AIR QUALITY
MANAGEMENT DISTRICT

DRAFT AUTHORITY TO CONSTRUCT

A/C NO.: 25035

ISSUED BY: _____
DAVID R. GROSE

DATE ISSUED: XX XX, 2017

DATE EXPIRES: XX XX, 2019

ISSUED TO: XTREAM DATA CENTERS CORP DBA SACRAMENTO VENTURE ONE LLC

LOCATION: 2407 AK ST., MCCLELLAN PARK, CA 95652

DESCRIPTION: IC ENGINE STANDBY, MAKE: CATERPILLAR, MODEL: C175-16, SERIAL NO.: TBD, 4,423 BHP @ 1,800 RPM, 5,167 IN^3 DISPLACEMENT, DIESEL FIRED, DRIVING AN EMERGENCY STANDBY GENERATOR.

AUTHORITY TO CONSTRUCT CONDITIONS

START-UP REQUIREMENTS

S1. After completing the equipment installation authorized under this Authority to Construct (ATC), the permit holder must contact the Sacramento Metropolitan Air Quality Management District (SMAQMD) to arrange a start-up inspection. SMAQMD may be contacted at (916) 874-4800.
[Basis: SMAQMD Rule 201, Section 405]

S2. This Authority to Construct may serve as a temporary Permit to Operate provided that:
A. The permit holder has notified SMAQMD that the equipment installation is complete and the facility is ready for a start-up inspection,
B. The equipment installed matches the equipment authorized in this Authority to Construct,
C. The equipment is operated in compliance with all conditions in this Authority to Construct, and
D. The equipment and its operation complies with SMAQMD, state and federal laws and regulations.
[Basis: SMAQMD Rule 201, Section 303.1, 405]

S3. The permit holder agrees to indemnify and defend SMAQMD, its officers, agents, and employees if this permit, or the environmental review of the permit under the California Environmental Quality Act (CEQA) or the National Environmental Policy Act (NEPA), including any exemption determination, is challenged in state or federal court. This indemnification includes attorney fees awarded against SMAQMD, as well as attorney fees, court costs, legal fees, and other expenses incurred in defending the challenge. The District will provide written notice to the permit holder within 5 days if it receives a petition, complaint or other legal notice by a third party challenging this Authority to Construct (ATC) or the environmental review of the ATC. The permit holder may, within 10 days of notification, request cancellation of the ATC. If the permit holder requests cancellation, SMAQMD will cancel the permit within 5 days, and will notify the plaintiffs of the cancellation and request dismissal of the litigation.
[Basis: SMAQMD Rule 201, Section 405]

DRAFT AUTHORITY TO CONSTRUCT

GENERAL

1. The equipment must be properly maintained and operated in accordance with the information submitted with the application and the manufacturer's recommendations at all times.
   [Basis: SMAQMD Rule 201, Section 405 and Rule 202, Section 408.1]

2. The Air Pollution Control Officer and/or authorized representatives must be permitted to do all of the following:
   A. Enter the source premises or any location at which any records required by this ATC are kept.
   B. Access and copy any records required by this ATC.
   C. Inspect or review any equipment, operation, or method required under this ATC.
   D. Sample emissions from the source or require samples to be taken.
   [Basis: SMAQMD Rule 201, Section 405]

3. This ATC 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 SMAQMD Rules and Regulations.
   [Basis: SMAQMD Rule 201, Sections 303.1, 405]

4. The facility may not discharge air contaminants or other materials that 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 ATC must be maintained on the premises with the equipment.
   [Basis: SMAQMD Rule 201, Section 401]

EMISSION LIMITATIONS

6. The IC engine must 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 if the discharge is as dark or darker than Ringelmann No. 1 or is equal to or greater than 20% opacity.
   [Basis: SMAQMD Rule 401, Section 301]

