Facility Name:	Neurocrine Biosciences, Inc.
Equipment Type:	34H – Emergency Diesel Engine
Application #:	APCD2025-APP-008601
SITE ID#:	APCD2022-SITE-04033
Equipment/Facility Address:	6045 Edgewood Bend Court San Diego, CA 92130
Facility Contact:	Abe Cuevas Director of Facilities acuevas@neurocrine.com

3/25/2025

Permit Engineer: X Victoria Burns

Victoria Burns
Air Pollution Control Engineer
Signed by: Victoria Burns

Senior Engineer: X

Joseph Herzig
Senior Air Pollution Control Engineer

1.0 Background

1.1 Type of Application: New installation of a stationary emergency generator engine.

1.2 Permit History: This is the initial application for this equipment.

1.3 Facility Description: This site is a pharmaceutical R&D facility. This is the only open application at the facility. There is another emergency engine under APCD2024-PTO-004891, as well as 8 medium boiler registrations.

1.4 Other Background Info: No NOVs, hearing board actions, permit denials, legal settlements, or nuisance complaints. Not a Title V facility.

2.0 Process Description

2.1 Equipment Description.

Emergency Diesel Engine:
Manufacturer: Kohler,
Model: KD27V12,
S/N TBD,
Maximum Rated Horsepower: 1494 bhp,
Model Year: 2024,
EPA Certification: Tier 2,
Engine Family: RLHAL45.0ESP,
Emissions Controls: Johnson Matthey S-DPF with DOC,
Model: NON-CARB-VERIFIED JM-SDPF-7-H-CS-BITO-16/16-RT,
Driving a KD1000 1000-kW emergency electrical generator.
Testing and Maintenance Limits: 18 hours per day and 50 hours per calendar year.

2.2 Process Description.
This is a new install of a diesel emergency engine.

2.3 Emissions Controls.
This is a Tier 2 certified diesel engine with an aftermarket Johnson Matthey S-DPF, which is non-CARB-verified. It has an oxidation catalyst in line with a wall-flow ceramic filter to reduce CO and HC as well as PM. Spec sheet gives: 85% PM reduction, 80% CO reduction, 70% HC Reduction based on Kohler-provided engine performance data.

2.4 Attachments.
Engine and DPF manufacturer specification sheets.

3.0 Emissions

3.1 Emissions estimate summary. Estimated emissions from the process are shown below.

Table 1: Estimated PTE for Criteria Pollutants for Single Engine

Compound	Emission Factor	Hourly Emissions	Daily Emissions	Annual Emissions	
	g/bhp-hr	lbs/hr	lbs/day	tons/year	lbs/yr
NOx	4.04	13.29	239.27	0.33	664.64
CO	0.12	0.39	7.08	0.01	19.66
NMHC	0.09	0.30	5.44	0.01	15.11
PM	0.0101	0.03	0.60	0.001	1.66
SOx	--	0.01500	0.26992	0.00037	0.75

3.2 Estimated Emissions Assumptions.

- Table 1 evaluates the emission unit at **18** hours per day and a total of **50** hours per year, assuming full load operations
- Estimated emissions are calculated for maintenance and testing operations. Emergency use is not counted towards operation limits.
- 15 ppmw sulfur fuel
- Emission factors were EPA-certified emission factors; Standard toxics emission factors for diesel engines.
- 85% control efficiency from DPF included in PM emission factor
- 80% control efficiency from DOC included in CO emission factor
- 70% control efficiency from DOC included in NMHC emission factor
- Expected actual emissions same as PTE.
- Other standard assumptions as stated in calculation sheets

3.3 Emissions Calculations.

Calculations were performed using the attached spreadsheets using standard calculation methods.

3.4 Attachments.

Emission Calculations.

4.0 Applicable Rules

4.1 District Prohibitory Rules

Emergency diesel engines at non-major sources are subject to the following District prohibitory rules: 50, 51, 53, 62 and 69.4.1. The proposed engine is expected to comply with all applicable requirements as shown in the table on the following page with standard permit conditions for this equipment type.

