

DOCKETED	
Docket Number:	24-OPT-04
Project Title:	Potentia-Viridi Battery Energy Storage System
TN #:	261427
Document Title:	DR Response 2 - Attachment 5, BAAQMD Correspondence - Part 1
Description:	This document (part 1 of 2) provides all correspondence between Dudek and the BAAQMD, including permit application for use of emergency generators.
Filer:	Ronelle Candia
Organization:	Dudek
Submitter Role:	Applicant Consultant
Submission Date:	1/29/2025 10:29:06 AM
Docketed Date:	1/29/2025

Attachment 5

BAAQMD Correspondence

safety **POWER**

clean essential energy



ecoCUBE®

Global Emissions Compliance

ecoCUBE® with SCR, DPF, DOC & Silencer



ecoCUBE® Simplifying Emissions Compliance

SCR and Silencing in one ecoCUBE®

If required add DOC, DPF to the same box

www.safetypowerinc.com

ecoCUBE® - a Much Simpler Approach

The ecoCUBE® Advantage

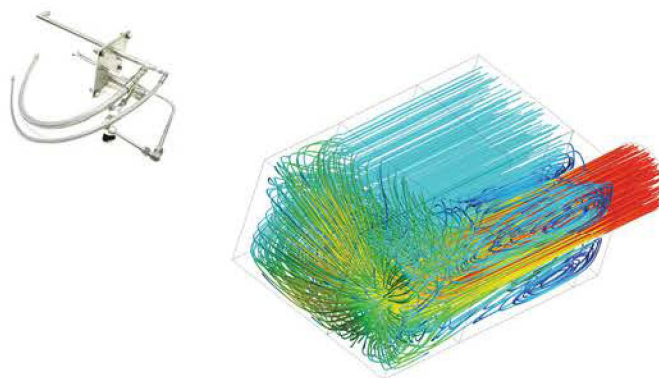
- Fully Compliant Tier 4f & Euro Stage IV Solution
- Up to 98% NO_x Reduction
- Optional DOC & DPF Integration
- Silencing up to 52 dBA Reduction
- Low Pressure Drop, Options from 6" WC
- Highly Customizable Inlet & Outlet locations
- Floor, Ceiling or Container Mounted Options
- Easy Addition to almost any Engine
- Ideal for Stationary, Marine and Non-Road Mobile Applications



Highly Optimized Design

The ecoCUBE® has been designed using Computational Fluid Dynamics (CFD) to ensure that performance is maximized and costs are minimized. This highly optimized design distributes exhaust gasses evenly over the catalyst surface creating an extremely high NO_x reduction with less catalyst.

The ecoCUBE® has a unique design that allows the integration of an optional Diesel Particulate Filter (DPF) and Diesel Oxidation Catalyst (DOC) in addition to the Selective Catalytic Reduction (SCR) unit. Silencing can also be added to the ecoCUBE®. All of these optional components are contained within the same geometry making it easy to allocate project space.



Versatile, Compact & Economical

The ecoCUBE® has customizable inlets and outlets. In addition the ecoCUBE® can be roof mounted, ceiling mounted or vertically mounted making it easier to integrate into your Data Center, Hospital or other installation.

If you have a specific space constraints please contact Safety Power, we will likely be able to accommodate your requirements.

The innovative design approach of the ecoCUBE® allows it to take less space than conventional designs.



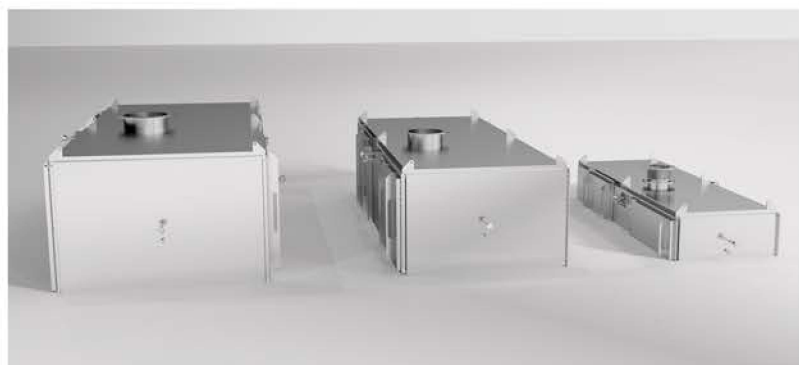
* Safety Power has been able to achieve NO_x reductions of up to 98% on a 2.5MW Tier 2 engine.

ecoCUBE® - an Advanced Design that Delivers Tier 4f Compliance

Meet the ecoCUBE® Family

The design of the ecoCUBE® is highly scalable. The same optimized design works for engines ranging from 500 kW to 10 MW. This unique scalability provides a substantial cost reduction, as customization is avoided.