7. The IC engine must meet the following BACT standards:
   A. EPA-certified Tier 2 engine, or
   B. An engine that meets the following standards:
      NOx + VOC: 4.8 g/hp-hr
      SOx: 0.0055 g/hp-hr, fuel with < 0.0015%sulfur content by weight
      PM: 0.15 g/hp-hr (based on filterable portion only)
      CO: 2.6 g/hp-hr
   [Basis: SMAQMD Rule 202, Section 408.2.a]

DRAFT AUTHORITY TO CONSTRUCT

8. The emissions from the IC engine must not exceed the following:
[Basis: SMAQMD Rules 201, Section 405 and 202, Section 408.2]

Pollutant	Emission Factors (A) (g/hp-hr)	Emission Limits (B)		
		lb/day	lb/quarter	lb/year
VOC (C)	0.32	74.9	624	624
NOx (C)	4.8	1,123.3	9,361	9,361
SOx	0.0055	1.3	11	11
PM10	0.17	40.6	338	338
PM2.5	0.17	40.6	338	338
CO	2.6	608.5	5,071	5,071

(A) Emission factors for VOC and NOx are based on the District's BACT standards (Tier 2 standard). CO emission factor is based on the certified level for a Tier 2 engine. PM10 and PM2.5 emission factors include both the condensable portion and the filterable portion of the particulates. The filterable portion is based on the certification standard and the condensable portion is derived using the condensable to filterable fraction, taken from AP-42, Table 3.4-2 (10/96), multiplied by the certification standard ((0.15 g/hp-hr + 0.15 g/hp-hr × 0.0077/0.0496)=0.17 g/hp-hr). SOx emission factor is based on AP-42, Table 3.4-1 (10/96) using a fuel sulfur content of 15 ppm.
(B) Emissions are based on 4,423 BHP, 24 hours/day, 200 hours/quarter and 200 hours/year of operation, and the emission factors in this table.
(C) The engine is required to comply with the combined NOx + VOC emission standard. For the purpose of calculating NOx and VOC individually, VOC emissions are assessed at the worst case scenario of the uncontrolled AP-42 emission factor of 0.32 g/bhp-hr and NOx emissions are assessed at the worst case limit of 4.8 g/bhp-hr.

EQUIPMENT OPERATION

9. The IC engine may only be operated for maintenance or emergency purposes and must not operate more than the following hours:
[Basis: SMAQMD Rule 202, Section 110.2 and Title 17 CCR, Section 93115.6 (a)(3)(A)]

Operational Hours	Maximum Allowable Operation		
	(hours/day)	(hours/quarter)	(hours/year)
Maintenance (A)	1.3	16.5	16.5
All Operation - Maintenance (A) and Emergency (B)	24	200	200

(A) Maintenance is defined as: the operation of an IC engine to preserve the integrity of the engine, its associated generator or the facility's electrical distribution system, or to verify compliance with the applicable rules and regulations – if verification is required by SMAQMD.
(B) Emergency is defined as: when electrical service from the serving utility is interrupted by an unforeseeable event.

DRAFT AUTHORITY TO CONSTRUCT

10. The **combined operation of all engines** at the facility for maintenance purposes only may not exceed **1.3 hours in any single day**.
[Basis: SMAQMD Rule 201, Section 405]

11. The IC engine may only be operated for maintenance purposes during 7 AM to 7 PM.
[Basis: SMAQMD Rule 201, Section 405 and Rule 402, Section 301]

12. The IC engine must be equipped with a non-resetting hour meter, with a minimum display capability of 9,999 hours.
[Basis: SMAQMD Rule 201, Sections 303.1 and 405, and Title 17 CCR, Section 93115.10 (d)(1)]

13. To determine whether the engine complies with opacity requirements, the Air Pollution Control Officer or designee may require the permit holder to operate the IC engine during a SMAQMD inspection. The inspection will be conducted during daylight hours, and the IC engine must be operated at maximum anticipated load and from a cold start condition.
[Basis: SMAQMD Rule 201, Section 405]

14. The IC engine may only be fueled with a CARB-approved diesel fuel or a fuel that meets the CARB requirements in 17 CCR Section 93115.5.
[Basis: SMAQMD Rule 201, Sections 303.1 and Title 17 CCR, Section 93115.5]

