

AUTHORITY TO CONSTRUCT ENGINEERING EVALUATION

Reviewed by: Glen Stephens
Title: APCO MCAQMD
Date: 09/22/2026

Applicant: **Mendocino Unified School District**

Mailing Address: P.O. Box 1154
Mendocino, California 95460

Contact Name: Mr. Jason Morse, Superintendent
Phone Number: (707) 937-5868 Email Address: jmorse@mcn.org

Application No.: **46277-26-58** Project #: 260918
Location: 44020 Little Lake Rd, Mendocino APN: 119-100-23-00
Latitude and Longitude: 39.312750 -123.781708

Project Title: 60-kW Emergency Generator Driven by 94-bhp Diesel Piston Engine

App. Rec.: 09/18/2026 Deemed Complete: 09/22/2026
180 Days: 01/18/2027 Submittal Date: 09/22/2026

Evaluation By: Glen E. Stephens

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I. **PROPOSAL:**

The Mendocino Unified School District is proposing to operate a stand-by 60-kW generator set. The proposed 60-kW generator is powered by an 94-bhp diesel engine. The unit is to provide power during electrical power outages. Operation of the unit, as noted in the application, is emergency, stand-by unit; therefore, generator set will be permitted as a stand-by unit with operation not to exceed 500-hours/year. However, there is an elementary school within 1000-feet of the generator site; therefore, a school notice in accordance with California Health and Safety Code Section 42301.6 is required. Generator set will be new to the Mendocino County Air Quality Management District (District); therefore, project will be evaluated for compliance with the California Diesel ATCM (Airborne Toxic Control Measure) for stationary compression ignition engines.

II. APPLICABLE RULES and REGULATIONS:

A. Rule 1-200 – Permits Required (Amended 12/05/06)

Any person building, altering, or replacing any equipment, the use of which may cause the issuance of air contaminants or the use of which may eliminate or reduce or control the issuance of air contaminants, shall first obtain authorization for such construction from the District. An Authority to Construct (ATC) shall remain in effect until the permit to operate the equipment for which the application was filed is granted, denied, or canceled.

B. Rule 1-210 –Environmental Assessment (CEQA)

Establishes criteria by which a project under review by MBCAQMD can be found to have no potential for causing a significant environmental impact, and, thus, be granted a general rule exemption pursuant to Section 15061(b)(3) of the State CEQA Guidelines.

C. Rule 1-220 – New and Modified Stationary Source Review

- a) Provide for pre-construction review of new and modified stationary sources of affected pollutants to insure emissions will not interfere with the attainment of ambient air quality standards.
- b) Insure that appropriate new and modified sources of affected pollutants are constructed with Best Available Control Technology, and
- c) Provide for no significant net increase in emissions from new and modified stationary sources for all non-attainment pollutants and their precursors.

D. Rule 1-400 – Nuisance (Amended 5/6/03)

A person shall not 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

E. Rule 1-410 – Visible Emissions

A person shall not discharge into the atmosphere emissions as dark or darker than Ringelmann 1 or 20% opacity for more than 3 minutes in any one hour.

F. Rule 1-440 – Sulfur Compounds

A person shall not discharge into atmosphere sulfur compounds with discharge concentration greater than 0.1% by volume calculated as SO₂.

G. California Health and Safety Code (CH&SC) 41700

Nuisance and hazardous emissions shall not cause any harm to the public (identical to Rule 1-400(a).

H. California Health and Safety Code (CH&SC) 42301.6

Prior to issuance of an Authority to Construct that emits hazardous air contaminants a school notice is required for all students attending the school and any other school within ¼-mile and all addresses within 1000-ft. of the source of the hazardous air pollutants.

I. California Code of Regulations (CCR), Title 17, Section 93115

Airborne toxic control measure (ATCM) for stationary compression ignition engines.

