

DOCKETED

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Project Title:	Fountain Wind Project
TN #:	254693
Document Title:	Shasta County Air Quality Management District Input on the Opt-in Application for Certification of the Fountain Wind Project
Description:	N/A
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Submitter Role:	Public Agency
Submission Date:	2/26/2024 2:18:38 PM
Docketed Date:	2/26/2024

SHASTA COUNTY AIR QUALITY MANAGEMENT DISTRICT

1855 Placer Street, Suite 101 • Redding, CA 96001

Paul A. Hellman
Air Pollution Control Officer
Rob Stahl
Air Quality District Manager

February 23, 2024

Joseph Hughes
Engineering Branch Manager, Siting
California Energy Commission
715 P Street
Sacramento, CA 95814
joseph.hughes@energy.ca.gov

**Re: Shasta County Air Quality Management District Input on the Opt-in
Application for Certification of the Fountain Wind Project (23-OPT-01)**

Shasta County Air Quality Management District (“SCAQMD”) hereby provides its input on the Opt-in Application for Certification of the Fountain Wind Project (23-OPT-01) (“Project”), as you requested in your *Request for Input from Shasta County Air Quality Management District on the Opt-in Application for the Fountain Wind Project*, February 9, 2024 (“Request”).¹ For the reasons set forth below, SCAQMD submits this response under protest.

I. SCAQMD Is a Separate Legal Entity With Authority to Regulate Local Air Quality

SCAQMD administers local and state air quality regulations designed to achieve state and federal ambient air quality standards. SCAQMD addresses emissions from stationary sources in the County of Shasta (“County”) through the issuance of permits, monitoring/inspection, and long-range planning, and is charged with implementing applicable portions of the federal Clean Air Act through California’s State Implementation Plan (“SIP”). While SCAQMD and the County work closely on air quality issues, SCAQMD is a separate, distinct legal entity from the County, and is governed by the Health and Safety Code and a separate Governing Board of appointed members.²

The County, on the other hand, is a political subdivision of the State of California governed by the Government Code. Its governing body is the County Board of Supervisors, comprised of members elected to terms of office. The County is also the local land use authority and exercises its constitutional police powers in the unincorporated area in which Fountain Wind, LLC (“Applicant”) proposes to build the Project.

II. The CEC Sent Informal Notice of the Project to the County, Not SCAQMD

On January 25, 2023, California Energy Commission (“CEC” or “Commission”) Project Manager Leonidas Payne sent an email to the County regarding *Notice of application receipt for Fountain Wind project (23-OPT-01) / request for comments and information* (“Commission Application Notice”). This informal notice was sent to the County, not to SCAQMD. Therefore,

¹ TN254394.

² See Health & Safety Code § 40000 to § 41499.

SCAQMD did not receive proper notice of the Commission’s review of the proposed Project.³ Furthermore, the January 25 email did not meet the Commission’s notice requirements and lacked the details provided to local agencies in prior Commission notices of application receipt.⁴

III. Both the Applicant and the CEC Have Recognized SCAQMD’s Jurisdiction Over the Project

The Applicant submitted an *Application for Authority to Construct/Permit to Operate* a 268 horsepower Generac propane backup generator to SCAQMD on August 14, 2023,⁵ thereby recognizing SCAQMD’s jurisdiction over the Project, in that the agency has discretionary permitting authority over the backup generator, which is a required component of the Project.⁶ As the Commission noted in its Request, the SCAQMD responded that its air permit review for the propane generator would be “processed in a timely manner,” within 180 days from August 14, 2023.⁷ Additionally, the Commission has confirmed on multiple occasions that air quality permits are “a bit different, and [the Applicant] will still need to get those permits from [SCAQMD] ...” because air quality permits are one of the “few technical areas” excepted from the scope of the jurisdiction the Commission has claimed in lieu of “any other state or local permits.”⁸

IV. SCAQMD Is A Responsible Agency and Its Permitting Authority Over the Air Quality Permit Is Not Subsumed by the Commission