15. The exhaust stack of the IC engine must exit vertically and must not be obstructed during engine operation. A flapper-type rain cap is permitted provided it does not impede the vertical exhaust flow.
[Basis: SMAQMD Rule 201, Section 405 and Rule 402, Section 301]

16. The exhaust stack of the IC engine must have a minimum height of **27'-0" from ground elevation.**
[Basis: SMAQMD Rule 201, Section 405 and Rule 402, Section 301]

DRAFT AUTHORITY TO CONSTRUCT

RECORD KEEPING & REPORTING

17. The following records must be continuously maintained onsite for the most recent five year period and must be made available to the Air Pollution Control Officer upon request. Monthly, quarterly, and annual records must be made available within 30 days of the end of the reporting period.
[Basis: SMAQMD Rule 201, Section 405 and Title 17 CCR, Section 93115.10 (f)(1)]

Frequency	Information to be Recorded
When Operated	A. Date and time. B. Purpose – Either Maintenance (M) or Emergency Power (E). C. Number of hours of operation.
Daily	D. Total combined number of hours of maintenance operation for all engines at the facility (hours/day).
Monthly	E. Total number of hours of operation for each operating mode (hours/month).
Quarterly	F. Total number of hours of operation for each operating mode (hours/quarter).
Annually	G. Total number of hours of operation for each operating mode (hours/year).
All Fuel Deliveries	H. Retain purchase records for all fuel purchased for use in the engine. Fuel purchase records must include: i. Identification of fuel type (CARB diesel or 17 CCR Section 93115.5 alternative fuel). ii. Quantity of fuel purchased. iii. Date of fuel purchase. iv. Signature of person receiving fuel. v. Signature of fuel provider indicating that fuel was delivered.

18. Unless otherwise directed by SMAQMD, by January 31st of every year, the permit holder must submit an Annual Engine Survey to the District stating the total number of hours each engine operated during the previous year, including maintenance and emergency operation. Copies of the ANNUAL ENGINE SURVEY can be found at www.airquality.org. SMAQMD may require the permit holder to supply additional information under the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.). If additional information is required, the SMAQMD will issue a written notification to the permit holder.
[Basis: SMAQMD Rule 201, Section 303.1]

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Your application for this air quality Authority to Construct was evaluated for compliance with Sacramento Metropolitan Air Quality Management District (SMAQMD), state and federal air quality rules. The following list identifies the rules that most commonly apply to the operation of your equipment. Other rules may also be applicable.

SMAQMD RULE NO.	RULE TITLE
201	GENERAL PERMIT REQUIREMENTS (8-24-06)
202	NEW SOURCE REVIEW (8-23-12)
401	RINGELMANN CHART (4-19-83)
402	NUISANCE (8-3-77)
406	SPECIFIC CONTAMINANTS (12-6-78)
420	SULFUR CONTENT OF FUELS (8-13-81)
STATE	REGULATION TITLE
TITLE 17, CCR SECTION 93115	CARB AIR TOXICS CONTROL MEASURES - STATIONARY COMPRESSION IGNITION ENGINES
FEDERAL	REGULATION TITLE
40 CFR 60 SUBPART IIII	NEW SOURCE PERFORMANCE STANDARDS - STATIONARY COMPRESSION IGNITION INTERNAL COMBUSTION ENGINES
40 CFR 63 SUBPART ZZZZ	NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS - STATIONARY RECIPROCATING INTERNAL COMBUSTION ENGINES

The conditions on this Authority to Construct reflect some, but not all, of the requirements of these rules. Because other rule requirements may apply to the operation, the permit holder should be familiar with all of the rules and related requirements. In addition, because future changes in prohibitory rules may establish more stringent requirements that may supersede the conditions listed here, the permit holder should monitor proposed rules and rule adoption actions at SMAQMD.

For further information please consult your SMAQMD rulebook or contact the SMAQMD for assistance.

THIS IS **NOT** A PERMIT TO OPERATE

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