarm has resulted in a reduction of uncontrolled biogas venting. In addition, ES has equipped the flare with remote re-light capability.

## FINDINGS

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

## Finding 1 – Violation

"That the Petitioner for a Variance is, or will be, in violation of Health and Safety Code section 41701 [opacity] or of any rule, regulation, or order of district." (Health and Safety Code, § 42353, subs. (a) (1).)

**Discussion:** There are two separate violations that are occurring; the first is the ongoing violation of operating the flare below the minimum temperature of the 1,400 °F requirement. This violation will continue until the revised permit is issued. The second violation is the release of biogas. The biogas is being released in two different ways: through small leaks in the digester roof and occasionally through pressure build-up through the PRV valves.

#### 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." (Health and Safety Code § 42352, subs. (a)(2).)

**Discussion:** The question here is two-fold: (1) whether it was beyond the Petitioner's reasonable control to ensure compliance with the minimum flare operating temperature as stated in their permit, and (2) whether, because of their 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 their business.

## (1) Whether the cause of the violation is beyond Petitioner's reasonable control

The question of whether compliance is beyond Petitioner's reasonable control is also a two-part question. First, whether the Petitioner took reasonable steps to comply, and second whether there are reasonable alternatives available that would allow Petitioner to continue to operate in compliance with Rule 201.

a. Whether Petitioner took reasonable steps to comply

In determining whether conditions exist that are beyond the Petitioner's reasonable control, the Hearing Board must consider the extent in which the Petitioner took reasonable and timely steps to comply with the requirements or seek a Variance.

(I) Flares: According to information contained in the Variance application, the Petitioner can maintain a minimum flare temperature of 1,400 °F, but doing so would require the Petitioner to purchase natural gas or burn the majority of their saleable gas. The Petitioner asserts that the burning of purchased natural gas or saleable gas is not economically feasible.

(ii) Leaks: To stop all biogas from leaking and escaping, the tank roofs will need to be upgraded. Since taking over operations, ES has taken many steps to ensure that pressure issues in the tank do

not result in biogas venting. The alarming of the flare and ES's prompt response to alarms has greatly reduced biogas emissions. Additionally, in the interim, ES routinely identifies tank roof leaks by pressurizing the tanks and patching areas of concern.

b. Whether Petitioner has reasonable alternatives available to comply with the VOC requirements

(i) Flares: While burning of purchased natural gas or saleable gas would allow for operation of the flare at 1,400 °F, the Petitioner contends this is not economically viable.

(ii) Leaks: To completely stop biogas from leaking from the tank roofs the digester would need to be shutdown. Operational changes have greatly reduced biogas venting related to flare failure. However, the roof still contains small leaks. Besides shutting down operations, tank redesign and roof replacement, as proposed by ES, are the only alternatives.

# (2) Whether requiring compliance will result in the arbitrary or unreasonable taking of Petitioner's property or the closing or elimination of its business

The only immediate method of compliance is to operate the flare at a minimum temperature of 1,400 °F, using both tail gas and digester gas (or purchased natural gas). According to the Petitioner, the facility is not economically viable if it must combust digester gas rather than sell it, or if it is required to purchase natural gas to aid combustion of the tail gas. This would result in an economic loss for the Petitioner and the potential closing of a facility that produces natural gas using organic wastes – a process that can divert up to 99.9 tons per day of organic wastes from landfills with an overall negative carbon impact (net reduction in greenhouse gases). Requiring compliance with capturing all biogas would mean emptying the tanks and shutting down all production. CWSATS has already voluntarily chosen to suspend receiving and processing solid material in the open loading area to reduce odors.

#### Finding 3 – Relative Benefit to Air Quality

"That the closing or taking would be without a corresponding benefit in reducing air contaminants." (Health and Safety Code § 42352, subs. (a)(3).)

**Discussion:** The closing of the facility would result in an economic loss for the Petitioner and increased emissions of greenhouse gases if the organic wastes were returned to the landfill.

Source test results indicate that operating the flare at 1,000 °F results in 9.2 lbs. /day of VOCs[1]. Operating the flare at 800 °F results in 11.5 lbs/day of VOCs. The flare is currently permitted to emit 16.1 lbs/day of VOCs. There is no source test data for the flare operating at 1,400 °F; however, it is likely the VOCs would continue to decrease at higher combustion temperatures. Granting the Variance to operate the flare below the minimum temperature of 1,400 °F will result in an increase in VOCs, but that increase is negligible and below the permitted level.

The application for a variance requires excess emissions be calculated; District staff therefore calculated an estimated amount of excess VOC emissions from the leaks, and CWSATS put that estimate in their variance application. In retrospect, District Staff has determined that the emissions estimate is speculative, because there is no reliable or accurate method to calculate VOC emissions from small leaks in the roof. While there is no actual emissions value, Staff does believe there are excess VOCs and thus the Petitioner will be charged excess emission fees.