III. EQUIPMENT SCHEMATIC:

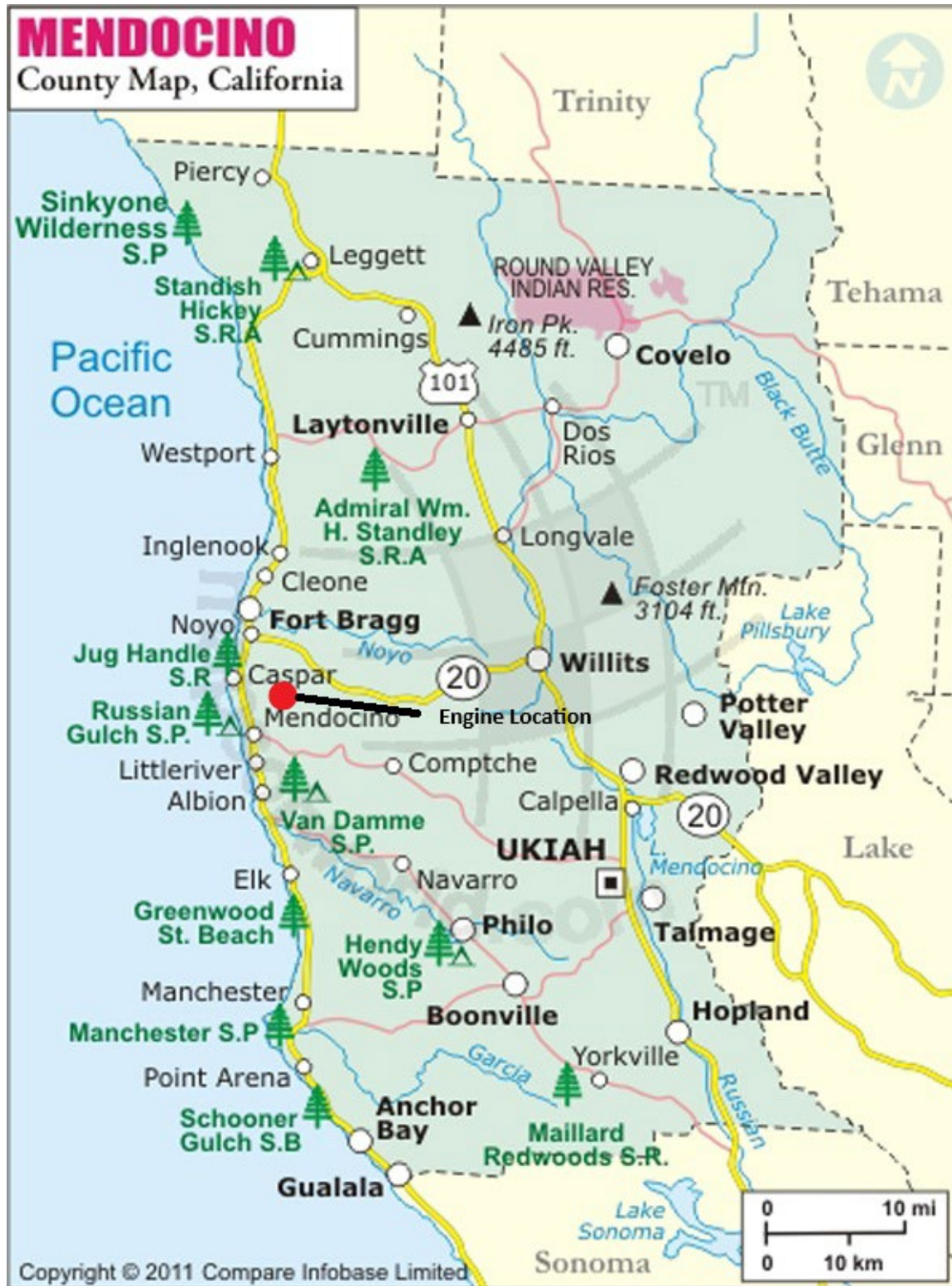


Figure 1: General Location of Generator Set

III. EQUIPMENT SCHEMATIC:

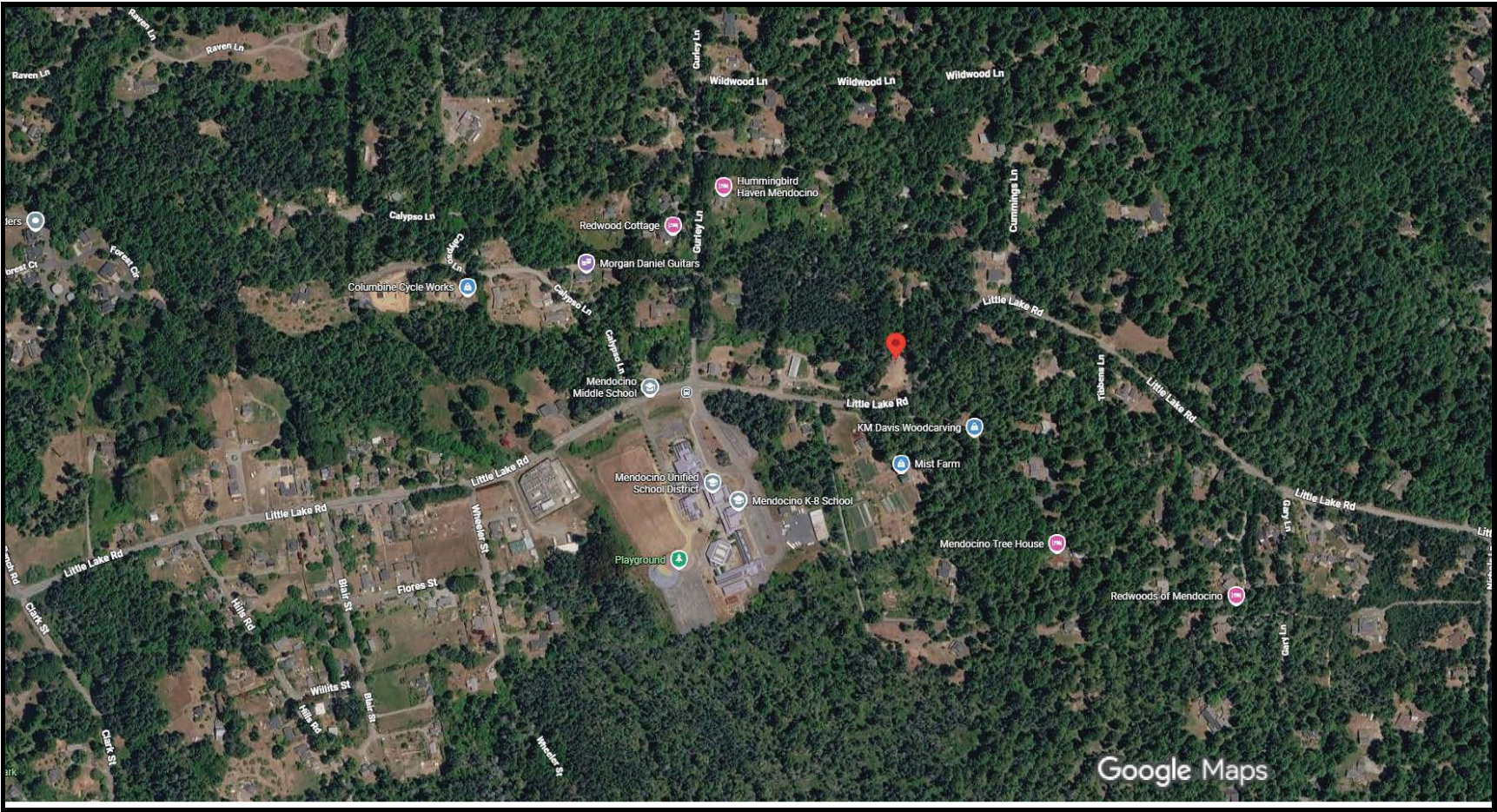


Figure 2: Location of Generator Set

III. EQUIPMENT SCHEMATIC (Continued):

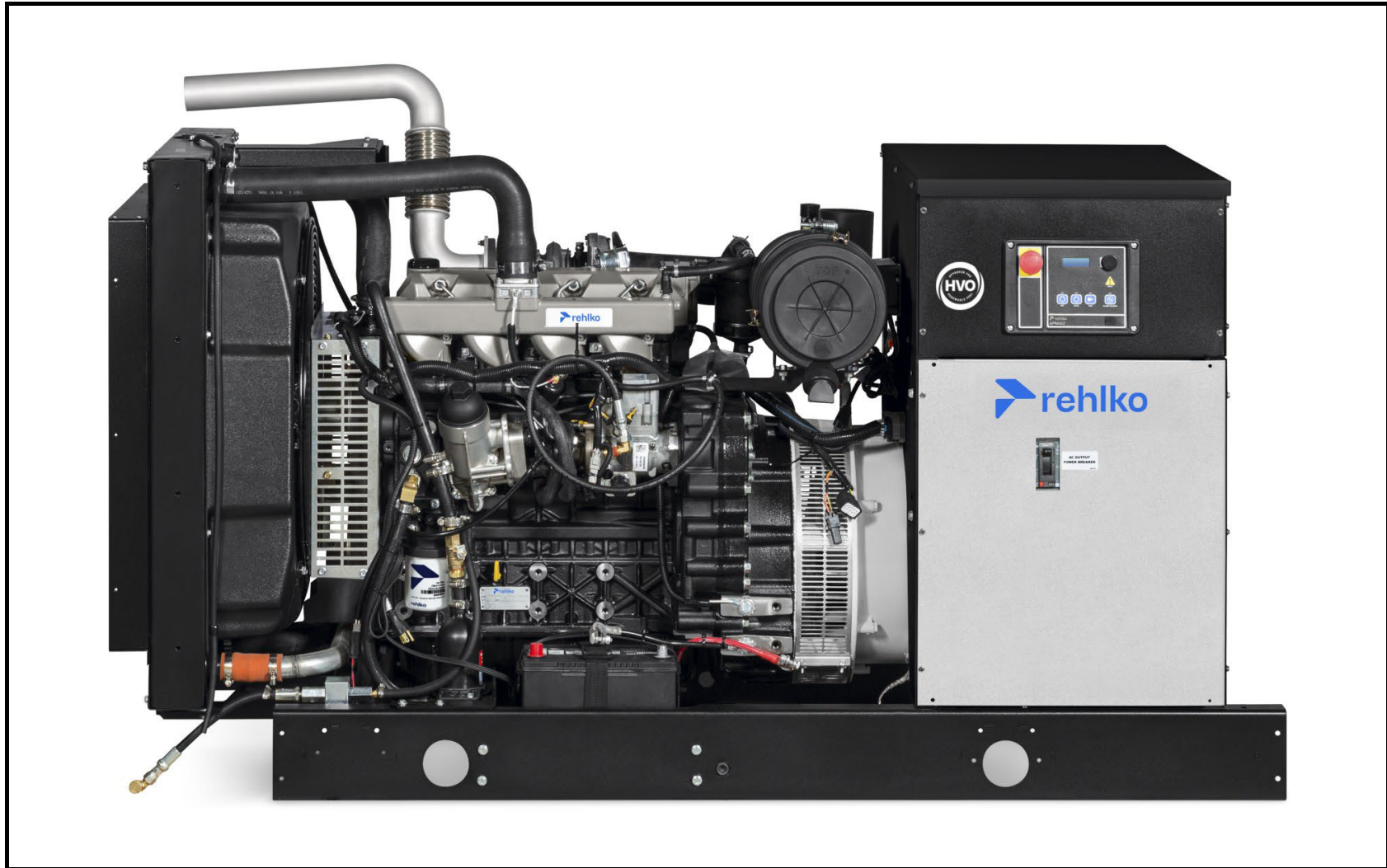


Figure 3: Picture of Proposed 60-kW Generator Set

IV. EQUIPMENT LISTING:

- A. 60-kW Kohler (Rehiko) electrical generator set, Model 60REOZK, driven by 94-bhp Kohler Model KDI 3404TCR diesel fueled piston engine with turbocharger. (ATC No. 46277-26-58)

V. ENGINEERING ANALYSIS:**A. Toxic Emissions Screening Health Risk Assessment:**

Combustion of diesel fuel generates toxic air contaminants. Initially, a "Prioritization Score" is obtained to determine if a more refined screening risk assessment will be required. The prioritization score was based on the following: emission calculation factors based on uncontrolled diesel fuel combustion of 94-bhp engine (worst case emissions), CARB VOC speciation profiles (see Attachment A), diesel PM emissions, and the nearest receptor within 100 meters (see Page 7). Prioritization for diesel piston engine is as follows:

Proximity Factors (Meters)	Carcinogenic Scores	Non-Carcinogenic Scores	Facility Ranking