Per Public Resources Code section 21080.4(a) and California Environmental Quality Act (“CEQA”) Guidelines section 15082(a), a lead agency must send its Notice of Preparation (“NOP”) to all public agencies with authority over a project or resources affected by a project. Here, the Commission’s NOP incorrectly identifies the State Water Resources Control Board and Regional Water Quality Control Board as the only Responsible Agencies. Additionally, Commission staff has taken the unsupportable position that SCAQMD is not a Responsible Agency and that “any local air quality permit would be subsumed in the CEC’s certification.”⁹ SCAQMD vehemently disagrees. As discussed *supra*, and as confirmed by Commission staff, receiving authority to construct and a permit to operate its backup generator is a condition

³ Nor did SCAQMD receive proper notice of the Commission’s Notice of Preparation of the Draft Environmental Impact Report. *See* TN253508, *County of Shasta Comments on Notice of Preparation of DEIR*, Dec. 4, 2023 (“County NOP Comments”) at 2-3 and discussion *infra*.

⁴ *See* the County’s comments in TN252654, *County of Shasta Response to Staff Objection to County’s Request for Reimbursement and Itemized Budget*, Oct. 19, 2023 at 14 that the purported notice it received did not conform to 20 California Code of Regulations (“C.C.R.”) section 1715(c) in that it was not issued by the Chair, a Presiding Member, or Executive Director of the agency, and was inconsistent with prior Commission notices to local governments pursuant to Public Resources Code section 25519(f) that included detailed project descriptions and the rights the local agency had to review, comment, and seek reimbursement for its participation.

⁵ Attached hereto as Exhibit A. The Applicant initially submitted its application on July 5, 2023, but SCAQMD deemed the Applicant’s initial application incomplete due to several deficiencies, including it not being signed. The Applicant submitted a conforming application on August 14, 2023, and SCAQMD deemed the application complete on August 14, 2023.

⁶ *See* County NOP Comments at 3.

⁷ Request at 2.

⁸ *See* County NOP Comments at 2-3 and Exhibit B.

⁹ TN253603, *Memo re Shasta County’s Comments on the Notice of Preparation of the Draft Environmental Impact Report*, Dec. 13, 2023 (“CEC Memo on County’s NOP Comments”) at 2.

precedent to the Commission granting the Applicant's request for certification of the Project.¹⁰ Therefore, SCAQMD's permitting authority is independent and separate from the Commission's authority over certification.

Moreover, Commission staff does not have authority to determine whether SCAQMD is a Responsible Agency. SCAQMD is a Responsible Agency for this Project by statute, not at the discretion of the Commission. Additionally, neither the Commission's General Counsel, nor the Commission itself, have issued a formal opinion on the CEC's jurisdiction over the Project, which jurisdiction the County continues to dispute.¹¹ The lack of a formal determination of jurisdiction is another example of the myriad procedural deficiencies that have been present in this opt-in proceeding from the start. It also stands in stark contrast to the numerous Commission determinations of jurisdiction over thermal power plants.¹² In short, the staff determination that SCAQMD is not a Responsible Agency is a non-determinative opinion that conflicts with the facts.

V. The Commission's Alleged Exclusive Jurisdiction Over the Air Quality Permit is Preempted by Federal Law

The Commission cannot subsume SCAQMD's air quality permitting authority into its opt-in permitting process because doing so is prohibited by federal law. The Commission's issuance of a certificate for an opt-in project replaces the otherwise applicable local permitting process for qualified projects, "to the extent permitted by federal law"¹³ Here, neither state nor federal law would allow the Commission to supersede SCAQMD's air permit requirement. Specifically, the federal Clean Air Act ("CAA") requires states to adopt a state implementation plan ("SIP") that includes "regulation of the modification and construction of any stationary source within the areas covered by the plan as necessary to assure that national ambient air quality standards are achieved, including a permit program as required in Part C and D of this subchapter."¹⁴ Thus, the SIP must include not only the major stationary source permit programs in Parts C and D, but also a permit program for minor sources as necessary to ensure attainment. Such regulations must be contained in the SIP, not in an unrelated statute or program (e.g., the Commission's opt-in certification process).