Table 2: Prohibitory Rule Discussion				
Applicable Section	**Requirement**	**Engine Complies?**	**Explanation**	**Condition**
Rule 50	Visible Emissions not to exceed 20% opacity or Ringelmann 1 for more than 3 minutes in a 60 minute period	Yes	Compliance with this requirement is achieved through the use of an EPA certified engine, and permit conditions will specify this requirement.	C28413
Rule 51	Cannot cause or contribute to a public nuisance	Yes	Due to the intermittent operation of an emergency engine that meets all emission requirements, it is anticipated that this will not cause a public nuisance. Permit conditions will prohibit this engine from causing a public nuisance.	C28414
Rule 53	Emissions of sulfur compounds calculated as SO2 on a dry basis shall not exceed 0.05 % by volume on a dry basis.	Yes	Permit conditions will require use of CARB diesel fuel (15 ppm Sulfur by weight), which will ensure compliance with this requirement.	C28412
Rule 62	Sulfur content of liquid fuel shall not exceed 0.5 % sulfur by weight.	Yes	Permit conditions will require use of CARB diesel fuel (15 ppm Sulfur by weight), which will ensure compliance with this requirement.	C28412
Rule 69.4.1				
69.4.1(d)(1)(ii)(E)	Emission standards for NOx and CO emissions. For a new or replacement certified diesel engine, NOx emissions shall not exceed: 3.5 g/bhp-hr if 50≤bhp<100; 3.0 g/bhp-hr if 100≤bhp<175; 3.0 g/bhp-hr if 175≤bhp<750; 4.8 g/bhp-hr if bhp≥750. For a new or replacement certified diesel engine, CO emissions shall not exceed: 3.7 g/bhp-hr if	Yes	Use of an EPA certified tier 3 engine (tier 2 for engines with a rated power in excess of 750 bhp) ensures that NOx and CO emissions comply with this requirement. This engine is a >750 bhp Tier 2 engine with an EPA certified NOx emission factor of 4.0 g/bhp-hr and CO emission factor of 0.31 g/bhp-hr (uncontrolled); therefore, it complies with this requirement.	NA

	50≤bhp<100; 3.7 g/bhp-hr if 100≤bhp<175; 2.6 g/bhp-hr if 175≤bhp<750; 2.6 g/bhp-hr if bhp≥750.			
69.4.1(d)(2)	Engines operated on diesel fuel shall use only California Diesel Fuel.	Yes	Permit conditions will require use of CARB diesel fuel (15 ppm Sulfur by weight), which will ensure compliance with this requirement.	C28412
69.4.1(e)(3)	All engines must be equipped with a non-resettable totalizing fuel or hour meter which shall be replaced in accordance with subsection (g)(7) of this rule.	Yes	Permit conditions will require installation of a non-resettable hour meter and specify the requirements for replacement.	C28419
69.4.1(f)(2)	The owner or operator must conduct periodic maintenance on the engine, according to engine/control equipment manufacturer's instructions or other written procedure, at least once each calendar year.	Yes	Annual maintenance of engine according to written procedure will be required by permit conditions.	C43433
69.4.1(g)(1)	Specifies engine information that must be maintained on-site.	Yes	Manufacturer and model number, brake horsepower rating, combustion method and fuel type are contained in the permit application. Documentation of CARB diesel fuel certification and manual of recommended maintenance will be specified in permit conditions.	C45251
69.4.1(g)(2)	Requires keeping an operating log containing dates and times and purpose of each period of engine operation, cumulative operation of engine for each calendar year and maintenance records including dates maintenance is performed. Engines within 500 feet of schools must record the time of day when	Yes	Compliance with the applicable provisions is expected and these requirements are specified in permit conditions. Section *93115.6(a)(1)-At-School and Near School Provisions* does not apply if the engine emits no more than 0.01 g/bhp-hr of diesel PM via a pathway found in *93115.13(f).* The engine demonstrates compliance with the 0.01 g/bhp-hr emission standard via *93115.13(f)(2)*- it uses an 85 percent PM emission reduction control strategy	C46473

	the engine is operated for testing and maintenance. Specific records for internal, external, and partial external power outages is required.		in combination with a certified CI engine that meets 0.15 g/bhp-hr PM emission standard. (EPA-certified engine PM emission factor is 0.07 g/bhp-hr).	
69.4.1(g)(6)	Requires records of the dates and times when fuel is being combusted and cumulative operating time if claiming a commissioning exemption.	NA	The applicant has claimed a commissioning period is needed. However, the applicant is not requesting a separate allotment for initial commissioning. This commissioning, as specified by the applicant, does not include running the engine without the DPF.	NA
69.4.1(g)(7)	Requires notification to APCD within 10 calendar days of replacing an hour meter.	Yes	Compliance with this provision is expected and this requirement is specified in permit conditions.	C28419
69.4.1(g)(9)	Requires specified records to be maintained on-site for at least three years and made available to the District upon request.	Yes	Compliance with this provision is expected and this requirement is specified in permit conditions.	C43432
69.4.1(i)(1)	Requires periodic source testing to confirm compliance with applicable emission standards.	NA	This subsection does not apply to certified emergency engines.	NA

4.2 New Source Review (NSR) Rule 20.1-20.4

This application is subject to District NSR rules. This site is considered a non-major stationary source, for each pollutant, as shown in the following table, and is therefore subject to District Rule 20.2. Calculation of emissions and determination of applicable requirements is performed in accordance with District Rule(s) 20.1 through 20.3.