$0 \leq R < 100$ 1.000	7.95441	1.49987	Medium Priority
$100 \leq R < 250$ 0.250	1.98860	0.37497	Medium Priority

Based on above carcinogenic and non-carcinogenic scores (see Attachment A for details), emissions from the 94-bhp engine could be significant. Therefore, a more refined risk assessment is required.

A screening health risk assessment (HRA) of the 94-bhp engine was completed. The HRA was based on the following: exhaust release height of 7 feet, emission calculation factors based on uncontrolled diesel fuel combustion, CARB VOC speciation profiles (see Attachment A), nearest receptor within 100 meters, 70 year exposure to toxic emissions, and generic wind patterns.

Carcinogenic Risk in One Million	Acute Hazard Index	Chronic Hazard Index
0.022	0.003	0.089

Above carcinogenic health risk is less than one in one million, acute and chronic hazard index are less than one (see Attachment A for details), therefore, carcinogenic, acute and chronic health risk from 94-bhp engine is insignificant. Further risk assessment and control measures are not required.

B. Stationary Diesel Air Toxic Control Measure (ATCM):

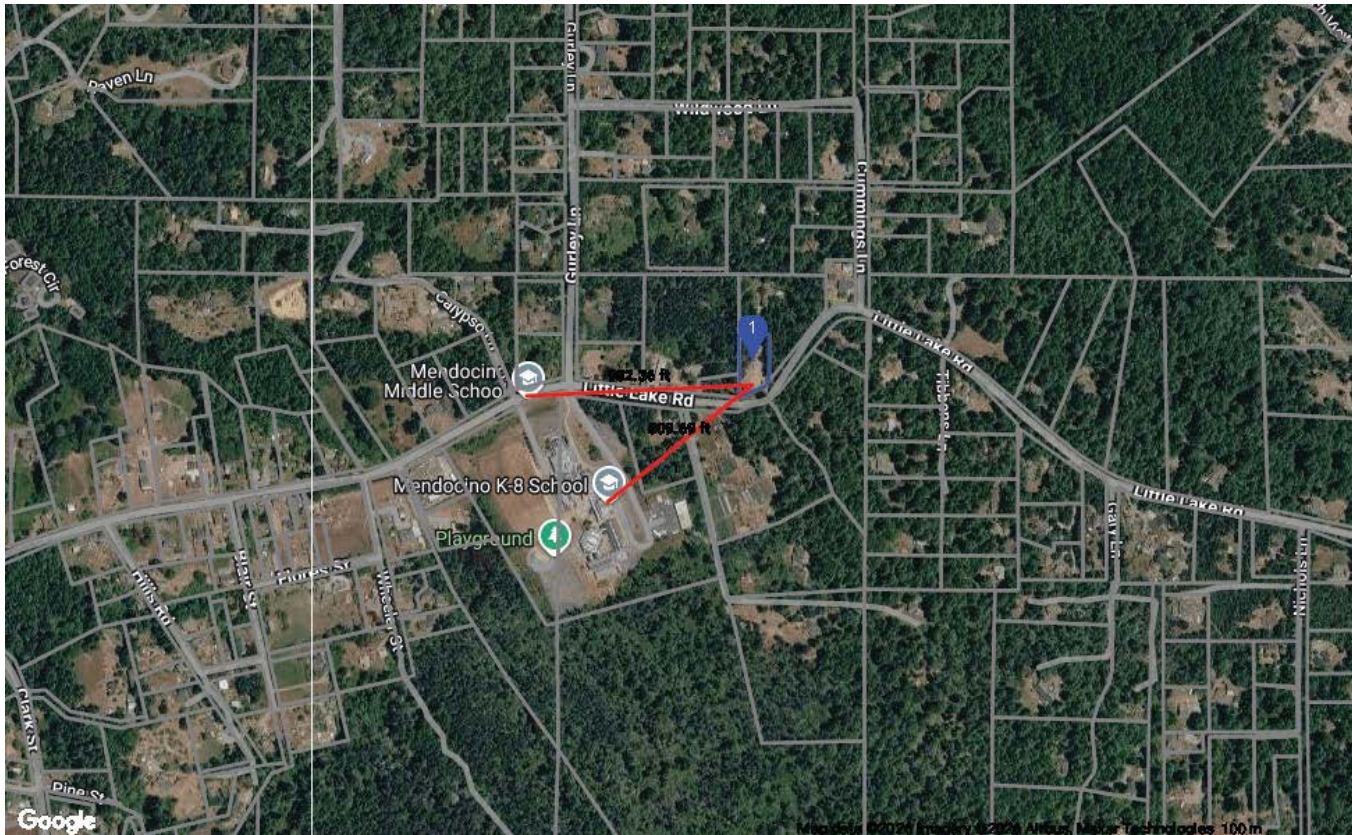
According to the CARB Stationary Diesel ATCM, the proposed engines must comply with the following:

- 1) CARB diesel fuel or alternative diesel fuel that has been verified for use, and
- 2) Tier 3 Non-Road Engine Certification Standard for a 2008+ model year engine between 75-bhp and 100-bhp.

2008+ model year engine between 74-bhp and 100-bhp are required to comply with Federal and State Tier 3 NMHC+NO_x, CO and PM standards of 3.5, 3.7 and 0.15-g/bhp-hr (respectively). The 94-bhp engine has the following emission rates:

	NMHC+NO_x	CO	PM-10
g/bhp-hr	3.5	3.7	0.15

Engine meets State and Federal requirements; additionally, requirements for emergency use engines shall be incorporated into the Authority to Construct (ATC) document.



Proposed Generator Set in Relation to Mendocino K – 8 and Middle School

VI. CEQA DETERMINATION:

Mendocino County AQMD PERMITS - CEQA COMPLIANCE
Instructions for Checklist

This form is designed to be used by the permit application processing engineer in implementing requirements of the California Environmental Quality Act (CEQA) for District permitting activities when the District is the lead or responsible agency under CEQA. The District is generally a responsible agency for portions of development projects requiring District permits. The District is a commenting agency for other parts of a project, such as, indirect source emissions and vehicle trips. Most District permits are considered exempt from CEQA (see District List of Exempt Projects). In most cases the environmental document prepared by the lead agency is adequate for the District permitting action. Certain District permit modifications may require supplemental CEQA documents.

CEQA compliance for a project subject to District permit requirements includes two steps:

- A. Determining what CEQA-related information, if any, is required from the applicant to deem the application complete (this may also be identified at the pre-application stage, if there is one¹).
- B. Determining and documenting CEQA compliance for each permit application prior to granting a permit by completing the attached form.

The following instructions correspond to the questions on the form:

- B.2. Projects subject to District permits often also require a land use or other permit from other agencies. The permit engineer should check the application or request from the applicant information regarding what other agencies will be requiring permits for the project and who the "Lead Agency" will be. District permit processing should begin as soon as adequate information is available to deem the application complete, even if the lead agency has not completed the environmental document (Govt. Code ' 65941 (b), amended 1993), and if the applicant so requests (Govt. Code ' 65951, amended 1993).
- B.3. For District permits that do not fall under the preceding case, the engineer shall receive from the applicant a signed and dated environmental questionnaire (Initial Study checklist).
- C.2. As a "responsible agency" under CEQA, the Control Officer shall consider information contained in the lead agency's final EIR or ND prior to granting the District permit. Acting on behalf of the Control Officer, the engineer shall review the ND or EIR and adopt any mitigation measures for air quality impacts or project alternatives over which the District has regulatory discretion.
- C.3. If any component of the project is not listed, and if exceptions to these exemptions provided in the form are true, then the project cannot be considered exempt. In making a recommendation to issue the District permit, the permit engineer shall review the environmental questionnaire provided by the applicant to establish the project has no potential for resulting in a significant adverse environmental impact to any environmental media (see Initial Study form). The study shall also demonstrate the project will not contribute to significant cumulative impacts and will not have significant impact itself. Although no further action is required under CEQA, the applicant may request a Notice of Exemption to be filed, to reduce the statute of limitations from 180 days to 30 days, on challenges to the decision the project is exempt from CEQA.

¹ *Preapplication under PRC ' 21080.1(b) amended 1993-at the request of the applicant the lead agency must provide for pre-application consultation on the environmental document.*

MENDOCINO COUNTY AQMD PERMITS -- CEQA COMPLIANCE CHECKLIST

Completeness Review Form

This form shall be completed by the permit application engineer for all Authority to Construct permit applications. The completed form shall be included in the Engineering Evaluation File.

A. General Information

Application Number: 46277
Applicant Name: Mendocino Unified School District
Project Description: 60-kW Emergency Generator Driven by 94-bhp Diesel Piston Engine

B. Determination of Completeness

Check the corresponding action to be taken to determine the application is complete for CEQA purposes and fill in blanks where appropriate.

1. Ministerial Exemption

☐ This permit application is not subject to CEQA because the evaluation is a ministerial action conducted using fixed standards and objective measurements. No discretion or judgment is required in granting of this permit.

2. Project Was Exempted by or is Subject to Negative Declaration or EIR by Another Agency

☐ This permit application was exempted by or is subject to a ND or EIR prepared (or under preparation) by another agency. The District has received the necessary information indicating another agency is acting as the Lead Agency. Therefore, the application shall be deemed complete for CEQA purposes.

3. All Other Permits

☒ The District has received from the applicant, a completed, signed and dated environmental questionnaire and any other information necessary for preparing a negative declaration or EIR, if required (see Form Instructions B.3.). Therefore, the application shall be deemed complete for CEQA purposes.

C. Final Action

Check the appropriate action taken by the AQMD prior to issuing the final permit.

1. Ministerial Action

☐ This permit application is exempt from CEQA because the permit evaluation is a ministerial action. CEQA does not apply to ministerial actions. No further action is necessary.

2. Project Was Exempted by or is Subject to Negative Declaration or EIR by Another Agency

___ This permit application was exempted by or was subject to an EIR or Negative Declaration by another agency. The final action on the District permit was taken only after review and consideration of information in the certified CEQA document by the Control Officer, or authorized District representative of the Control Officer.