In fact, pursuant to state law, the agency responsible for the SIP in California is the California Air Resources Board ("CARB"), not the Commission.¹⁵ Pursuant to the enabling

¹⁰ See, e.g., email correspondence between Joseph Hughes (CEC) and Brewster Birdsall and Rachael Dal Porto (Aspen Environmental Group), re *Fountain Wind Project – Data Adequacy Tracker Sheet*, May 30, 2023 to June 14, 2023, attached hereto as Exhibit B.

¹¹ See, e.g., TN252439, *County of Shasta Standing Reservation of Rights*, Sep. 28, 2023.

¹² See, e.g., *In re Los Angeles Department of Water and Power's Harbor Generating Station Repowering Project*, Docket No. 89-C & I-3, Order No. 90-0117-01, Jan. 17, 1990 (order instituting investigation into Commission jurisdiction); *In re Applied Energy, Inc.'s Four San Diego Powerplants*, Docket No. 88-C & I-4, Order No. 88-0713-01, July 13, 1988 (in which the Commission granted the developer's petition for CEC confirmation that its powerplants were not subject to Commission jurisdiction); *In re Calenergy Company, Inc.'s Desert Valley/Saltion Sea Unit 5 Geothermal Project*, Docket No. 98-C&I-1, Order No. 98-0318-1(e), March 18, 1998 (finding that petitioner's geothermal plant was not subject to Commission jurisdiction).

¹³ Pub. Res. Cod § 24445.1(b)(1).

¹⁴ CAA section 110(a)(2)(C).

¹⁵ Health & Safety Code § 39602.

statute, CARB is to “coordinate the activities of all districts” necessary to comply with the CAA.¹⁶ The statutes do not refer to the Commission. Therefore, if a permit program for minor sources is necessary, it must be included in the SIP, according to federal law.

Furthermore, at the state level, the district rules—not Commission rules—are the requirements that go into the SIP. This state law should not be interpreted to brush aside the specific requirements for air district permit programs found in the Health and Safety Code. These include the requirements in Health and Safety Code sections 40918, 40919, 40920, and 40920.5 for a control program to achieve no net increase in emissions for permitted sources, and specified degrees of control technology for permitted sources, depending on the degree of pollution in the relevant district.

In sum, the Commission maintains “exclusive jurisdiction” over opt-in applications for certification of qualifying projects, but only to the extent permitted by federal law¹⁷ and here, federal law prohibits the Commission from subsuming SCAQMD’s discretionary permitting authority over the Applicant’s backup generator. The Commission’s attempt to prevent SCAQMD from reviewing the proposed Project as a Responsible Agency under CEQA, if not corrected, risks severe consequences for the State. Specifically, it could cause the EPA to revoke both the State’s authority to regulate air pollution from stationary sources and its permitting authority over those sources. Both of which would place local air quality protections in the hands of federal agencies not as familiar with the local environment and not necessarily as interested in protecting it. The Commission can avoid these potentially dire consequences by acknowledging that SCAQMD is a Responsible Agency under Public Resources Code section 21069, sending SCAQMD a corrected copy of the NOP and giving SCAQMD thirty (30) days to send a written reply specifying the scope and content of environmental information that is germane to SCAQMD’s statutory responsibilities and that must be included in the EIR pursuant to CEQA.¹⁸

VI. SCAQMD’s Response to the Commission’s Request

In response to the Commission’s Request, SCAQMD hereby submits under protest the following: (1) an engineering evaluation and draft permit conditions for the Applicant’s backup generator¹⁹ and (2) recommendations for controlling emissions from other activities associated with the overall development of the proposed Project.²⁰ The submission of this input in no way constitutes an admission by SCAQMD that it is not a Responsible Agency under CEQA. Furthermore, SCAQMD explicitly reserves its right to challenge, at the Commission, or in court, the Commission’s determination that SCAQMD is not a Responsible Agency and related failure to properly notice SCAQMD of the Commission’s NOP.

¹⁶ *Id.* “Districts” are defined as air pollution control districts or air quality management districts created or continued in existence pursuant to the provisions of Part (commencing with section 40000). Health & Safety Code § 39025.

¹⁷ Pub. Res. Code § 25545.1(b)(1).