The ecoCUBE® family has a large installed base that has demonstrated reliability and 3rd party verified Tier 4f compliance.

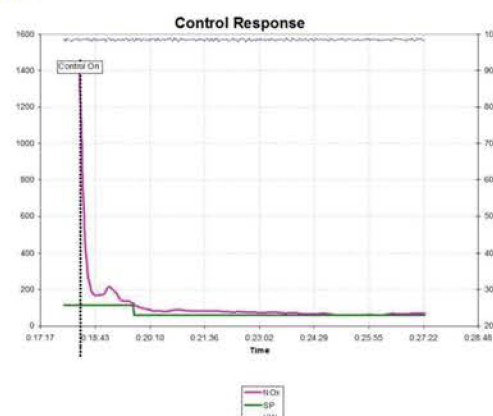


Advanced Model Based Control with NO_x Sensor

The ecoCUBE® has a highly robust advanced model based predictive controller. This proprietary control algorithm accurately models the chemical reactions on the catalyst delivering industry leading response times. The graph on the right side demonstrates the effectiveness of the ecoCUBE® on a customer installation; NO_x levels after injection are reduced over 95%. The design uses two NO_x sensors with a patented gas extractor to ensure compliance and provide logged data for customers.

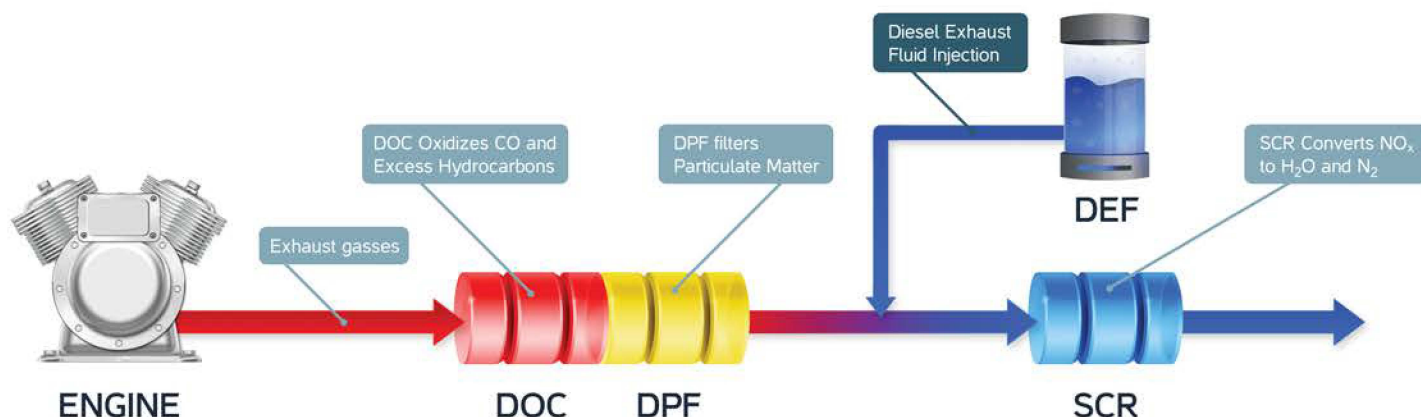
With an optional pre-heat system the ecoCUBE® SCR system can become active in less than 5 minutes.

ecoCUBE's® with the DPF module also have an innovative pressure relief valve system that does not require expensive active regeneration systems.



Selective Catalytic Reduction (SCR) and Diesel Emissions

The ecoCUBE® utilizes an SCR to achieve Tier 4f NO_x compliance. The SCR is a catalytic process that uses urea to transform NO₂ into harmless Nitrogen Gas (N₂) and water vapor (H₂O). The optional Diesel Particulate Filter (DPF) and Diesel Oxidation Catalyst (DOC) are used to remove Particulate Matter (PM), Carbon Monoxide (CO) and other excess Hydrocarbons; depending on the engine these modules may be required to achieve Tier 4f compliance.



ecoCUBE® with SCR, DPF, DOC & Silencer



Safety Power is the global innovator in emissions control for large scale diesel and natural gas engines.

The company manufactures the ecoCUBE® range of products that reduce NO_x, CO and Hydrocarbon emissions on engines from 500kW up to 10MW and beyond.