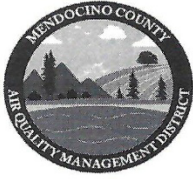
3. Exemption

X This permit application is exempt from CEQA because the project, as a whole, is listed in the District List of Exempt Projects AND because the project has no potential for causing a significant adverse environmental impact. A General Exemption under CEQA Section 15061 (b)(3) applies if the project is not listed in the District Exemption List AND it can be seen with certainty the project will not have a significant adverse effect on the environment. In making this determination,

- a. a review of information submitted by the applicant has been conducted indicating there is no potential for a significant adverse environmental impact on any environmental media from the project;
- b. recognized Best Available Control Technology (BACT) was proposed; and
- c. no unusual circumstances such as location, or cumulative impacts from successive projects of the same type in the same place over time, were determined to result in significant adverse environmental impacts.

4. Permit is Not Exempt from CEQA

___ This permit was found not to be exempt from CEQA and no other agency will be conducting a CEQA review for the project. The District has prepared and adopted a Negative Declaration/Addendum or certified an EIR for the project. The final action by the District was taken only after information contained in the final EIR or ND was considered and any significant adverse environmental effects were mitigated to the maximum extent feasible.



MENDOCINO COUNTY AIR QUALITY MANAGEMENT DISTRICT
 1100A HASTINGS ROAD, UKIAH, CA 95482
 PHONE: (707) 463 5354 mcaqmd@mendocinocounty.gov www.mendoair.gov

Environmental Information Form and Initial Study Evaluation

Applicant: Fort Bragg Electric, Inc **Application #:** _____

Contact: Michael Mercado

Title: Project Manager **Phone:** 707-964-9118

Project Description: Backup generator for Mendocino Unified School District water treatment plant

<u>Environmental Information</u>	<u>Yes</u>	<u>No</u>	<u>Maybe</u>
Will the proposed project with regard to the proposed location:			
1. Conflict with the adopted environmental plans and goals of the community?	☐	☒	☐
2. Have a substantial, demonstrable negative aesthetic effect?	☐	☒	☐
3. Substantially affect a rare or endangered species of animal or plant or the habitat of the species?	☐	☒	☐
4. Interfere substantially with the movement of any resident or migratory fish or wildlife species?	☐	☒	☐
5. Substantially diminish habitat for fish, wildlife or plants?	☐	☒	☐
6. Breach published national, state, or local standards relating to solid waste or litter control?	☐	☒	☐
7. Substantially degrade water quality or contaminate a public water supply?	☐	☒	☐
8. Substantially degrade or deplete ground water resources or interfere substantially with ground water recharge?	☐	☒	☐
9. Disrupt or adversely affect a prehistoric or historic archeological site or a property of historic or cultural significance to a community or ethnic or social group or a paleontological site except as part of a scientific study?	☐	☒	☐
10. Induce substantial growth or concentration of population?	☐	☒	☐
11. Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system?	☐	☒	☐
12. Displace a substantial number of people?	☐	☒	☐



MENDOCINO COUNTY AIR QUALITY MANAGEMENT DISTRICT

1100A HASTINGS ROAD, UKIAH, CA 95482
 PHONE: (707) 463 5354 mcaqmd@mendocinocounty.gov www.mendoair.gov

Applicant: Fort Bragg Electric, Inc.

Application # _____

Environmental Information

	<u>Yes</u>	<u>No</u>	<u>Maybe</u>
13. Encourage activities which result in the use of large amounts of fuel, water or energy?	☐	☒	☐
14. Use fuel, water or energy inefficiently?	☐	☒	☐
15. Increase substantially the ambient noise level for adjoining areas?	☐	☒	☐
16. Cause substantial flooding, erosion or siltation?	☐	☒	☐
17. Expose people or structures to major geologic hazards?	☐	☒	☐
18. Extend a sewer trunk line with capacity to serve new development?	☐	☒	☐
19. Disrupt or divide the physical arrangement of an established community?	☐	☒	☐
20. Create a potential public health hazard or involve the use, production, or disposal of materials which pose a hazard to people or animal or plant populations in the area affected?	☐	☒	☐
21. Conflict with established recreational, educational, religious or scientific uses?	☐	☒	☐
22. Convert prime agricultural land to non-agricultural use or impair the agricultural productivity of prime agricultural land?	☐	☒	☐
23. Interfere with emergency response or evacuation plans?	☐	☒	☐
24. Violate any ambient air quality standard, contribute substantially to an existing or projected air quality violation, or expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐
25. Emit Greenhouse Gas (GHG) emissions greater than 25,000 tons per year?	☐	☒	☐

NOTE: Please attach any pertinent explanatory information.

CERTIFICATION:

I hereby certify the statement furnished above and in attached exhibits present the data and information required for this initial evaluation to the best of my ability, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Print Signing Authority Name: _____

(If different than contact listed on page 1)

Signature: Michael Mercado
Digitally signed by Michael Mercado
 DN: cn=Michael Mercado, o=Fort Bragg Electric, Inc., ou=Estimator,
 email=michael@fortbraggelectric.com, c=US
 Date: 2020.09.17 15:15:49 -0700

Date: 9/17/2026

VII. EMISSION CALCULATIONS:**A. Assumptions:**

1. Emission Factors (AP-42, except SO_x - mass balance)
2. Conversions:
7.4805 gal/cu.ft.
0.002205 lb/gm
3. Fuel Properties:
Sulfur content = 0.0015%
Higher heating value = 19,111 Btu/lb
Fuel density = 57.4 lb/cu.ft.
4. Fuel use (max) 94-bhp = 4.8-gal/hr (manufacturer data)
= 36.8-lb/hr (conversion of mfg. data)
5. Max. daily use = 24 hr
6. Max weekly use = 7 days/week
7. Max. annual use = 500 hrs/yr

B. Emission Factors:**26-58 Diesel Piston Engine Emission Factor Calculations**SO_x 94-bhp Engine Calculations:

$$36.8 \frac{\text{lb}(\text{fuel})}{\text{hr}} \times \frac{0.0015(S - \text{fuel} \cdot \text{content})}{100} \times 453.59 \frac{\text{gm}}{\text{lb}} \times 2 \left(\frac{\text{SO}_2}{S} \right) = 0.50 \frac{\text{gm} \cdot \text{SO}_x}{\text{hr}}$$

$$0.50 \frac{\text{gm} \cdot \text{SO}_x}{\text{hr}} \times \frac{1}{85} \frac{1}{\text{hp}} = 0.005 \frac{\text{gm} \cdot \text{SO}_x}{\text{hp} - \text{hr}}$$

$$0.005 \frac{\text{gm} \cdot \text{SO}_x}{\text{hp} - \text{hr}} \times \frac{1}{453.59} \frac{\text{lb}}{\text{gm}} = 1.18 \times 10^{-5} \frac{\text{lb} \cdot \text{SO}_x}{\text{hp} - \text{hr}}$$