Table 3: Classification of Major/PSD Source and Modification New Source Review (NSR) Requirements

	NOx	VOC	PM-10	PM-2.5	SOx	CO	Lead
Major Source Threshold (ton/year)	*50*	*50*	*100*	*100*	*100*	*100*	*100*
Major Source? (yes/no)	***No***	***No***	***No***	***No***	***No***	***No***	***No***
Major Modification Threshold (ton/year)	*25*	*25*	*15*	*10*	*40*	*100*	*0.6*
Major Modification at a Major Source?	***No***	***No***	***No***	***No***	***No***	***No***	***No***
Contemporaneous Calculations Performed?	**No**	**No**	**No**	**No**	**No**	**No**	**No**
Federal Major Stationary Source Threshold (ton/year) (Severe non-attainment status)	25	25	100	100	100	100	100
Federal Major Stationary Source?	**No**	**No**	**No**	**No**	**No**	**No**	**No**
Federal Major Modification Threshold (ton/year) (Severe non-attainment status)	*25*	*25*	*15*	*10*	*40*	*100*	*0.6*
Federal Major Modification?	***No***	***No***	***No***	***No***	***No***	***No***	***No***
Contemporaneous Net Calculations Performed	***No***	***No***	***No***	***No***	***No***	***No***	***No***
PSD Threshold (ton/year)	*250*	*250*	*250*	*--*	*250*	*250*	*--*
PSD Modification Threshold (ton/year)	*40*	*40*	*15*	*--*	*40*	*100*	*0.6*
PSD New or Modification?	**No**	**No**	**No**	**--**	**No**	**No**	**No**

District Rule 20.2 contains requirements for Best Available Control Technology (BACT), Air Quality Impact Assessment (AQIA), Prevention of Significant Deterioration (PSD) and public notification.

Table 4: New Source Review Discussion

Rule/Requirement	Requirement	Applicability	Discussion	Condition
Applicability	Rule 20.2 applies to non-major stationary sources	Yes	This is a non-major stationary source, so Rule 20.2 applies.	NA
Type of application	New	Yes	NA	NA
Exemptions	No exemptions apply to this equipment	NA	NA	NA
20.2(d)(1) – BACT				

BACT - NOx	Installation of BACT is required if emissions of NOx exceed 10 lbs/day	Triggered, see discussion below.	The potential to emit for this pollutant is 240 lbs/day, which does exceed this trigger level, so BACT is required.	NA
BACT - VOC	Installation of BACT is required if emissions of VOC exceed 10 lbs/day	Not triggered, no permit limit	The potential to emit for this pollutant is 5.4 lbs/day, which does not exceed this trigger level, so BACT is not required.	NA
BACT - PM-10	Installation of BACT is required if emissions of PM-10 exceed 10 lbs/day	Not triggered, no permit limit	The potential to emit for this pollutant is 0.6 lbs/day, which does not exceed this trigger level, so BACT is not required.	NA
BACT - SOx	Installation of BACT is required if emissions of SOx exceed 10 lbs/day	Not triggered, no permit limit	The potential to emit for this pollutant is 0.3 lbs/day, which does not exceed this trigger level, so BACT is not required.	NA
20.2(d)(2) – AQIA				
AQIA - NOx	Required for project emission increases in excess of 25 lbs/hr, 250 lbs/day or 40 ton/yr of NOx calculated as NO2	Not Triggered	The increase in emissions of this air contaminant from this project does not exceed any of these levels, so no AQIA is required when daily hours for testing and maintenance are limited to 18 hours/day.	Daily Limit in equipment description and conditions.
AQIA - PM-10	Required for project emission increases in excess of 100 lbs/day or 15 ton/yr of PM-10	Not Triggered	The increase in emissions of this air contaminant from this project does not exceed any of these levels, so no AQIA is required.	NA
AQIA - SOx	Required for project emission increases in excess of 25 lbs/hr, 250 lbs/day or 40 ton/yr of SOx calculated as SO2	Not Triggered	The increase in emissions of this air contaminant from this project does not exceed any of these levels, so no AQIA is required.	NA
AQIA - CO	Required for project emission increases in excess of 100 lbs/hr, 550 lbs/day or 1000 ton/yr of CO	Not Triggered	The increase in emissions of this air contaminant from this project does not exceed any of these levels, so no AQIA is required.	NA

20.2(d)(3) - PSD	Applicable to source that may have a significant impact on a class I area	NA	Emissions from this engine do not trigger PSD requirements.	NA
20.2(d)(4) - Public Notice	Requires 30 day public notice if an AQIA was required or if increase in VOC emissions from the project exceed 250 lbs/day or 40 ton/year	NA	AQIA was not required, and VOC emissions increase from this project does not exceed these levels.	NA

20.2(d)(1) – BACT

The PTE for NOx for the engine is 240 lbs./day, greater than the 10 lbs./day threshold for BACT. Therefore, a BACT analysis is required.