For more information please contact info@safetypowerinc.com



Safety Power Inc.

5155 Spectrum Way, Unit 26
Mississauga, Ontario
L4W 5A1

☎ 1-800-657-1280

📠 1-800-657-1280

✉ info@safetypowerinc.com

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT****FACILITY CREATION FORM**

For new facilities or facilities not currently permitted by BAAQMD

All fields are required unless otherwise noted. Please type or print.

Send to:
BAAQMD
Engineering Division
375 Beale St., Suite 600
San Francisco, CA 94105
Email: permits@baaqmd.gov

Phone: (415) 749-4990

➤ A **Facility Contacts Form** must also be submitted with this form.**1. Facility Name**

Facility Name
Potentia Viridi Energy Storage Facility

2. Ownership and Business Type

Owning Entity
Levy Alameda, LLC

Type of Business (Select one)

☒ Corporation☐ Federal government☐ Partnership☐ State government☐ Sole proprietorship☐ Local government**3. Facility Physical Address/Location**☒ Check here, if this facility location address is unable to accept mail.☐ This facility does not have a street address. If checked, submit map with location marked. (See instructions)

Street Address or Intersection or Nearest Street		
17257 Patterson Pass Road		
Address Line 2 (Optional)		
City	State	Zip Code
Alameda County	CA	95377

Is this facility within an Overburdened Community, as defined in Regulation 2-1-243: ☐ Yes ☒ No (See instructions)**4. North American Industry Classification System Code**

Enter your facility's primary NAICS code.

NAICS Code (6 digits)

221122

The following sites have keyword searches and other tools to help you determine the NAICS number: www.census.gov - or - www.naics.com**5. Certification/Signature of person responsible for the information on this form.***I hereby certify that I am authorized to complete this form for the facility and that all information contained herein is true and correct.*

Name	Title	
Nicholas Lorenzen	Air Resources Specialist	
Signature	Date	Phone (xxx-xxx-xxxx)
	1/3/2025	805-308-8517

BAAQMD Office Use Only – Skip this section

BAAQMD Facility ID

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT****FACILITY CONTACTS FORM**

For contacts at new facilities and updates to existing facility contacts

All fields are required unless otherwise noted. Please type or print.

Send to:
BAAQMD
Engineering Division
375 Beale St., Suite 600
San Francisco, CA 94105
Email: permits@baaqmd.gov

Phone: (415) 749-4990

1. Purpose of submitting this form

This form is being submitted to: (Select one)

- ☒ Provide information on facility contacts for a new facility. (Complete all sections)
- ☐ Update information on current facility contacts (Complete Parts 1, 2, 6 and applicable contact sections)

2. Facility Name

Facility Name	BAAQMD Facility ID (except new facilities)
Potentia Viridi	

3. Owner Contact

First Name		Last Name	
Paul		Miller	
Business Name of Contact (If different from facility)		Contact Title	
Eurowind Energy		Country Manager	
Address Line 1		Address Line 2 (Optional)	
16875 W Bernardino Drive		Ste 200	
City	State	Zip Code	
San Diego	CA	92127	
E-mail Address			
pam@eurowindenergy.com			
Primary Phone (xxx-xxx-xxxx)	Alternate Phone (optional)	Fax Number (Optional)	
760-291-8603			

4. Operator Contact – Select existing contact or fill out information below.☐ Same as Owner Contact

First Name		Last Name	
Patrick		Leitch	
Business Name of Contact (If different from facility)		Contact Title	
Capstone Infrastructure		Chief Operating Officer	
Address Line 1		Address Line 2 (Optional)	
155 Wellington Street West		Suite 2930	
City	State	Zip Code	
Toronto	NA	NA	
E-mail Address			
pleitch@capstoneinfra.com			
Primary Phone (xxx-xxx-xxxx)	Alternate Phone (optional)	Fax Number (Optional)	
+1 (416) 649-1316			

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT****FACILITY CONTACTS FORM**

For contacts at new facilities and updates to existing facility contacts

All fields are required unless otherwise noted. Please type or print.