94-Bhp Engine

	PM-10	SO _x	NO _x	VOC	CO
EF Source:	Mfr.	See Above	Mfr.	Mfr.	Mfr.
gm/hp-hr:	0.15	---	3.3	0.2	3.7

$$\text{PM}_{10}: 0.15 \frac{\text{gm} \cdot \text{PM}_{10}}{\text{hp} - \text{hr}} \times \frac{1}{453.59} \frac{\text{lb}}{\text{gm}} = 3.31 \times 10^{-4} \frac{\text{lb} \cdot \text{PM}_{10}}{\text{hp} - \text{hr}}$$

$$\text{NO}_x: 3.3 \frac{\text{gm} \cdot \text{NO}_x}{\text{hp} - \text{hr}} \times \frac{1}{453.59} \frac{\text{lb}}{\text{gm}} = 7.28 \times 10^{-3} \frac{\text{lb} \cdot \text{NO}_x}{\text{hp} - \text{hr}}$$

$$\text{VOC}: 0.2 \frac{\text{gm} \cdot \text{VOC}}{\text{hp} - \text{hr}} \times \frac{1}{453.59} \frac{\text{lb}}{\text{gm}} = 4.41 \times 10^{-4} \frac{\text{lb} \cdot \text{VOC}}{\text{hp} - \text{hr}}$$

$$\text{CO}: 3.7 \frac{\text{gm} \cdot \text{VOC}}{\text{hp} - \text{hr}} \times \frac{1}{453.59} \frac{\text{lb}}{\text{gm}} = 8.16 \times 10^{-3} \frac{\text{lb} \cdot \text{CO}}{\text{hp} - \text{hr}}$$

Summary of 0386007 Emission Factors (lb/hp-hr):

ATC No.	Size	PM-10	SO _x	NO _x	VOC	CO
46277-26-58	94-Bhp	3.31E-04	1.18E-05	7.28E-03	4.41E-04	8.16E-03

C. Emission Calculations:

46277-26-58:

$$PM_{10}: 3.31 \times 10^{-4} \frac{lb \cdot PM_{10}}{hp \cdot hr} \times 94 \cdot bhp = 0.031 \frac{lb}{hr}$$

$$0.031 \frac{lb}{hr} \times 24 \frac{hr}{day} = 0.746 \frac{lb}{day}$$

$$0.031 \frac{lb}{hr} \times 500 \frac{hr}{year} \times \frac{1}{2000} \frac{tons}{lb} = 0.008 \frac{tons}{year}$$

$$SOx: 1.18 \times 10^{-5} \frac{lb \cdot SOx}{hp \cdot hr} \times 94 \cdot bhp = 0.0011 \frac{lb}{hr}$$

$$0.0011 \frac{lb}{hr} \times 24 \frac{hr}{day} = 0.027 \frac{lb}{day}$$

$$0.0011 \frac{lb}{hr} \times 500 \frac{hr}{year} \times \frac{1}{2000} \frac{tons}{lb} = 0.0003 \frac{tons}{year}$$

$$NOx: 7.28 \times 10^{-3} \frac{lb \cdot NOx}{hp \cdot hr} \times 94 \cdot bhp = 0.684 \frac{lb}{hr}$$

$$0.684 \frac{lb}{hr} \times 24 \frac{hr}{day} = 19.416 \frac{lb}{day}$$

$$0.684 \frac{lb}{hr} \times 500 \frac{hr}{year} \times \frac{1}{2000} \frac{tons}{lb} = 0.171 \frac{tons}{year}$$

$$VOC: 4.41 \times 10^{-4} \frac{lb \cdot VOC}{hp \cdot hr} \times 94 \cdot hp = 0.041 \frac{lb}{hr}$$

$$0.041 \frac{lb}{hr} \times 24 \frac{hr}{day} = 0.995 \frac{lb}{day}$$

$$0.041 \frac{lb}{hr} \times 500 \frac{hr}{year} \times \frac{1}{2000} \frac{tons}{lb} = 0.010 \frac{tons}{year}$$

$$CO: 8.16 \times 10^{-3} \frac{lb \cdot CO}{hp \cdot hr} \times 94 \cdot hp = 0.767 \frac{lb}{hr}$$

$$0.767 \frac{lb}{hr} \times 24 \frac{hr}{day} = 18.406$$

$$0.767 \frac{lb}{hr} \times 500 \frac{hr}{year} \times \frac{1}{2000} \frac{tons}{lb} = 0.192 \frac{tons}{year}$$

46277-26-58: 94-bhp Engine Emissions Summary

	PM-10	SOx	NOx	VOC	CO
lb/hr:	0.03	0.00	0.68	0.04	0.77
lb/day:	0.75	0.03	16.42	0.99	18.41
tons/yr:	0.01	0.00	0.17	0.01	0.19

VIII. CONCLUSIONS:

- A. Rule 1-220 (conclusions based on worst case):
X satisfies requirements of Sections (a) and (b)
- B. Rule 1-210 – Compliance with the California Environmental Quality is satisfied by MCAQMD staff review of Environmental Questionnaire submitted by the applicant. Staff the proposed generator set has no potential for causing a significant environmental impact, and, thus, the project be granted a general rule exemption pursuant to Section 15061(b)(3) in accordance with the State CEQA Guidelines.
- C. Rule 1-400: Emissions from diesel engine (given the proposed emission limits) are not expected to cause nuisance emissions. Compliance with Rule 1-400 is expected.
- D. Rule 1-410: Visible emissions from diesel are expected not to exceed 5% opacity or Ringelmann ¼ during normal operations. Compliance with Rule 1-410 is expected.
- E. Rule 1-440: Sulfur content of low sulfur diesel fuel is not expected to exceed 0.002-grains per standard cubic foot (gr/scf). Given known combustion principles, the SO₂ emission rate shall be less than 0.1%. Compliance with Rule 1-440 is expected.
- F. California Health and Safety Code (CH&SC) 41700: Based on proposed emissions, proposed boilers should not propose a significant health risk to community at large. Compliance with CH&SC 41700 is expected.
- G. California Health and Safety Code (CH&SC) 42301.6: Prior to issuance of this Authority to Construct the District in conjunction with the school district and funded by Angley Electric Company provided a school notice for all students attending the school and all addresses within 1000-ft. of the source of the hazardous air pollutants. There are no other schools within 1000-feet of the school or the proposed engine.
- H. CCR, Title 17, Section 93115: ATCM for stationary compression ignition engines requires Tier 3 engines to comply with Tier 3 emission standards and fuel requirements upon operation. Engine requirements (including non-emergency use requirements) shall be incorporated into the ATC; therefore, proposed engine will comply with Stationary Diesel ATCM.