¹⁸ Pub. Res. Code § 21080.4(a) and CEQA Guidelines section 15096(b)(2).

¹⁹ Attached hereto as Exhibit C.

²⁰ Attached hereto as Exhibit D.

In conclusion, SCAQMD is a Responsible Agency under CEQA and should have received timely notice and a copy of the Commission's NOP, so that it could review and provide comments thereon; but it did not. SCAQMD nevertheless, but under protest, submits this response to inform Commission staff's development of the draft environmental impact report with respect to air quality.

Sincerely,



Paul A. Hellman
Air Pollution Control Officer
Shasta County Air Quality Management District

EXHIBIT A

APPLICATION FOR AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE – FOUNTAIN WIND

**SHASTA COUNTY DEPARTMENT OF RESOURCE MANAGEMENT
AIR QUALITY MANAGEMENT DISTRICT**

1855 PLACER STREET, SUITE 101, REDDING, CALIFORNIA 96001 PHONE (530)225-5674/FAX (530)225-5237
aqmd.shastacounty.gov

APPLICATION FOR AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE

RECEIVED
AUG 14 2023
Shasta County AQMD

INSTRUCTIONS

PERMIT NUMBER -PO-

Each applicant for an Authority to Construct shall provide to the District the following:

- A. One application form for each emission unit or multi-component system at the facility.
- B. A \$75 one time filing fee for each application or a \$15 transfer of ownership * or name change fee made payable to the Shasta County AQMD. (*Furnish a copy of the sales agreement or a signed statement from the seller.)
- C. Adequate drawings of each emissions unit, including plot plan and area map indicating receptors within 1/4 mile of the facility. Any public or private school with an outer boundary within 1000 feet of the emissions unit must be included on the map.
- D. A signature of a responsible member of the organization on each application.
- E. An annual permit fee must be paid before a Permit to Operate is granted. The District shall notify the applicant of the appropriate amount due following an initial inspection of the permitted device(s).

Print Clearly

1. Business Name: Fountain Wind LLC
2. Email: Sara.Parsons@avangrid.com
3. Assessor's Parcel Number: 029-190-010 (see figures) Telephone: 281.520.6995 Fax: _____
4. Type of Business: renewable energy generation
5. Mailing Address: 100 McKinney Street, Suite 700, Houston, TX 77002
6. Address of Equipment: 40.823144 degrees, -121.821985 degrees
7. Equipment Description (use additional sheets if required): A 268 horsepower Generac emergency generator fueled by propane.

- | | |
|--|---|
| 8. Application to: (check one):
Operate Existing Equipment _____
New Construction <u> x </u>
Change of Location _____
Modification _____
Exempt Equipment _____
Change of Ownership* _____ | 9. Type of Organization:
Corporation <u> x </u>
Partnership _____
Individual Owner _____
Government Agency _____

(Copy of agreement or statement attached? Yes _____ No <u> x </u>) |
|--|---|

10. Planned construction dates: Start: April 2025 End: December 2025

11. Is a plot plan attached? Yes: x No: _____

12. Is this emission unit within 1000 feet from the outer boundary of any public or private school? Yes: _____ No: x

13. Name of Owner(s)/Principles: Sara Parsons DocuSigned by: _____ Date: 8/14/2023

14. Signature of Applicant: Sara Parsons _____ Date: _____
7E3636F16E82493...

15. Print Signer's Name: Sara Parsons Title: Authorized Representative

BY SIGNING THIS APPLICATION, THE APPLICANT/PROPERTY OWNER AGREES TO DEFEND, INDEMNIFY, AND HOLD THE SHASTA COUNTY AIR QUALITY MANAGEMENT DISTRICT HARMLESS FROM ANY CLAIM, ACTION, OR PROCEEDING BROUGHT TO ATTACK, SET ASIDE, VOID OR ANNUL THE DISTRICT'S APPROVAL OF THIS APPLICATION, ISSUANCE OF ANY ASSOCIATED PERMIT, AND ANY ENVIRONMENTAL REVIEW ASSOCIATED WITH THE PROPOSED PROJECT.