Send to:
BAAQMD
Engineering Division
375 Beale St., Suite 600
San Francisco, CA 94105
Email: permits@baaqmd.gov

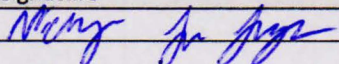
Phone: (415) 749-4990

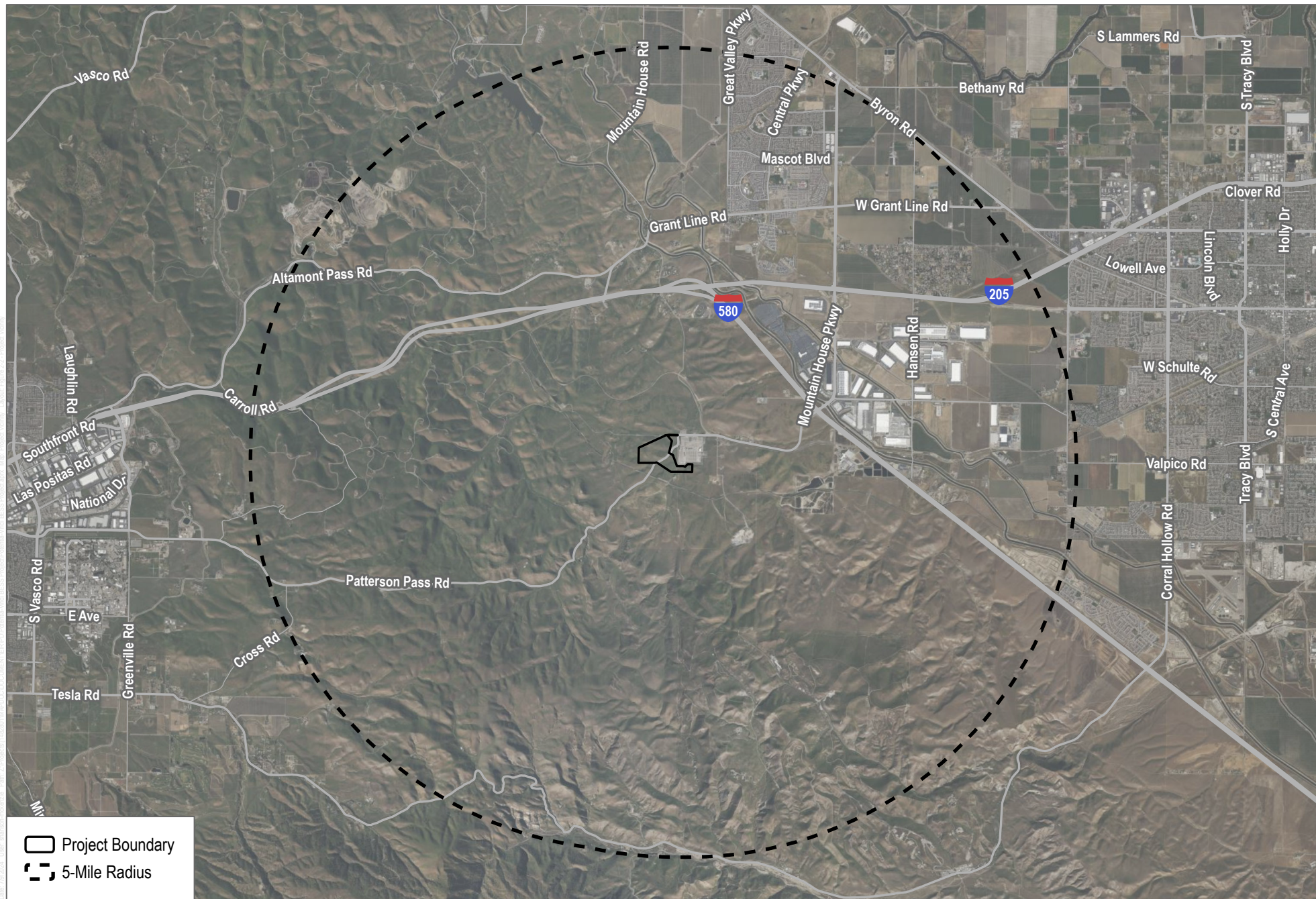
5. Billing Contact - Select existing contact or fill out information below.☐ Same as Owner Contact☐ Same as Operator Contact

First Name Patrick		Last Name Leitch	
Business Name of Contact (if different from facility) Levy Alameda, LLC		Contact Title	
Address Line 1 155 Wellington Street West.		Address Line 2 (Optional) Suite 2930	
City Toronto	State NA	Zip Code M5V 3H1	
E-mail Address pleitch@capstoneinfra.com			
Primary Phone (xxx-xxx-xxxx) +1 (416) 649-1316	Alternate Phone (optional)	Fax Number (Optional)	

6. Certification/Signature of person responsible for the information on this form.

I hereby certify that I am authorized to complete this form for the facility and that all information contained herein is true and correct.