While VOC emissions are increased in the short term, the Petitioner's process can have a long-term positive impact on the reduction of greenhouse gases, landfill waste diversion and a beneficial use of waste products.

#### 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." (Health and Safety Code § 42352, subs. (a)(4).)

**Discussion:** The Petitioner has considered curtailing operations, but doing so would result in economic loss. This would also have environmental and air quality impacts by returning organic wastes to a landfill instead of diverting them to an anaerobic digester.

#### 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." (Health and Safety Code § 42352, subs. (a)(5).)

**Discussion:** There are two issues pertaining to excess emissions. First, whether the Petitioner has committed to reducing its emissions, as required by the statute, and second, whether the Petitioner is obligated to pay excess emission fees in the event the Variance is granted.

- Control of excess emissions: Source test data indicates that at 800 °F excess VOCs are negligible for operating the flare below 1400 °F. District staff are aware that there are VOC emissions from the leaking roof, but do not believe they contribute to a significant health risk. Petitioner has already taken steps to reduce biogas from venting by processing biogas at a lower tank pressure. A lower tank pressure results in fewer VOCs escaping from the leaking roof.
- 2. Excess emission fees: District Rule 302 Hearing Board Fees, requires the payment of excess duration fees for any Variance approved for more than 90 days. Though this is a new Variance, it includes a portion of the original Variance covering the period of May 4, 2016 through May 4, 2017. Excess emission fees are calculated from the period of May 4, 2016 May 4, 2018, which includes the maximum allowable time for this Variance to extend to. Fees will be \$5775.00 for twenty four months between the two variances. The amount specifically is \$275 per month for all months in excess of the first 90 days (24 months-3 months x \$275). If the Variance is granted, the attached excess emission fee invoice must be paid within one week, or the District will not release the final Findings & Orders.

#### 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." (Health and Safety Code § 42352, subs. (a)(6).)

**Discussion:** The Petitioner stated in their application that they will continue to maintain operational records as required by AC 23443. In addition, the Petitioner will continue to respond to all flare alarms and take steps to reduce biogas venting from the PRV valves.

## **OTHER ISSUES**

The District does not have authority to enforce public nuisance as stated in Health and Safety Code section 41700. However, hydrogen sulfide is the odor-creating pollutant in the emission stream and source test data submitted indicates that destruction efficiency for this pollutant remains consistently at 99.6% or above when the flare is operated at 800 °F and above. Hydrogen sulfide inlet concentration is already limited by the permit to 50 ppm, therefore any overall increase in hydrogen sulfide would be minimal.

[1] VOC's as total non-methane hydrocarbons.

ATTACHMENTS:				
Description	Туре	Upload Date		
Petition for Regular Variance	Petitions	6/15/2017		

## Approvals/Acknowledgements

Division Manager or Designee: David R. Grose, Report Approved 6/14/2017

District Counsel or Designee: Kathrine Pittard, Approved as to Form 6/14/2017



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

#### PETITION APPLICATION

Petitioner's Name, Business Name, and Address Cleanworld SATS Biodigester, LLC	For Office Use Only
PO Box 12219 Zephyr Cove, NV 89448	Variance No. 2017-005
c/o Prim Ventures, Inc. Attn: Creative Energy Strategies, LLC - Steve Tetrick, Manager	X Filing Fee Received, Receipt No: 61800
Telephone No: (775) 588-7300	<u>30</u> Day Notice of Hearing Required
	0

#### 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	X Other (specify) limited liability company
--------------	-------------	-------------	---

- 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.<sup>1</sup>
- 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 12<sup>th</sup> 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.

<sup>&</sup>lt;sup>1</sup> See Health and Safety Code section 42323. The Business Environmental Resource Center's Telephone number is (916) 649-0225.

F. Please use a check mark in the i 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:

	ee
Interim Variance\$1,02 Short-Term Variance\$1,02	
Regular Variance\$1,02	
Emergency Variance\$49	
Product Variance Petitions	
Interim Product Variance	4 (\$765)
Product Variance\$1,08	
Detition to Medify on Order Dermitting o Variance	
Petition to Modify an Order Permitting a Variance	4 (\$825)
Short-term Variance\$1,08	
Regular Variance\$1,08	
Interim Product Variance\$1,08	
Product Variance\$1,08	1 (\$825)
Petition to Modify Increments of Progress	
Interim Authorization—Variance\$1,02	
Interim Authorization—Product Variance\$1,02	
Variance	
Product Variance\$1,02	+ (\$705)
Petition to Modify a Final Compliance Date	
Variance\$1,08	
Product Variance\$1,08	1 (\$825)
Permit Action Petition	
Review of Permit Denial\$1,08	4 (\$825)
Review of Conditional Approval\$1,08	
Review of Permit Suspension\$1,08	1 (\$825)
Other Petitions	
Rehearing of a Variance Decision\$1,08	1 (\$825)
Review of an Emission Reduction Credit Refusal\$1,08	
Petition by an Aggrieved Party\$1,08	\$825)
Please enclose filing fee with each petition. Make checks payable to the <b>SMAQMD</b> . No p will be processed unless filing fee is submitted with petition.	etition
Printinger in Bernellin in eine Abernelin abschlanden ausschleffe Gesten und eine eine eine eine	
I I'll to the fill of ONA ONAD when when a matching a matching and far far a	1 - FF 4:

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.