Alternatives that were considered include natural gas and propane engines and Tier 4f engines including SCR and DPF. Gas-fueled engines are not feasible as backup power for operations that must occur if natural gas lines are damaged in the event of an emergency like an earthquake. An engine of this size would also likely require SCR for emissions control, a method which is not cost effective as described below. The cost-effectiveness evaluation did not take into account the likely short periods of operation of this engine for maintenance. In many maintenance situations, the engine is operated at low loads and for approximately 30 minutes, some of which the SCR catalyst has not reached appropriate temperature for effectively controlling emissions.

NOx Analysis:
A tier 4 engine is the lowest emitting BACT option. Cost-effectiveness has previously been evaluated under applications APCD2021-APP-006831 and APCD2021-APP-006981, comparing incremental costs of a tier 2 vs. 4 engine, the results of which are summarized below. Note that this analysis is conservative and does not take into account the likely short periods of operation of this engine for maintenance as noted above which would lower the level of emission reductions achieved.

Project	*Engine Size (bhp)*	*Capital Cost Tier 2*	*Capital Cost Tier 4*	*Annual Cost Tier 2*	*Annual Cost Tier 4*	*Annual Incremental Cost*	*Annual Emission Reduction (lb/yr)*	***Cost Effectiveness***
6831	*2346*	*$329,050*	*$603,826*	*$127,026*	*$200,228*	*$73,202*	*1,112*	***$65.82***
6981	*2937*	*$810,000*	*$1,200,000*	*$131,824*	*$195,294*	*$63,471*	*1,322*	***$48.03***

This analysis shows that a Tier 4f engine, the lowest-emitting category of diesel engines, is not cost-effective. The analysis is based on the assumption that the engine is allowed to run up to 50 hours per year for maintenance and testing, the maximum NOx emissions were calculated using the emission standards for a tier 2 and tier 4 engines. Capital costs were provided by the permit applicants which were annualized and added to expected maintenance and operating costs to determine an overall annual cost. NOx emissions and costs are expected to scale roughly linearly with engine size. Additionally, the cost for an add-on SCR to a tier 2 engine is expected to have a similar cost to the incremental cost of a tier 4 engine, so this analysis also demonstrates that use of an SCR would not be cost effective, in addition to being technologically infeasible because it would not function during most periods of testing and maintenance.

For this engine size, a tier 2 engine is the next lowest emitting option; therefore, it satisfies BACT for NOx.

20.2(d)(2) – AQIA

No AQIA limits were triggered by this engine, therefore no AQIA is required for this project.

4.3 Toxic New Source Review – Rule 1200

District Rule 1200 applies to any application that is part of a project which results in an emission increase of toxic air contaminants. The rule limits the increase in acute and chronic health hazard index (HHI) to no more than one from the project and limits the increase in cancer risk from the project to no more than one in one million if the engine is not equipped with Toxics BACT (T-BACT) or no more than ten in one million if the project meets T-BACT requirements. The following table contains an in-depth review of Rule 1200 requirements. If a refined HRA was required, the HRA report is attached.

Table 5: Rule 1200 Applicable Requirements and Discussion

Question	Answer	Discussion
Does the application result in an increase in toxic emissions?	Yes	The application does result in an increase in toxic emissions of specific trace heavy metals and organics (as shown in emission calculations section). See HRA for detail.
Do any special exemptions apply to this equipment?	No	No exemptions apply to this equipment
Are there any other applications that are part of the project?	No	NA.
What type of HRA was used?	Refined HRA	NA.
Is the Project Equipped with T-BACT?	No	NA.
Cancer Risk increase (per one million)	<1	Meets standard of one.
Chronic HHI	<1	Meets standard of one.
Acute HHI	<1	Meets standard of one.
Passes Rule 1200?	Yes	Maintenance and testing (non-emergency operation) must be limited by permit conditions to 50 hours per calendar year.