Name Nicholas Lorenzen	Title Air Resource Specialist.	
Signature 	Date 1/3/2025	Phone (xxx-xxx-xxxx) 805-308-8517



SOURCE: Bing Maps 2023

DUDEK



0 4,000 8,000
Feet

FIGURE 2-2
Project Vicinity
Potentia-Viridi BESS Project



BAY AREA AIR QUALITY MANAGEMENT DISTRICT
 375 Beale Street, Suite 600, San Francisco, CA 94105
 Engineering Division Phone (415) 749-4990
 www.baaqmd.gov Email permits@baaqmd.gov

Form ICE
 Internal Combustion Engines
 Application# (BAAQMD Only)

Form ICE is to be completed for all internal combustion engines except turbines. (For turbines, submit Form C). Submit one form for each engine. If this is a new engine or a modification to an existing engine, complete Form HRA (Health Risk Assessment).

➤ Please include the engine manufacturer's **equipment specifications as an attachment to this form.**

1. SUMMARY ☒ New Construction ☐ Modification ☐ Loss of Exemption

Facility Name Potentia Viridi Energy Storage Plant/Facility No. _____ Source No. (Existing Only) _____

Source Description Emergency Generator Initial Date of Operation (New Engines Only) 6/1/2025

Operating Schedule: Typical hrs/day 0.5 Days/week 1 Weeks/yr 52 Maximum hrs/day 1

2. ENGINE INFORMATION ☐ Check here if applying for a multiple location permit. (See Reg. 2-1-413 for requirements)

Engine Type: (Check one) ☐ 4 Stroke ☒ 2 Stroke Compression Ignition (Diesel) or ☐ 4 Stroke ☐ 2 Stroke Spark Ignition

Engine Manufacturer MTU Model 20V4000G94S Model Year _____

EPA/CARB Engine Family Name _____ Engine Serial No. _____

Engine Displacement 5,822 (cu in) Maximum rated output (bhp) _____ Typical load as % of bhp rating _____

Is this an emergency/standby engine? ☒ Yes ☐ No

Is this emergency generator being installed in response to PG&E's PSPS program? ☐ Yes ☒ No

*The Air District is collecting information on emergency generators that are being installed in response to PG&E's Public Safety Power Shutoff (PSPS) program. If you are completing this form for an emergency generator, please mark "Yes" if you are installing this emergency generator because of the PG&E PSPS program. Note: Marking "Yes" will NOT limit the operation of the emergency generator to only PSPS power outages.

(Check all that apply below)

Certification: ☒ EPA Certified ☐ CARB Certified CARB Executive Order No. _____

☐ None (If None is checked, please indicate below the items applicable to this engine.)

☐ Naturally aspirated ☐ Supercharged ☐ Turbocharged ☐ Inter-cooled ☐ After-cooled

☐ Timing retard $\geq 4^\circ$ ☐ Lean-burn ☐ Rich-burn

Primary Use: ☒ Electrical generation ☐ Cogeneration ☐ Pump driver ☐ Fire pump driver

☐ Compressor driver ☐ Tub grinder driver ☒ Other: Emergency electrical power generation only

3. ABATEMENT DEVICE INFORMATION Complete this section only if the engine has an add-on abatement device.

☐ Check here if the engine has more than one add-on abatement device and complete a separate Form A for each additional abatement device.

Abatement device number A (If "New" leave blank) ☒ New ☐ Existing

Device type: ☒ Diesel catalyzed particulate filter ☒ Oxidation catalyst ☒ Selective catalytic reduction (SCR)

☐ Non-selective catalytic reduction (NSCR or 3-way catalyst) ☐ Other: _____

Make, Model, and Rated Capacity Eco Cube With SCR, DPF and DOC

Abatement device control efficiencies at typical operation (Use the basis codes listed below. If unknown leave blank)

Control Efficiency/Emission Factor Basis Codes: (Submit supporting documentation if available)

- | | |
|---|----------------------------|
| (1) Source testing or other measurement by plant | (8) Guess |
| (2) Source testing or measurement by BAAQMD (BAAQMD only) | (9) EPA/CARB Certification |
| (3) Specification from vendor | |
| (4) Material balance by plant using knowledge of process | |
| (5) Material balance by BAAQMD (District use only) | |
| (6) EPA Document AP-42 Emission Factors | |
| (7) Taken from literature other than AP-42 | |

Pollutant Name	Wt % Reduction	Basis Code
Particulates	97%	3
Organics	0%	3
Nitrogen Oxides	99%	3
Sulfur Dioxide	NA	3
Carbon Monoxide	0%	3
Others ☐ Check here and attach a separate list of pollutants. Include the basis code and the control efficiency.		