IX. RECOMMENDATIONS:

Issue Authority to Construct No. 46277-26-58 with the following conditions:

46277-26-58:

EQUIPMENT DESCRIPTION:

- A. 60-kW Kohler (Rehiko) electrical generator set, Model 60REOZK, driven by 94-bhp Kohler Model KDI 3404TCR diesel fueled piston engine with turbocharger.

DESIGN CONDITIONS:

- a. Engine shall be equipped with turbocharger and intercooler. (CCR Title 17, Section 93115)
- b. Elapsed time meter shall be installed and maintained indicating cumulative hours of engine operating time. (CCR Title 17, Section 93115)

OPERATIONAL CONDITIONS:

1. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (CCR Title 17, Section 93115)
2. Visible emissions from engine exhaust after engine has reached normal operating temperature shall not equal or exceed 5% opacity or Ringelmann No. ¼ for more than 3 minutes in any one hour. (CCR Title 17, Section 93115)
3. Fuel for diesel piston engine shall conform to California Air Resources Board standards for reformulated diesel fuel (low sulfur, 0.0015% by weight and low aromatic hydrocarbon, 20% by weight). (CCR Title 17, Section 93115)
4. Equipment shall be maintained according to manufacturer's specifications to ensure compliance with emissions limitations. (Rule 1-220)
5. Compliance with all operational conditions shall be verified by appropriate recordkeeping, including records of operational data needed to demonstrate compliance. Such records shall be kept on site in readily available format. (Rule 1-220)
6. Operating record of this equipment shall be maintained in format approved in writing by District, kept for minimum of two years, and made available upon request of District personnel. Record shall include, at minimum, days and hours of operation, amount of fuel oil supplied to this engine, and date(s), check(s) and certification(s) of injection timing. (Rule 1-220)
7. Engine operation for maintenance and testing shall not exceed 50 hours per year without prior District approval. (CCR Title 17, Section 93115)
8. Engine operation for shall not exceed 500 hours per year without prior District approval. (Rule 1-220)
9. No emission resulting from use of this equipment shall cause injury, detriment, nuisance, annoyance to or endanger comfort, repose, health or safety of any considerable number of persons or public. (Rule 1-400 and CH & SC 41700)

STATE OF CALIFORNIA AIR TOXICS HOT SPOTS REQUIREMENTS:

Facility shall comply with California Health and Safety Code, Sections 44300 through 44384. (Rule 208.1)

COMPLIANCE TESTING REQUIREMENTS:

Should inspection reveal conditions indicative of non-compliance, compliance with diesel piston engine emission limitations shall be verified, within 60 days of District request. Test results shall be submitted to KCAPCD within 30 days after test completion. (Rule 108.1 and 209)

EMISSION LIMITS:

Emissions rate of each air contaminant from this unit shall not exceed the following emissions limitations:

<u>Particulate Matter (PM₁₀):</u>	0.15 gm/bhp-hr
	0.03 lb/hr
	0.75 lb/day
	0.01 ton/yr

<u>Sulfur Oxides (SOx as SO₂):</u>	0.001	lb/hr
	0.03	lb/day
	0.0003	ton/yr
<u>Oxides of Nitrogen (NO₂):</u>	3.3	gm/bhp-hr
	0.68	lb/hr
	16.42	lb/day
	0.17	ton/yr
<u>Volatile Organic Compounds (VOC):</u>	0.2	gm/bhp-hr
	0.04	lb/hr
	0.99	lb/day
	0.01	ton/yr
<u>Carbon Monoxide:</u>	0.77	lb/hr
	18.41	lb/day
	0.19	ton/yr

(Emissions limits established pursuant to 1-Rule 220 unless otherwise noted)

Compliance with maximum daily emission limits shall be verified by source operator (with appropriate operational data and recordkeeping to document maximum daily emission rate) each day source is operated and such documentation of compliance shall be retained and made readily available to District for period of three years. (Rule 1-220)

ATTACHMENT A

Screening Risk Assessment

94-bhp Diesel Engine

Diesel Exhaust Toxic Components

Fuel Flow	4.8	gal/hr
#2 Diesel	19,111	Btu/lb
Density	57.4	lb/cu.ft.
Vol. Conv.	7.4805	gal/cu.ft.
Fuel Flow	36.832	lb/hr
Fuel Flow	0.704	MMBtu/hr
Yearly Use	500.0	hrs/yr

	lb/MMBtu	lb/hr	lb/yr	grams/sec
Acetaldehyde	7.67E-04	5.399E-04	0.269943	6.80E-05
Acrolein	9.25E-05	6.511E-05	0.032555	8.20E-06
Benzene	9.33E-04	6.567E-04	0.328366	8.27E-05
1,3-Butadiene	3.91E-05	2.752E-05	0.013761	3.47E-06
Diesel Particulate		3.109E-02	15.545250	3.92E-03
Formaldehyde	1.18E-03	8.306E-04	0.415296	1.05E-04
Naphthalene	8.48E-05	5.969E-05	0.029845	7.52E-06
POLYCYCLIC AROMATIC HYDROCARBONS (PAH)				
Benz(a)anthracene	1.68E-06	1.183E-06	0.000591	1.49E-07
Benzo(b)flouranthene	9.91E-08	6.976E-08	0.000035	8.79E-09
Benzo(k)flouranthene	1.55E-07	1.091E-07	0.000055	1.37E-08
Benzo(a)pyrene	1.88E-07	1.323E-07	0.000066	1.67E-08
Dibenz(a,h)anthracene	5.83E-07	4.104E-07	0.000205	5.17E-08
Ideno(1,2,3-cd)pyrene	3.75E-07	2.640E-07	0.000132	3.33E-08
TOTAL PAH	3.08E-06	2.168E-06	0.001084	2.73E-07
Toluene	4.09E-04	2.879E-04	0.143946	3.63E-05
Xylenes	2.85E-04	2.006E-04	0.100305	2.53E-05

Air Toxics "Hot Spots" Information and Assessment Act, AB-2588

Facility Prioritization Scores

MDAQMD	22-September-2026
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Name of Company:	Mendocino Unified School District
Facility Location:	44020 Little Lake Road, Mendocino, CA
Hours/Year Operation:	500
FACILITY ID:	46277
Permit No.:	26-58
Data Entered By:	Glen Stephens