G.

#### 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			<u>Telephone Number</u>
Steve Tetrick, Manager of Creative Ener	rgy Strategies, LLC	( 831	) 324-9418
PO Box 12219 Zephyr Cove, NV 89448			
Ini D Ghidirmic, Attorney (Slovak Baron	Empey Murphy & Pinkney, LLP)	760-32	2-2275 EXT 212
1800 E. Tahquitz Canyon Way, Palm S	prings, CA 92262		
Nick Avdis, Attorney (Thomas Law Gro	up)	916-2	287-9292
455 Capitol Mall Ste. 801, Sacramento,	CA 95814		
George Eowan, Director, Environ Strate 1036 W. Taft Ave. Orange, CA 92865 Names and addresses of partners		916-9	96-5938
Name(s)	<u>Address(es)</u>		
Steve Tetrick, Manager of Creative En	ergy Strategies, LLC - PO Box 1	2219, Zep	ohyr Cove, NV 89448
Wayne L. Prim, Jr., Manager of Creati	ve Energy Strategies, LLC - PO E	Box 12219	9, Zephyr Cove, NV 89448

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

2.

4.	Briefly describe the nature of your business:
	Applicant operates an anaerobic digestion facility which processes and coverts
	organic wastes (diverted from landfills and other disposal sites) into commercial
	products, like electricity, process heat, renewable compressed natural gas (RNG),
	soil amendments and fertilizer products.

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:

The equipment that is the subject of this petition is a biogas flare that is used to flare excess

biogas and the associated in-vessel digestion tanks. During normal operations, flaring of low BTU purified tail gas (a byproduct of RNG production), plus any excess biogas. In the event of flare failure or emergency, the flare is designed to flare all gas produced at the facility, if necessary. Additionally, the tank design is being reconfigured as part of the current upgrade program. Prior tank design has been considered insufficient and has contributed to flare failure.

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

N/A	
	;·

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 41705<sup>2</sup> 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?

If yes, please explain:

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

<sup>&</sup>lt;sup>2</sup> 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 41701<sup>3</sup> 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.

We are petitioning to extend the term of the current variance for the subject flare equipment. In addition, applicant is request relief for the venting of biogas. The variance requested is for P.O.

<u>23433, specifically for conditions 9 and 12 therein. Applicant currently has an Authority to Construct</u> application under review at the District (ATC24978). There are two additional permits for the site

associated with other pieces of equipment (ATCs 24710 and 24711)

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:

The alternative to the requested variance is the ceasing of the anarobic biodigestion facility

and the economic and greater social benefits it provides or the potential imposition of fines.

Either of these conditions would potentially force a shutdown of this facility which has the capacity

to divert approx. 100 tons of organic waste from land fills per day and has a negative carbon impact.

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

<sup>&</sup>lt;sup>3</sup> 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:

Shutdown of the facility would result in both economic loss to the applicant as well as increased

emissions of air contaminants and GHG if the diverted organic wastes were returned to the

<u>landfill. The proposed variance is an extension of a previously approved variance and will</u> also provide relief from additional venting due to improper digestion tank design.

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

The applicant has considered curtailing its operations so that a higher flare temperature

<u>could be achieved and to allow for the redesign of the digestion tanks.</u> However, in doing so, applicant has concluded that it would economically infeasible to continue operations if the RNG that would be needed to increase the flare temperature to 1400 degrees could not otherwise be sold. In addition, the cessation of applicant's activities would have a negative environmental impact due to the return of organic wastes to landfills, resulting in air quality impacts.

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?



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 noncompliant activity will not create a public nuisance:

·
<u></u> .
-
······

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:

<b>POLLUTANT(S)</b> ( <i>e.g.</i> , VOC, NO <sub>X</sub> , PM10, PM2.5, Hexavalent Chromium)	LBS. PER DAY OF EXCESS EMISSIONS	NO. OF DAYS EXCESS EMISSIONS PRODUCED	% OPACITY (If Applicable)
voc	630 lbs/day		

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.

The applicant will continue to monitor, record and report data to the District in accordance with

the terms of the ATC.