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Form ICE
Internal Combustion Engines**4. EMISSION POINT/STACK INFORMATION** ☐ Check here if the engine has more than one stack or has a continuous pollutant emission monitor and complete one Form P for each emission point.

Emission point number P _____ (If "New" leave blank) ☒ New ☐ Existing

Stack outlet height from ground level (ft) 21

Diameter of stack outlet (inches) 2.33 or Outlet cross-section area (square inches) _____

Direction of outlet (check one) ☐ Horizontal ☒ Vertical End of outlet (check one) ☒ Open/hinged flap ☐ Rain cap

Exhaust rate at typical operation (acfm) 24,791 Exhaust temperature at typical operation (°F) 977

5. RISK ASSESSMENT INFORMATION

Distance from engine to the property line of the nearest residence (ft) _____ or (check if) ☒ Greater than one mile

Distance from engine to the property line of the nearest school¹ (ft) _____ or (check if) ☒ Greater than 1000 ft

¹K-12 and more than twelve children only.

Describe the nearest non-residential, non-school site (check one) ☒ Industrial ☐ Commercial ☐ Hospital

☐ Day care center ☐ Other Substation

Distance from engine to the property line of the nearest non-residential, non-school site(ft) 875 or ☐ Greater than one mile

6. FUEL DATA Complete the table below for each fuel burned. If you are using a fuel other than those listed in the fuel code table, attach a **fuel analysis** indicating the higher heating value, sulfur content, and nitrogen content. Please clearly indicate the measurement unit that corresponds to the information you are submitting. ☐ Check here if you are using more than two fuels, and attach a copy of this page listing the additional fuels.

Primary Fuel		Secondary Fuel				
Fuel Code ¹	Name	Fuel Code ¹	Name			
<u>98</u>	<u>Diesel</u>					
Maximum Fuel Use Rate ² <u>223</u> gal/hr or SCF/hr		Maximum Fuel Use Rate ² _____ gal/hr or SCF/hr				
Annual Fuel Usage ³ <u>11,596</u> gal/yr or therm/yr or SCF/yr		Annual Fuel Usage ³ _____ gal/yr or therm/yr or SCF/yr				
Typical Heat Content ⁴ _____ BTU/gal or BTU/SCF		Typical Heat Content ⁴ _____ BTU/gal or BTU/SCF				
Sulfur Content ⁴ _____ wt% liquids or ppmv gases		Sulfur Content ⁴ _____ wt% liquids or ppmv gases				
Pollutant Name		Emission Factor	Units ⁵	Basis Code ⁶	Abated Factor (✓) ⁷	
Particulates	0.020	g/bhp-h	3	☐		☐
Organics	0.14	g/kW-h	3	☐		☐
Nitrogen Oxides	0.50	g/bhp-h	3	☐		☐
Carbon Monoxide	0.72	g/kW-h	3	☐		☐
Others – ☐ Check here and attach a separate list under each fuel used.		Others – ☐ Check here and attach a separate list under each fuel used.				

- Fuel Codes:** Diesel (**98**) Bio Diesel B100 (**815**) Bio Diesel B20 Blend (**816**) Gasoline (**551**) Propane (**417**)
Natural Gas (**189**) Landfill Gas (**511**) Digester Gas (**493**) Liquid Petroleum Gas (LPG) (**160**)
- Maximum fuel use rate units: gallon/hr for liquid fuels and SCF/hr for gaseous fuels. (SCF = Standard Cubic Foot)
- The annual fuel usage is the actual or projected engine fuel consumption over a rolling 12-month time period. Annual usage units: gallons for liquid fuel, therms for natural gas, and SCF for other gaseous fuels. (therm = 100,000 BTUs, BTU = British Thermal Unit)
- If you are using diesel, natural gas, or gasoline, you may skip this entry. Heat content units: BTU/gallon for liquid fuels, BTU/SCF for gaseous fuels. Sulfur content units: weight % for liquid fuels, ppmv for gaseous fuels. (ppmv = parts per million by volume)
- Emission factors may be reported as gram/brakehp-hr, or as lb per gallon, or as lb per therm, or as lb per SCF.
- See the Control Efficiency/Emission Factor Basis Code table under Section 3 on page 1 of this form.
- Place a check in this column if the emission factor applies to emissions after abatement by an add-on abatement device.