Estimated Risk Levels:

Maximum Individual Cancer Risk (Resident)	= 0.034 in one million
Chronic Noncancer Health Hazard Index (Resident)	= 9.20E-06
8-Hour Noncancer Health Hazard Index (Worker)	= N/A*
Acute Health Hazard Index (**PMI)	= 0.13

*8-Hour Non-Cancer Health Hazard Index is only applicable when calculating worker risk
**Point of Maximum Impact

The proposed application is for a stationary diesel emergency engine. The ARB Air Toxics Control Measure (ATCM) limits non-emergency operations to 50 hours per year.

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Based on this analysis, the proposed engine complies with all applicable requirements of District Rule 1200.

4.4 AB3205

Requirements in the California Health and Safety Code in sections 42301.6 through 42301.9 (a.k.a. "AB3205 requirements") specify that prior to issuing an authority to construct for sources located within 1000 feet of a K-12 school, a 30-day public notification process must be conducted.

This project is located within 1000 feet of a school (Canyon Crest Academy: 5951 Village Center Loop Rd., San Diego, CA 92130), so public notice is required. A copy of the public notice is attached to the file and when the notice is issued, this evaluation and relevant attachments will be made available on the District's website for review. If any comments are received, they will be reviewed, considered and responded to prior to taking action on the permit, including revising any requirements as necessary in response to comments received.

4.5 State and Federal Regulations.
This engine is subject to both the State Air Toxic Control Measure for Stationary Engines (Stationary ATCM) and federal EPA issued National Emission Standards for Hazardous Air Pollutants (NESHAPs) and New Source Performance Standards (NSPS).

Applicable requirements of the Stationary ATCM include purchasing an engine certified to EPA standards and meeting specified emission standards of the rule, installing an hour meter, conducting maintenance according to a written plan, restrictions on operating the engine for purposes other than emergency use and limited (50 hours/year) use for maintenance and testing, and maintaining records to substantiate compliance with these requirements. This engine is expected to comply with all these requirements as described in the detailed analysis shown in the table following the discussion of NESHAP/NSPS requirements.

The NESHAP (subpart ZZZZ) requires that all new emergency engines comply with the rule by complying with the NSPS (subpart IIII). Applicable requirements of the NSPS include purchasing a certified engine, operating it as directed by the manufacturer, and maintaining records to substantiate compliance. These requirements closely mirror the ATCM requirements, except that the NSPS is somewhat less stringent in regards to allowable PM emission rate and contains some allowance for other types of operation not allowed by the ATCM. This means the more stringent ATCM requirements apply. A detailed analysis of NESHAP and NSPS requirements is shown in the following table.

Table 6a: State and Federal Requirement Discussion (Stationary ATCM)				
Applicable Section	**Requirement**	**Engine Complies/Expected to Comply?**	**Explanation**	**Condition**
Stationary ATCM				
93115.3	There are no exemptions that apply to this engine	NA	This engine is not one of the engines exempted from any applicable requirements	NA
93115.4	Definitions. Permit conditions ensure that the engine only operates in a manner allowed for engines designated as "Emergency Standby"	Yes	Permit conditions require that the engine operate only as an emergency engine	C40239
93115.5	Requires the use of CARB diesel as fuel.	Yes	Permit conditions will require use of CARB diesel fuel (15 ppm Sulfur by weight), which will ensure compliance with this requirement.	C28412
93115.6(a)(1)	Prohibits non-emergency operation of an emergency engine between 7:30 AM and 3:30 PM during school days if within 500 feet of school and during all school sponsored activities if located on school grounds. (a) New Emergency Standby Diesel-Fueled CI Engine (>50 bhp) Operating Requirements and Emission Standards. (1) At-School and Near-School Provisions. No owner or operator	Yes	Engine is Tier 2 with an 85% PM emission reduction control strategy in combination with a certified CI engine that meets the 0.15 g/bhp-hr PM emission standard and emits 0.0101 g/bhp-hr PM controlled; therefore, this requirement does not apply.	N/A