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:

Improved operational uptime by eliminating unnecessary operating conditions (i.e., differentiating

between low BTU flaring and emergency high BTU flaring.

Indirect regional air quality benefits in the form of reduced GHG emissions through the ongoing operation of the facility.

The Disadvantages:

The potential for fines and violations during the permit modification process which could result in irreparable economic damage to applicant. Which would also hurt economic development goals in the Power Inn corridor, which is known as a regional innovation hub.

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

<u>The current applicant is a new owner/operator of this facility.</u> The previous owner/operator had processed and received approval of a variance to achieve the same intent as this variance. The previous variance term expires on May 4, 2017. Additional time is needed to obtain the modifications to the permit to operated for the flare. Applicant has shown that the flare can operate safely at lower temperatures.

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

<u>Applicant has process and received approval of a variance to achieve the same intent as this</u> variance. The previous variance term expires on May 4, 2017. Additional time is needed to obtain the modifications to the permit to operated for the flare. Applicant has shown that the flare can operate safely at lower temperatures. Additional time is needed to redesign the in-vessel digestion tanks. 19. Fill in the date on which you expect to be in compliance with the rules and/or regulations:

May 4, 2018 to allow sufficient time to process the necessary permit modifications.

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:

Prior variance application.

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.

VI (A-1
Signature:
Date: 05-02-2017
Name (Print):

Title: Manager of Creative Energy Strategies, LLC, the Manager of Cleanworld SATS Biodigester, LLC

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. <u>IMPORTANT: You must supply the evidence in support of those</u> <u>findings.</u> 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 <u>before</u> 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. <u>Please submit your</u> <u>completed petition and initial filing fee no later than the deadline shown on the schedule.</u> 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.

#### BEFORE THE HEARING BOARD OF THE SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT STATE OF CALIFORNIA

#### **FINDINGS AND ORDERS**

VARIANCE PETITION NO:	2016-002	
PETITIONER:	CleanWorld SATS Biodigester, LLC. Equipment Location: 8550 Fruitridge Road Sacramento, CA 95826	
HEARING DATE:	Tuesday, January 17, 2017	
HEARING TIME:	4:00 p.m.	
HEARING LOCATION:	Sacramento Metropolitan Air Quality Management Distri 777 12th Street, Third Floor Sacramento, CA 95814	ct
NOTICE GIVEN:	Notice was given pursuant to Health and Safety Code section 40826.	
PETITION FOR:	Modification of final compliance date of Regular Variance 002 issued May 4, 2016.	e 2016-
<u>HEARING BOARD</u> <u>MEMBERS</u> :	Dr. Stephen Weyers, Chairman of the Hearing Board John German, Engineering Member Stacy Moak, Attorney Member Tim Olsen, Public Member Darrel Woo, Public Member	Present Present Absent Absent Present
OTHERS:	Kimon Manolius, Counsel to Hearing Board Virginia Muller, Clerk of the Hearing Board	Present Present
<u>REPRESENTING</u> <u>PETITIONER</u> :	Nick Avdis, Attorney at law, representing CleanWorld Michele Wong, President/CEO CleanWorld Ini Ghidirmic, Attorney at law representing CW-PR, LLC	Sworn Sworn Sworn
SMAQMD STAFF:	Levi Ford, Associate Air Quality Specialist Kathrine Pittard, District Counsel	Sworn

#### HEARING

A hearing properly noticed for the Hearing Board to consider modification of the final compliance date to Clean World's Findings & Orders for Regular Variance 2016-002 granted May 4, 2016, took place on Tuesday, January 17, 2017. The Hearing Board's Chair, Dr. Stephen Weyers, conducted the meeting. The other Hearing Board members in attendance were John German and Darrel Woo. Representing the Petitioner were Nick Avdis, Attorney at law, Michele Wong and Ini Ghidirmaic, Attorney at Law. Representing the District were Kathrine

Pittard, District Counsel and Levi Ford, Associate Air Quality Specialist. Also in attendance were Kimon Manolius, Hearing Board Counsel and Virginia Muller, Clerk of the Hearing Board.

No members of the public were present.

Clean World testified that the flare manufacture plans to upgrade the flare software with an alarm for flare failures, and that the upgrade should eliminate software communication errors between the flare and the gas processing system.

By way of motion properly made, seconded, and voted, the Hearing Board received, entered and incorporated by reference all records, testimony and submissions associated with its prior actions regarding Clean World, including but not limited to those associated with the following prior hearings:

- a. Interim Variance hearing on February 25, 2016
- b. Interim Variance continuance hearing on March 15, 2016
- c. Regular Variance hearing on May 4, 2016
- d. Regular Variance extension hearing on August 16, 2016

The hearing board granted modification to the final compliance date for one year from the effective date for the regular variance. As a precautionary measure, in the event the Air Resources Board determines that the one-year increments of progress trigger should be calculated from the effective date of the interim variance (February 8, 2016), the Board also adopted increments of progress under Health and Safety Code section 42358(b).