7. CERTIFICATION I hereby certify that all information contained herein is true and correct. (Please sign and date this form)

Nicholas Lorenzen

Name of person certifying (print)

Air Resource Specialist

Title of person certifying

Signature of person certifying

1/3/2025

Date



BAY AREA AIR QUALITY MANAGEMENT DISTRICT
375 Beale Street, Suite 600, San Francisco, CA 94105
Engineering Division Phone (415) 749-4990
www.baaqmd.gov Email permits@baaqmd.gov

Form ICE
Internal Combustion Engines
Application# (BAAQMD Only)

Form ICE is to be completed for all internal combustion engines except turbines. (For turbines, submit Form C). Submit one form for each engine. If this is a new engine or a modification to an existing engine, complete Form HRA (Health Risk Assessment).

➤ Please include the engine manufacturer's **equipment specifications as an attachment to this form.**

1. SUMMARY ☒ New Construction ☐ Modification ☐ Loss of Exemption

Facility Name Potentia Viridi Energy Storage Plant/Facility No. _____ Source No. (Existing Only) _____

Source Description Emergency Generator Initial Date of Operation (New Engines Only) 6/1/2025

Operating Schedule: Typical hrs/day 0.5 Days/week 1 Weeks/yr 52 Maximum hrs/day 1

2. ENGINE INFORMATION ☐ Check here if applying for a multiple location permit. (See Reg. 2-1-413 for requirements)

Engine Type: (Check one) ☐ 4 Stroke ☒ 2 Stroke Compression Ignition (Diesel) or ☐ 4 Stroke ☐ 2 Stroke Spark Ignition

Engine Manufacturer MTU Model 20V4000G94S Model Year _____

EPA/CARB Engine Family Name _____ Engine Serial No. _____

Engine Displacement 5,822 (cu in) Maximum rated output (bhp) _____ Typical load as % of bhp rating _____

Is this an emergency/standby engine? ☒ Yes ☐ No

Is this emergency generator being installed in response to PG&E's PSPS program? ☐ Yes ☒ No

*The Air District is collecting information on emergency generators that are being installed in response to PG&E's Public Safety Power Shutoff (PSPS) program. If you are completing this form for an emergency generator, please mark "Yes" if you are installing this emergency generator because of the PG&E PSPS program. Note: Marking "Yes" will NOT limit the operation of the emergency generator to only PSPS power outages.

(Check all that apply below)

Certification: ☒ EPA Certified ☐ CARB Certified CARB Executive Order No. _____

☐ None (If None is checked, please indicate below the items applicable to this engine.)

☐ Naturally aspirated ☐ Supercharged ☐ Turbocharged ☐ Inter-cooled ☐ After-cooled

☐ Timing retard $\geq 4^\circ$ ☐ Lean-burn ☐ Rich-burn

Primary Use: ☒ Electrical generation ☐ Cogeneration ☐ Pump driver ☐ Fire pump driver

☐ Compressor driver ☐ Tub grinder driver ☒ Other: Emergency electrical power generation only

3. ABATEMENT DEVICE INFORMATION Complete this section only if the engine has an add-on abatement device.

☐ Check here if the engine has more than one add-on abatement device and complete a separate Form A for each additional abatement device.

Abatement device number A (If "New" leave blank) ☒ New ☐ Existing

Device type: ☒ Diesel catalyzed particulate filter ☒ Oxidation catalyst ☒ Selective catalytic reduction (SCR)

☐ Non-selective catalytic reduction (NSCR or 3-way catalyst) ☐ Other: _____

Make, Model, and Rated Capacity Eco Cube With SCR, DPF and DOC

Abatement device control efficiencies at typical operation (Use the basis codes listed below. If unknown leave blank)

Control Efficiency/Emission Factor Basis Codes: (Submit supporting documentation if available)

(1) Source testing or other measurement by plant

(8) Guess

(2) Source testing or measurement by BAAQMD (BAAQMD only)

(9) EPA/CARB Certification

(3) Specification from vendor

(4) Material balance by plant using knowledge of process

(5) Material balance by BAAQMD (District use only)

(6) EPA Document AP-42 Emission Factors

(7) Taken from literature other than AP-42

Pollutant Name	Wt % Reduction	Basis Code
Particulates	97%	3
Organics	0%	3
Nitrogen Oxides	99%	3
Sulfur Dioxide	NA	3
Carbon Monoxide	0%	3
Others ☐ Check here and attach a separate list of pollutants. Include the basis code and the control efficiency.		