	shall operate a new stationary emergency standby diesel-fueled Cl engine for non-emergency use, including maintenance and testing, during the following periods: (A) whenever there is a school sponsored activity, if the engine is located on school grounds, and (B) between 7:30 a.m. and 3:30 p.m. on days when school is in session, if the engine is located within 500 feet of school grounds. Section 93115.6(a)(1) does not apply if the engine emits no more than 0.01 g/bhp-hr of diesel PM.			
93115.6(a)(2)	Allows for engine to be started 30 minutes prior to rotating outage	Yes	Permit conditions specify this requirement.	C28560
93115.6(a)(3)(A)(1)(b)	Requires that all engines used for emergency purposes be certified to at least tier 3 standards (tier 2 for engines with a rated power in excess of 750 bhp) and have Diesel PM emissions less than 0.15 g/bhp-hr	Yes	Use of an EPA certified tier 3 engine (tier 2 for engines with a rated power in excess of 750 bhp) with PM emission below this level satisfies this requirement. This is a tier 2 >750 hp engine; therefore, it complies.	NA
93115.6(a)(3)(A)(1)(c)	Restricts maintenance and testing operation to no more than 50 hours per calendar year	Yes	Permit conditions specify this requirement.	C28643 C44986
93115.6(c)	Does not allow emergency standby engines to operate as part of "demand response programs" unless additional requirements are met	Yes	Permit conditions specify this requirement.	C40907

93115.10(a)-(b)	Requires that specified information is submitted to the District as part of application package	Yes	The submitted application contained all of the required contact/location information, engine data, and emission information	NA
93115.10(d)	Requires installation of a non-resettable hour meter and for engines with DPFs, a backpressure monitor that alerts the operator when the backpressure limit of the engine is approached	Yes	Permit conditions require the installation and use of a non-resettable hour meter. Permit conditions require installation and use of a backpressure monitor between the engine and DPF.	C40721, C40721, C28419; backpressure limit
93115.10(f)	Specifies that the owner or operator must keep records and prepare a monthly summary of hours of operation and purpose (emergency, maintenance and testing, emission testing, start-up testing, other, demand response) of each period of operation	Yes	Permit conditions require that these records be kept and the summary updated monthly	C45252
93115.10(f)	Requires records of CARB diesel fuel certification	Yes	Permit conditions require that documentation of the CARB diesel certification for all fuel used be maintained	C43434
93115.10(f)	States that records must be kept on-site for at least 24 months and off-site for an additional 12 months (total 36 months)	Yes	Compliance with this provision is expected and this requirement is specified in permit conditions.	C43432
93115.13(a)	Allows the use of certification data or other emission test data to demonstrate compliance with emission limits	Yes	The manufacturer's engine rating specific emission data as provided to the EPA was used to determine compliance and for emission calculations	NA

93115.13(f)	For engines equipped with DPFs, allows the use of an engine certified to a PM-10 emission level of no more than 0.15 g/bhp-hr and an 85 percent PM emission reduction control strategy in lieu of source testing (or other alternative means as listed).	Yes	The engine is a certified Tier 2 engine that uses an 85% PM aftermarket DPF and with certified PM emission below 0.15 g/hp-hr.; therefore, (f)(2) may be used to demonstrate compliance with the 0.01 g/bhp-hr PM emission standard of sections 93115.6 through 93115.9 in the ATCM.	NA

Table 6b: State and Federal Requirement Discussion (FEDERAL)				
Applicable Section	**Requirement**	**Engine Complies/Expected to Comply?**	**Explanation**	**Condition**
NESHAP ZZZZ				
40 CFR 63.6590(b)-(c)	Requires that new emergency engines comply with the NESHAP by complying with the applicable NSPS	Yes	See NSPS section below.	NA
NSPS IIII				
40 CFR 60.4205	Requires that engines meet emission limits equivalent to tier 3 levels (tier 2 for engines 750 bhp or higher)	Yes	Use of an EPA certified tier 3 engine (tier 2 for engines with a rated power in excess of 750 bhp) with PM emission below this level satisfies this requirement. This is a tier 2, >750 bhp engine; therefore, it complies.	NA
40 CFR 60.4207	Sets maximum fuel sulfur limits for fuel equivalent to CARB diesel requirements	Yes	Permit conditions will require use of CARB diesel fuel (15 ppm Sulfur by weight), which will ensure compliance with this requirement.	C28412
40 CFR 60.4209	Requires installation of a non-resettable hour meter	Yes	Permit conditions require the installation and use of a non-resettable hour meter.	C28419