#### FINDINGS

Determined at May 4, 2016 hearing.

#### <u>ORDER</u>

IT IS HEREBY ORDERED that Petitioner's request for Modification of Final Compliance date of Regular Variance granted May 4, 2016, is granted, under the following conditions:

- The Petitioner's request to modify the final compliance date in Condition 1 of the Regular Variance Order issued May 4, 2016 is granted. The effective date of the Variance, as modified, is from May 5, 2016 to May 4, 2017. At the end of the Variance period, excess duration fees will be calculated in accordance with Rule 302 – *Hearing Board Fees*.
- 2) Condition 2 in the Regular Variance Order, which required Petitioner to conduct source testing (including dioxin testing) as soon as practicable, has been met.
- Condition 3 in the Regular Variance Order, which required Petitioner to report back to the Hearing Board approximately 90 days after the issuance of the variance, has been met.
- 4) Petitioner must continue to comply with Condition 4 in the Regular Variance Order by continuing to monitor all operation parameters of the bio-digestion system and make the results available to the District upon request.
- 5) Petitioner must continue to comply with Condition 5 in the Regular Variance Order by continuing to monitor the facility for leaks and continue regular inspections of the PRVs.
- 6) Petitioner must install an alarm that is dedicated to and will provide notifications of flare failures.

- 7) Petitioner must immediately check the flare if and when the alarm is triggered within regular working hours (approximately 7 a.m. to 4 p.m.). Outside regular hours, and/ or if staff is not onsite to respond, Petitioner must check the flare within 1 hour. Checks may be done remotely if Petitioner equips the flare with remote relighting capability.
- 8) Petitioner agrees to abide by the Increments of Progress (Health & Saf. Code § 42358) set forth below:

By January 23, 2017:

- a. Initiate onsite reprograming of flare alarm to allow for remote alarm capabilities, including, if technically feasible, remote reset option
- b. Initiate corrections to communication system between the flare and the gas processor system

By February 28, 2017:

c. Complete steps 1 and 2.

<u>By May 4, 2017</u>:

d. Obtain a revised permit or variance extension

ON A MOTION by Board Member Darrel Wool and seconded by Board Member John German, the aforementioned Orders and conditions were approved.

ON AN ADDITIONAL MOTION by Board Member Darrel Woo, and seconded by Board Member John German, the Chairperson, Dr. Stephen Weyers will be sole signatory for these Findings and Orders.

The foregoing Orders were passed and adopted by the Sacramento Metropolitan District Hearing Board, the 17<sup>th</sup> day of September 2017.

APPROVED AS TO FORM:

Date:

Kimon<sup>/</sup>Manolius, Hearing Board Counsel

Date: \_\_\_\_\_

Dr. Stephen Weyers, Chairman of the Hearing Board

- 7) Petitioner must immediately check the flare if and when the alarm is triggered within regular working hours (approximately 7 a.m. to 4 p.m.). Outside regular hours, and/ or if staff is not onsite to respond, Petitioner must check the flare within 1 hour. Checks may be done remotely if Petitioner equips the flare with remote relighting capability.
- 8) Petitioner agrees to abide by the Increments of Progress (Health & Saf. Code § 42358) set forth below:
  - By January 23, 2017:
    - a. Initiate onsite reprograming of flare alarm to allow for remote alarm capabilities, including, if technically feasible, remote reset option
    - b. Initiate corrections to communication system between the flare and the gas processor system
  - By February 28, 2017:

c. Complete steps 1 and 2.

By May 4, 2017:

d. Obtain a revised permit or variance extension

ON A MOTION by Board Member Darrel Wool and seconded by Board Member John German, the aforementioned Orders and conditions were approved.

ON AN ADDITIONAL MOTION by Board Member Darrel Woo, and seconded by Board Member John German, the Chairperson, Dr. Stephen Weyers will be sole signatory for these Findings and Orders.

The foregoing Orders were passed and adopted by the Sacramento Metropolitan District Hearing Board, the 17<sup>th</sup> day of September 2017.