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Form ICE
Internal Combustion Engines**4. EMISSION POINT/STACK INFORMATION** ☐ Check here if the engine has more than one stack or has a continuous pollutant emission monitor and complete one Form P for each emission point.Emission point number P _____ (If "New" leave blank) ☒ New ☐ ExistingStack outlet height from ground level (ft) 21Diameter of stack outlet (inches) 2.33 or Outlet cross-section area (square inches) _____Direction of outlet (check one) ☐ Horizontal ☒ Vertical End of outlet (check one) ☒ Open/hinged flap ☐ Rain capExhaust rate at typical operation (acfm) 24,791 Exhaust temperature at typical operation (°F) 977**5. RISK ASSESSMENT INFORMATION**Distance from engine to the property line of the nearest residence (ft) _____ or (check if) ☒ Greater than one mileDistance from engine to the property line of the nearest school¹ (ft) _____ or (check if) ☒ Greater than 1000 ft¹K-12 and more than twelve children only.Describe the nearest non-residential, non-school site (check one) ☒ Industrial ☐ Commercial ☐ Hospital☐ Day care center ☐ Other SubstationDistance from engine to the property line of the nearest non-residential, non-school site(ft) 875 or ☐ Greater than one mile**6. FUEL DATA** Complete the table below for each fuel burned. If you are using a fuel other than those listed in the fuel code table, attach a fuel analysis indicating the higher heating value, sulfur content, and nitrogen content. Please clearly indicate the measurement unit that corresponds to the information you are submitting. ☐ Check here if you are using more than two fuels, and attach a copy of this page listing the additional fuels.

Primary Fuel		Secondary Fuel	
Fuel Code ¹	Name	Fuel Code ¹	Name
<u>98</u>	<u>Diesel</u>		
Maximum Fuel Use Rate ² <u>223</u> gal/hr or SCF/hr		Maximum Fuel Use Rate ² _____ gal/hr or SCF/hr	
Annual Fuel Usage ³ <u>11,596</u> gal/yr or therm/yr or SCF/yr		Annual Fuel Usage ³ _____ gal/yr or therm/yr or SCF/yr	
Typical Heat Content ⁴ _____ BTU/gal or BTU/SCF		Typical Heat Content ⁴ _____ BTU/gal or BTU/SCF	
Sulfur Content ⁴ _____ wt% liquids or ppmv gases		Sulfur Content ⁴ _____ wt% liquids or ppmv gases	
Emission Factors (Optional)		Emission Factors (Optional)	
Pollutant Name	Emission Factor	Units ⁵	Basis Code ⁶
Particulates	0.020	g/bhp-h	3
Organics	0.14	g/kW-h	3
Nitrogen Oxides	0.50	g/bhp-h	3
Carbon Monoxide	0.72	g/kW-h	3
Others - ☐ Check here and attach a separate list under each fuel used.		Others - ☐ Check here and attach a separate list under each fuel used.	

1. Fuel Codes: Diesel (98) Bio Diesel B100 (815) Bio Diesel B20 Blend (816) Gasoline (551) Propane (417)
 Natural Gas (189) Landfill Gas (511) Digester Gas (493) Liquid Petroleum Gas (LPG) (160)

2. Maximum fuel use rate units: gallon/hr for liquid fuels and SCF/hr for gaseous fuels. (SCF = Standard Cubic Foot)

3. The annual fuel usage is the actual or projected engine fuel consumption over a rolling 12-month time period. Annual usage units: gallons for liquid fuel, therms for natural gas, and SCF for other gaseous fuels. (therm = 100,000 BTUs, BTU = British Thermal Unit)

4. If you are using diesel, natural gas, or gasoline, you may skip this entry. Heat content units: BTU/gallon for liquid fuels, BTU/SCF for gaseous fuels. Sulfur content units: weight % for liquid fuels, ppmv for gaseous fuels. (ppmv = parts per million by volume)

5. Emission factors may be reported as gram/brakehp-hr, or as lb per gallon, or as lb per therm, or as lb per SCF.

6. See the Control Efficiency/Emission Factor Basis Code table under Section 3 on page 1 of this form.

7. Place a check in this column if the emission factor applies to emissions after abatement by an add-on abatement device.

7. CERTIFICATION I hereby certify that all information contained herein is true and correct. (Please sign and date this form)

Nicholas Lorenzen

Name of person certifying (print)

Air Resource Specialist

Title of person certifying

Signature of person certifying

1/3/2025

Date