Reviewed By:			
=	=	=	=

Receptor Proximity & Total Scores

Proximity Factors (Meters)	Carcinogenic Scores	Non-Carcinogenic Scores	Facility Ranking
-	-	-	-
0<=R< 100 1.000	7.95441	1.49987	Medium Priority
100<=R< 250 0.250	1.98860	0.37497	Medium Priority
250<=R< 500 0.040	0.31818	0.05999	Low Priority
500<=R<1000 0.011	0.08750	0.01650	Low Priority
1000<=R<1500 0.003	0.02386	0.00450	Low Priority
1500<=R<2000 0.002	0.01591	0.00300	Low Priority
=R>2000 0.001	0.00795	0.00150	Low Priority
=	=	=	=

Health Risk Assessment

$$GLC = E - rate \times \frac{X}{Q}$$

1. GLC = Ground Level Concentration $\left(\frac{\mu g}{m^3}\right)$

2. E-rate = Substance emission rate (g/sec)

3. X/Q = Dilution factor provided by dispersion modeling $\left(\frac{\frac{\mu g}{m^3}}{\frac{g}{sec}}\right)$

Toxic Air Contaminants	lbs/year	grams/sec	Unit Risk Values			
			Acute	Chronic	Carcinogenic	
Acetaldehyde	0.269943	6.802E-05	NA	9.00E+00	2.70E-06	1/(mg/kg-day)
Acrolein	0.032555	8.204E-06	1.90E-01	2.00E-02	NA	
Benzene	0.328366	8.275E-05	1.30E+03	6.00E+01	2.90E-05	1/(mg/kg-day)
1,3-Butadiene	0.013761	3.468E-06	NA	NA	1.70E-04	1/(mg/kg-day)
	15.54525	0.0039173	NA	5.00	3.00E-04	1/(mg/kg-day)
Formaldehyde	0.415296	0.0001047	9.40E+01	3.00E+00	6.00E-06	1/(mg/kg-day)
Naphthalene	0.029845	7.521E-06	NA	1.40E+01	NA	
Benz(a)anthracene	0.000591	1.49E-07	NA	NA	1.10E-04	1/(mg/kg-day)
Benzo(b)flouranthene	3.49E-05	8.789E-09	NA	NA	1.10E-04	1/(mg/kg-day)
Benzo(k)flouranthene	5.46E-05	1.375E-08	NA	NA	1.10E-04	1/(mg/kg-day)
Benzo(a)pyrene	6.62E-05	1.667E-08	NA	NA	1.10E-03	1/(mg/kg-day)
Dibenz(a,h)anthracene	0.000205	5.171E-08	NA	NA	1.20E-03	1/(mg/kg-day)
Ideno(1,2,3-cd)pyrene	0.000132	3.326E-08	NA	NA	1.10E-04	1/(mg/kg-day)
Toluene	0.143946	3.63E-05	3.70E+04	2.00E+02	NA	
Xylenes	0.100305	2.53E-05	2.20E+04	3.00E+02	NA	

Dilution Factor (from "Breeze"):

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Acetaldehyde	GLC =	4.90E-03	$\mu g/m^3$
Acrolein	GLC =	5.91E-04	$\mu g/m^3$
Benzene	GLC =	5.96E-03	$\mu g/m^3$
1,3-Butadiene	GLC =	2.50E-04	$\mu g/m^3$
Diesel Particulate	GLC =	2.82E-01	$\mu g/m^3$
Formaldehyde	GLC =	7.53E-03	$\mu g/m^3$
Naphthalene	GLC =	5.41E-04	$\mu g/m^3$
Benz(a)anthracene	GLC =	1.07E-05	$\mu g/m^3$
Benzo(b)flouranthene	GLC =	6.33E-07	$\mu g/m^3$
Benzo(k)flouranthene	GLC =	9.90E-07	$\mu g/m^3$
Benzo(a)pyrene	GLC =	1.20E-06	$\mu g/m^3$
Dibenz(a,h)anthracene	GLC =	3.72E-06	$\mu g/m^3$
Ideno(1,2,3-cd)pyrene	GLC =	2.39E-06	$\mu g/m^3$
Toluene	GLC =	2.61E-03	$\mu g/m^3$
Xylenes	GLC =	1.82E-03	$\mu g/m^3$

$$\text{Hazard Index} = \frac{\text{Annual} \cdot \text{Average} \cdot \text{Concentration} \left(\frac{\mu\text{g}}{\text{m}^3} \right)}{\text{Chronic} \cdot \text{Reference} \cdot \text{Exposure} \cdot \text{Level} \left(\frac{\mu\text{g}}{\text{m}^3} \right)}$$

Hazard Index	Acute	Chronic
Acetaldehyde	NA	5.44E-04
Acrolein	0.003109	2.95E-02
Benzene	4.58E-06	9.93E-05
1,3-Butadiene	NA	NA
Diesel Particulate	NA	5.64E-02
Formaldehyde	8.02E-05	2.51E-03
Naphthalene	NA	3.87E-05
Benz(a)anthracene	NA	NA
Benzo(b)flouranthene	NA	NA
Benzo(k)flouranthene	NA	NA
Benzo(a)pyrene	NA	NA
Dibenz(a,h)anthracene	NA	NA
Ideno(1,2,3-cd)pyrene	NA	NA
Toluene	7.06E-08	1.31E-05
Xylenes	8.27E-08	6.07E-06
Total:	0.003194	0.0891555

Dose-inh = Cair x (inhalation) = Cair x 0.0002599		Risk =(Dose-inh) x (Carcinogenic Risk Value)
Acetaldehyde	1.27E-06 mg/kg-day)	3.44E-12
Acrolein	1.53E-07 (mg/kg-day)	NA
Benzene	1.55E-06 (mg/kg-day)	4.49E-11
1,3-Butadiene	6.49E-08 (mg/kg-day)	1.10E-11
Diesel Particulate	7.33E-05 (mg/kg-day)	2.20E-08
Formaldehyde	1.96E-06 (mg/kg-day)	1.17E-11
Naphthalene	1.41E-07 (mg/kg-day)	NA
Benz(a)anthracene	2.79E-09 (mg/kg-day)	3.07E-13
Benzo(b)flouranthene	1.64E-10 (mg/kg-day)	1.81E-14
Benzo(k)flouranthene	2.57E-10 (mg/kg-day)	2.83E-14
Benzo(a)pyrene	3.12E-10 (mg/kg-day)	3.43E-13
Dibenz(a,h)anthracene	9.67E-10 (mg/kg-day)	1.16E-12
Ideno(1,2,3-cd)pyrene	6.22E-10 (mg/kg-day)	6.84E-14
Toluene	6.79E-07 (mg/kg-day)	NA
Xylenes	4.73E-07 (mg/kg-day)	NA
Total:		2.21E-08

Risk in One million = 0.022