APPROVED AS TO FORM:

Date: \_\_\_\_\_

Kimon Manolius, Hearing Board Counsel

1-29-1 Date:

Dr. Stephen Wevers

Chairman of the Hearing Board

A sense me musici con oracio de caricada a la construcción e de construcción e construcción de la la social de sessiones e construcción e de la sense de la construcción de la sense da construcción de la la sense de la construcción de sense de sense de construcción de la sense da construcción de la construcción de la desense de la construcción de la desense de la construcción de la sense da construcción de la construcción d la sense de la construcción de la desense de la construcción de la sense de la construcción de la construcción la sense de la construcción de la construcción de la desense de la construcción de la construcción de la constru la sense de la construcción de la construcción de la desense de la desense de la construcción de la construcción construcción de la construcción de la construcción de la desense de la desense de la construcción de la construcción construcción de la construcción de la construcción de la desense de la desense de la desense de la de la desense construcción de la construcción de la de la de la desense construcción de la desense de

는 <u>합니다.(文本) (文本) (</u>2019년) (2019년) - 1997년 - 1997년 - 전문왕과 (국本) (1997년) (1997년 - 1997년 - 1997년 - 1997년 - 1997년 - 1997년) - 1997년 - 1997년

(A) a strategies (and 1) by the second data (and 4) are second as the second s second s second s

n an an Arrange ann an Arrange an Arrange ann an A An an Arrange ann an A

. . . . .

## **CREATIVE ENERGY STRATEGIES, LLC**

**Physical Address:** 

224 Kingsbury Grade Road Stateline, NV 89449 Mailing Address:

P.O. Box 12219 Zephyr Cove, NV 89448 c/o Prim Ventures, Inc.

March 28, 2017

#### Via: Electronic Mail and U.S. Mail

Kathrine Pittard District Counsel Sacramento Metropolitan Air Quality Management District 777 12<sup>th</sup> Street, Third Floor Sacramento, CA 95814 Angela Thompson Air Quality Specialist Sacramento Metropolitan Air Quality Management District 777 12<sup>th</sup> Street, Third Floor Sacramento, CA 95814

#### Re: <u>Cleanworld SATS Biodigester</u> Address: 8550 Fruitridge Rd. Sacramento, CA 95826

Dear Ms. Pittard and Ms. Thompson:

This letter is intended to provide you with some updated information regarding certain operational changes related to the aforementioned facility referred to, occasionally, as the "Cleanworld South Area Transfer Station (SATS) Biodigester" (the "Facility" or "SATS-AD").

SATS-AD assets (namely, the equipment and personal property) are owned by Cleanworld SATS Biodigester, LLC, a Delaware limited liability company ("CWSATS"). The owner of a majority of the limited liability company ("LLC") membership interests is CW-PR Investments, LLC, a Nevada limited liability company. CleanWorld, a California corporation ("CleanWorld"), holds (through a wholly-owned subsidiary) a minority of the LLC interests.

Creative Energy Strategies, LLC, a Nevada limited liability company ("CES") acts and, since Nov. 1, 2015, has acted, as the sole statutory manager of CWSATS. Until recently, CleanWorld also provided day-to-day operations and Facility management services. Briefly, these services involved supervising ground labor, operating the equipment, and communicating with regulatory agencies (including, providing reports and responding to various requests pursuant to applicable laws). As of March 14, 2017, CleanWorld has been replaced as day-to-day service provider by ES Engineering Services, LLC, a Delaware limited liability company ("ES").

For purposes of clarification, the Facility ownership remains intact (i.e. CWSATS) and the final management authority remains the same (i.e. CES). The only change that has taken place is that CleanWorld has been replaced by a professional and experienced biodigester facility day-to-day operator – ES.

Going forward, the critical personnel for purposes of communicating with respect to the Facility is listed below. CleanWorld may assist with certain transition support services but it no longer plays an active role in operations or acts as an agent for communicating with regulatory agencies with respect to the Facility. You are hereby authorized to communicate with the following personnel regarding Facility operations and concerns. Such communication includes, without limitation, sending and receiving reports, notices, notifications and requests relating to the Facility.

Please be advised, however, that contracts or commitments that are intended to be binding on CWSATS will be executed solely by CES, as CWSATS' manager.

OWNER	FACILITY MANAGER	AGENT FOR SERVICE OF PROCESS AND LEGAL REPRESENTATIVE
CLEANWORLD SATS BIODIGESTER, LLC Attn: Creative Energy Strategies, LLC	ES ENGINEERING SERVICES, LLC 109 South Main Street, Suite C	SLOVAK BARON EMPEY MURPHY & PINKEY LLP
P.O. Box 12219	Eaton Rapids, Michigan 48827	1800 E. Tahquitz Canyon Way Palm Springs, CA 92262
Zephyr Cove, NV 89448 c/o Prim Ventures, Inc.	Darrell Olmsted Senior Facility Manager	Attn: Ini D. Ghidirmic, Esq. 760.322.2275 ext. 212
Via Email: • Steve Tetrick	T: 435.590.8029 dolmsted@es-online.com	ghidirmic@sbemp.com
<ul> <li>steve@glenbrookcap.com</li> <li>David Pouncy</li> </ul>	<i>Bernard Sheff, PE</i> Vice President, Biogas Engineering T: 517.719.2212	
david@glenbrookcap.com	bsheff@es-online.com Ben Sheff	
	Project Engineer bensheff@es-online.com T: 404.772.5251	
	George T. Eowan, Ph.D. Director, Environmental Services and Renewable Energy ES Engineering, Inc.	
	T: 916.996.5938 <u>geowan@pacbell.net</u> • Primary contact For Permit-related	
	issues	

Ownership and Facility management team feel that, going forward, you will be very happy with the progress being made at SATS-AD and that the facility will serve as a point of pride for the entire Sacramento Area.