40 CFR 60.4211(a)	Requires that the engine be operated according to manufacturer's emission related instructions and that no changes are made to emission related settings unless allowed by manufacturer	Yes	Permit conditions specify this requirement.	C43433
40 CFR 60.4211(c)	Requires that the engine be certified under EPA regulations	Yes	Use of an EPA certified tier 3 engine (tier 2 for engines with a rated power in excess of 750 bhp). This is a tier 2, >750 bhp engine; therefore, it complies.	NA
40 CFR 60.4211(e)	Restricts operation of emergency engines for non-emergency purposes	Yes	Compliance ensured by permit conditions for ATCM limiting operation for maintenance and testing to no more than 50 hours per calendar year and restricting non-emergency operation for only those uses allowed by the permit (maintenance and testing). ATCM requirements more stringent than NSPS.	C40239, C40907, C28643
40 CFR 60.4214(b)	Requires records of operation to show that engine is operated as an emergency engine	Yes	Compliance is expected and specified in permit conditions.	C45252
40 CFR 60.4214(c)	For engines with DPFs, requires records of corrective actions taken when the high backpressure limit is approached	Yes	The engine is a certified Tier 2 engine that uses an aftermarket DPF. The DPF package is equipped with a backpressure monitor to ensure proper operation of the DPF, which fulfills this requirement. Permit conditions specify following manufacturer's instructions which ensures compliance with this requirement.	C43433
40 CFR 60.7(f)	Requires that all records be maintained for at least 2 years	Yes	Compliance with this provision is expected and this requirement is specified in permit conditions.	C43432

4.6 Title V.
This is not a Title V facility; therefore, this requirement does not apply.

4.7 CEQA.
CEQA requires government agencies, such as air districts, to consider the environmental consequences of their actions before approving plans and policies or committing to a course of action on a project.

The project being permitted is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) under Article 19 of the CEQA Guidelines. Specifically, the project is exempt under Section §15303, which includes projects that involve the new construction of accessory structures and the installation of small new equipment and facilities in small structures. This exemption is appropriate as the project falls within the scope of established exemptions that recognize the negligible impact of such activities on the environment and is not subject to any of the exceptions to the Categorical Exemptions listed in Section 15300.2 of the CEQA Guidelines. Consequently, no further environmental review is required.

5.0 Recommendations

This equipment is expected to comply with all rules and regulations; therefore, it is recommended that an Authority to Construct be issued with the following conditions.

6.0 Recommended Conditions

Modified APCD2024-CON-002189* with a 50 hour/year limit for non-emergency/maintenance and testing with a daily limit of 18 hr/day maximum.

* APCD2024-CON-002189: Modified APCD2020-CON-001718 with daily and annual limits for non-emergency/maintenance and testing in equipment description and updated DPF phrasing and backpressure. For 34c,34h-emergency diesel gen., DPF 0.01 g/bhp-hr PM (**34.2**"), 50 hrs., NSPS IIII, no school restrictions, added C46377 and C46473:

Proposed Conditions:

C40239	The engine shall be operated exclusively during emergencies as defined in Rule 69.4.1 or Rule 12 or 17CCR93115 as applicable, or for maintenance and testing.
C40907	This engine shall not be enrolled in a non-emergency Demand Response Program (DRP). This condition shall not apply to engines operating pursuant to the rolling blackout reduction program as defined in 17 CCR 93115 and operating in accordance with 17 CCR 93115.6(c). (17 CCR 93115)
C46377	Engine operation for maintenance and testing purposes shall not exceed the hours per day, and hours per calendar year specified in the above equipment description. (17 CCR 93115, Rule 1200, NSR)
C28412	This engine shall only use CARB diesel fuel. (Rule 12, Rule 69.4.1, 17 CCR 93115, 40 CFR 60 Subpart IIII)

C28413	Visible emissions including crank case smoke shall comply with Air Pollution Control District Rule 50. (Rule 50)
C28414	The equipment described above shall not cause or contribute to a public nuisance. (Rule 51)
C28560	Engine operation in response to notification of an impending rotating outage shall be subject to all the following restrictions: (a) the utility distribution company has ordered rotating outages in the control area where the engine is located, (b) the engine is operated no more than 30 minutes prior to the time when the utility distribution company officially forecasts a rotating outage in the cited control area, and (c) the engine operation is terminated immediately after the utility distribution company advises that a rotating outage is no longer in effect. This condition shall not apply to engines operating pursuant to the rolling blackout reduction program as defined in 17 CCR 93115 and operating in accordance with 17 CCR 93115.6(c). (17 CCR 93115)
C28419	A non-resettable engine hour meter shall be installed on this engine, maintained in good working order, and used for recording engine operation hours. If a meter is replaced, the Air Pollution Control District's Compliance Division shall be notified in writing within 10 calendar days. The written notification shall include the following information: (a) old meter's hour reading, (b) replacement meter's manufacturer name, model and serial number if available and current hour reading on replacement meter, and (c) copy of receipt of new meter or of installation work order. A copy of the meter replacement notification shall be maintained onsite and made available to the Air Pollution Control District upon request. (Rule 12, Rule 69.4.1, 17 CCR 93115, 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ)
C40721	The engine shall be equipped with a permanently installed continuously-operated monitor that measures the backpressure between the engine and diesel particulate filter. This monitor shall be capable of displaying the backpressure between the engine and the diesel particulate filter in one of the following ways: (a) the monitor shall be connected to a permanently installed display that shows the backpressure between the engine and diesel particulate filter, Or (b) the monitor shall be capable of downloading backpressure data to a