Please feel free to contact any of us directly, should you have any questions or concerns.

Kind regards,

Creative Energy Strategies, LLC

ten Tin

Steve P. Tetrick, Manager steve@glenbrookcap.com

777 12<sup>TH</sup> STREET, 3<sup>RD</sup> FLOOR SACRAMENTO, CA 95814-1908

SACRAMENTO METROPOLITAN

(916) 874-4800 FAX (916) 874-4899



# PERMIT TO OPERATE

## ISSUED TO: SYNERGEX VENTURES

#### EQUIPMENT LOCATION: 8550 FRUITRIDGE RD, SACRAMENTO, CA 95826

# PERMIT NO. EQUIPMENT DESCRIPTION

23433 ANAEROBIC DIGESTION SYSTEM CONSISTING OF H2S TREATMENT AND 10.65 MMBTU/HR FLARE, MAKE: JOHN ZINK, MODEL ENCLOSED FLARE SYSTEM MODEL ZTOF 4' X 50' S/N BF-9145032.

## SUBJECT TO THE FOLLOWING CONDITIONS:

#### GENERAL

- The equipment shall be properly maintained and operated in accordance with the manufacturer's recommendations at all times.
   [Basis: SMAQMD Rule 201, Section 405]
- 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 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.

#### [Basis: SMAQMD Rule 201, Section 405]

 This Permit to Operate 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 SMAQMD.

[Basis: SMAQMD Rule 201, Section 405]

 DATE ISSUED:
 05-11-2016

 DATE EXPIRES:
 04-23-2017 (UNLESS RENEWED)

LARRY GREENE AIR POLLUTION CONTROL OFFICER

BY. PERMIT NO.: 23433

PAGE 1 OF 4 PAGES

777 12<sup>TH</sup> STREET, 3<sup>RD</sup> FLOOR SACRAMENTO, CA 95814-1908

## SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

- 4. The equipment shall not discharge such quantities of air contaminants or other materials 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. [Basis: SMAQMD Rule 402, Section 301]
- 5. A legible copy of this Permit to Operate shall be maintained on the premises with the equipment. [Basis: SMAQMD Rule 201, Section 401]

#### EMISSION LIMITATIONS

- The equipment shall not discharge into the atmosphere any visible air contaminant 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 No. 1 or equivalent to or greater than 20% opacity.
   [Basis: SMAQMD Rule 401, Section 301]
- Emissions from the equipment shall not exceed the following: [Basis: SMAQMD Rule 202, Section 301 and Rule 411, Section 301]

	Emission Factors Maximum Allowable Emissions (B)			missions (B)
Pollutant	(A) (lbs/MMBTU)	lb/day	lb/quarter	lb/year
VOC	0.063	16.1	1,481	5,878
NOx	0.068	17.4	1,599	6,344
SOx	0.0149	3.8	350	1,390
PM10	0.0137	3.5	322	1,278
PM2.5	0.0137	3.5	322	0.6 tons/year
CO	0.37	94.6	8,701	34,519

#### P/O 23433 10.65 MMBTU/hr Flare

(A) Emission factors for VOC, NOx, and CO are from AP-42, Tables 13.5-1 (09/91, reformatted 1/95) SOx emission is based on 50 PPM H2S in fuel gas stream, 55% METHANE & 45% CO2. PM and PM2.5 is based on past SMAQMD permitting of open flares The VOC emission factor is reduced by 55% to take into account the methane content.

(B) Emissions based on 10.65 MMBtu/hr, 24 hours/day, 92 days/quarter, 365 days/year, and the emission factors in this table.

#### EQUIPMENT OPERATION

 The equipment shall be fired only on digester gas with a maximum concentration of 50 PPM of H2S. The pilot light may be fired on propane or natural gas.
 [Basis: SMAQMD Rule 202, Section 301]

PAGE 2 OF 4 PAGES

PERMIT NO.: 23433

777 12<sup>TH</sup> STREET, 3<sup>RD</sup> FLOOR SACRAMENTO, CA 95814-1908 (916) 874-4800 FAX (916) 874-4899

## SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

- The flare shall be constructed, and operated such that a minimum retention time of the combustion gas is 0.6 seconds at a minimum temperature of 1400 F.
   [Basis: SMAQMD Rule 202, Section 301]
- Only pre-consumer food type material may be used as feedstock. Other feed stocks, such as those from an industrial process or post-consumer waste will require an SMAQMD permit modification.
   [Basis: SMAQMD Rule 402, Section 301]
- Weekly H2S concentration readings (ppmvd) of the produced gas shall be made using draeger tubes or equivalent method upon written approval from the Air Pollution Control Officer.
   [Basis: SMAQMD Rule 202, Section 301]
- The digester system shall be operated such that all gas produced is processed through either the flare, turbines or is collected.
   [Basis: SMAQMD Rule 202, Section 301]
- 13. The flame shall be present at all times when combustible gases are vented through the flare. [Basis: SMAQMD Rule 202, Section 301]
- 14. The flare shall be equipped with a chart recorder that measures fuel flow rate and combustion temperature. [Basis: SMAQMD Rule 201, Section 405]
- The digester system shall not vent to the flare unless a minimum flow is available to sustain combustion parameters in the flare.
   [Basis: SMAQMD Rule 202, Section 301]

## EMISSION TESTING

- 16. A fuel higher heating value, composition, including hydrogen sulfide (H2S) test shall be performed within 90 days of start-up of the digestion process.
  - A. The source test shall be done when a representative gas can be sampled
  - B. The facility shall submit a test plan to the APCO for approval at least 30 days before source test is to be performed.
  - C. The facility shall notify the Air Pollution Control Officer at least seven days in advance of the actual source test date.
  - D. The source test results shall be submitted to the APCO within 60 days from the completion of the source test.
  - E. Source test minimum sample duration is 30 minutes with a summa canister, or other proposed methodology.

[Basis: SMAQMD Rule 202, Section 301 and 402, Section 301]

PAGE 3 OF 4 PAGES

PERMIT NO.: 23433

777 12<sup>™</sup> STREET, 3<sup>RD</sup> FLOOR SACRAMENTO, CA 95814-1908

## SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT

#### RECORD KEEPING

17. The following records shall be continuously maintained on-site for the most recent five-year period and shall be made available to the air pollution control officer upon request. Monthly, quarterly, and annual records as specified in the table below shall be made available for inspection within 30 days following the end of the month, quarter, and year, respectively.

## [Basis: SMAQMD Rule 202, Section 301]

Frequency	Information To Be Recorded
All Times	Fuel flow and temperature for the combustion flare.
Weekly	Weekly H2S concentration readings (ppmvd) using draeger tubes (or equivalent method upon written approval from the Air Pollution Control Officer)

Your application for this air quality Permit to Operate was evaluated for compliance with Sacramento Metropolitan Air Quality Management District (SMAQMD), 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.

SMAQMD RULE NO. RULE TITLE

- 201 GENERAL PERMIT REQUIREMENTS
- 202 NEW SOURCE REVIEW
- 301 PERMIT FEES
- 401 RINGELMANN CHART
- 402 NUISANCE
- 406 SPECIFIC CONTAMINANTS
- 411 BOILER NOx
- 420 SULFUR CONTENT OF FUELS
- 801 NEW SOURCE PERFORMANCE STANDARDS (40 CFR 60 SUBPART Dc)

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 SMAQMD rulebook or contact the SMAQMD for assistance.

PAGE 4 OF 4 PAGES

PERMIT NO.: 23433



# INVOICE

6/15/17

INVOICE NO.: DUE DATE: 2017-005-EEF June 27, 2017

Cleanworld SATS Biodigester, LLC P.O. Box 12219 Zephyr Cove, NV 89448 ATTN: ACCOUNTS PAYABLE

This Excess Emission fee is only due if the Sacramento Metropolitan Air Quality Management District approves a variance for your facility that is conditioned on payment of an excess emission fee. To allow timely issuance of the Hearing Board's final Findings & Orders, the fee is due one week from the date the variance is granted. In no event will the final Findings & Orders be issued prior to payment of the fee.

To avoid delays in properly crediting your account, please:

- 1. Detach and return the lower portion of this page with your remittance.
- 2. Record the invoice number on your check.

**CREDIT CARD PAYMENTS:** If paying with a credit card, please visit our website: <u>www.airquality.org</u>

(Detach Here)

## **Excess Emissions Fee**

INVOICE NO.:	2017-005-EEF
DUE DATE	June 27, 2017

TOTAL AMOUNT DUE .....\$ 5,775

Cleanworld SATS Biodigester, LLC P.O. Box 12219 Zephyr Cove, NV 89448

	For Distric	t Use Only		
Receipt No.	Amount		Date Received	

## 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.	
a fawful busiliess.	
(3) The closing or taking would be without a corresponding benefit in reducing air contaminates.	
contaminates.	
(4) The petitioner has given consideration	
to curtailing operations of the source in lieu of	
obtaining a variance.	
8	
(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.	