	computer or other device that can display the backpressure data. This data shall be downloaded at least once per month in which the engine operates and be made available upon District request. [17 CCR 93115, 40 CFR 60 Subpart IIII]
newBackpressure	Engine backpressure shall not exceed the high backpressure limit of **34"** inches of water at any time to protect the diesel particulate filter. Operation of the DPF should follow engine manufacturer's recommendation. (17 CCR 93115, 40 CFR 60 Subpart IIII)
C29194	The engine shall be equipped with a device that alerts the owner or operator prior to the high backpressure limit being reached. (17 CCR 93115, 40 CFR 60 Subpart IIII)
C43433	The owner or operator of this engine shall install, configure, operate, and maintain this engine and control device, if any, according to the manufacturer's emission-related written instructions. The owner or operator may change only those emission-related settings that are permitted by the manufacturer. The periodic maintenance shall be conducted at least once each calendar year. (Rule 12, Rule 69.4.1, 40 CFR 60 Subpart IIII)
C43434	The owner or operator of the engine shall maintain the following records on site for at least the same period of time as the engine to which the records apply is located at the site: (a) documentation shall be maintained identifying the fuel as CARB diesel, and (b) manual of recommended maintenance provided by the manufacturer. (Rule 12, Rule 69.4.1, 17 CCR 93115, 40 CFR 60 Subpart IIII)
C45595 (same as 45251)	The owner or operator of this engine shall conduct periodic maintenance of the engine and add-on control equipment, if any, as recommended by the engine and control equipment manufacturers or as specified by the engine servicing company's maintenance procedures. Maintenance shall be conducted at least once each calendar year, and shall include, but is not limited to, the following: 1) Change oil and filter, or test in accordance with the requirements of 40 CFR §63.6625(i) or (j); 2) Inspect and clean air filters, replacing as necessary; and 3) Inspect all hoses and belts, replacing as necessary. Documentation of oil and filter changes or copies of the oil test analysis shall be kept on site and made available upon request. If testing in accordance with 40 CFR §63.6625(i) or (j), the oil analysis program must analyze the Total Base Number, viscosity and percent water content (for compression ignition engines) and the Total Acid Number, viscosity and percent water content (for spark ignited engines). If all of these condemning limits are not exceeded, the engine owner or operator is not

	required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (Rule 12, and/or Rule 69.4.1, and/or 40 CFR 63 Subpart ZZZZ)
C40725	The owner or operator of the engine shall maintain an operating log that contains the following records: (a) backpressure between the engine and diesel particulate filter recorded at least once each month in which the engine operates. (b) daily records of any corrective actions taken in response to the backpressure monitor notifying the owner or operator of the high backpressure limit being approached. This log shall be made available to the Air Pollution Control District upon request. (17 CCR 93115, 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart NESHAP ZZZZ)
C43432	All records required by this permit shall be maintained on site and readily available for District inspection for a minimum of 36 months from their date of creation unless otherwise indicated by the conditions of this permit. (Rule 12, Rule 69.4.1, 40 CFR 60 Subpart IIII)
C46473	The owner or operator of this engine shall maintain a monthly operating log containing, at a minimum, the following: (a) dates and elapsed times of every instance of engine operation based on actual readings of the engine hour meter; whether the operation was for maintenance and testing purposes or emergency use; and the nature of the emergency; (b) for a total external power outage, documentation from the serving utility of an outage in the area where the engine is located; for an internal power outage, a description of what caused the failure and receipts and/or work orders for the necessary repairs; for a partial external power outage, including a low-voltage or electrical transient incident in which the external power voltage is low enough to trigger the operation of an emergency standby engine, a description of the incident; (c) total cumulative hours of operation per calendar year; (d) records of annual engine maintenance shall include the date the maintenance was performed and the nature of the maintenance; and (e) hours of operation for all uses other than those specified above and identification of the nature of that use. (Rule 12, Rule 69.4.1, 17 CCR 93115, 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ)

CHW001	Access, facilities, utilities and any necessary safety equipment for source testing and inspection shall be provided upon request of the Air Pollution Control District.
CHW002	This Air Pollution Control District Permit does not relieve the holder from obtaining permits or authorizations required by other governmental agencies.
CHW003	The permittee shall, upon determination of applicability and written notification by the District, comply with all applicable requirements of the Air Toxics "Hot Spots" Information and Assessment Act (California Health and Safety Code Section 44300 et seq.)