Other Division Review**Air Quality Fees Collected**

General Plan/Zoning:		Type	Date	Amount	Receipt #	Rec'd By
Use requires use permit:	Yes No	Filing				
Use requires building permit:	Yes No	Permit				
Planning:	Building:					
Date:	Date:					

SHASTA COUNTY DEPARTMENT OF RESOURCE MANAGEMENT
AIR QUALITY MANAGEMENT DISTRICT
1855 PLACER STREET, SUITE 101, REDDING, CA 96001
VOICE (530)225-5674/FAX (530)225-5237

SUPPLEMENTAL INFORMATION: INTERNAL COMBUSTION ENGINE
(specifically natural gas-fired or propane-fired engines used for electricity generation)

Provide the following data, specifications, drawings, and plans for each engine as a supplement to the standard application form. This information requested should be submitted complete and accurate to ensure expedient review and evaluation.

1. **Facility Information**

Company Name: Fountain Wind LLC

2. **Equipment Location Drawing**

The drawing or sketch submitted must be dimensioned and must show the following:

- a) The property involved and outlines of all buildings. Identify property lines plainly.
See attached map.
- b) Location and identification of the internal combustion engine on the property.
The genset will be located within the substation and switchyard depicted on the map.
- c) Location of the property with respect to streets and all adjacent properties within 1000'.
Also, identify use type of the adjacent properties.
No receptors within 0.25 mi and no schools within 1,000 ft. Nearest receptor is 2 mi NW.

3. **List the Equipment Driven by the Engine (or generator)**

4. **Engine Specifications**

- a) Engine Manufacturer: Generac Industrial Power
- b) Model Number: RG060
- c) Identification/Serial Number: 3004556017
- d) Horsepower: 107 bhp
- e) Power Rating: 60 kw
- f) Total Displacement: 146.46 cuft in³
- g) Fuel Type: propane natural gas or propane

SUPPLEMENTAL (cont)4. **Engine Specifications** (cont)

- h) Fuel Usage Rate (maximum): 327 cuft/hour _____ cuft/year
- i) Fuel Storage Tank: 65 cuft capacity
aboveground or underground
- j) Emission Data: Data must include: criteria pollutant emission rates, stack height, stack diameter, stack exhaust flow rate, and stack exhaust temperature. Submittal of the engine manufacturers specifications manual is recommended (if available).

5. **Engine Operation**

- a) Maximum Operating Schedule: 24 hrs/day 1 days/week 3 weeks/year
- b) Average Operating Schedule: 0.167 hrs/day _____ days/week 52 weeks/year

6. **Describe Periodic Maintenance Procedures**

The genset will be used as a backup generator at the site. Other than use as a backup, the engine will be operated a maximum of 8.6 hours (520 minutes) per year for testing.
Testing/maintenance will typically occur once a week for approximately 10 minutes

7. **Generator Specifications (if applicable)**

- a) Generator Manufacturer: Generac Industrial Power
- b) Model Number: RG060
- c) Power Rating: 60 kw

8. **Filer Information**Filer's Printed Name: Sara Parsons

DocuSigned by:
 Signature: Sara Parsons Date: 8/14/2023
 7E3636F16E82493...

NOTICE: After the Authority to Construct is granted, any deviation from approved plans is not permitted without first securing additional approval from the Air Pollution Control Officer. As stated in the Health and Safety Code Sections 41510, 41511, and 42304, the Air Quality Management District shall make random audits on submitted data to insure the appropriateness of such data. The willful submission of false or inaccurate data constitutes a misdemeanor per Health and Safety Code Section 42400.



Stantec Consulting Services Inc.
601 SW Second Avenue Suite 1400, Portland OR 97204-3128

August 14, 2023

Attention: Monica Stant
Air Pollution Inspector II
Shasta County Air Quality Management District
Suite 101
1855 Placer Street
Redding, CA 96001

Dear Monica,

Reference: Fountain Wind LLC Authority to Construct an Emergency Generator – East of Round Mountain, CA (AP# 029-190-010-000) – Response to Incompleteness Letter

Fountain Wind LLC (Applicant) received the letter of incomplete application on July 26, 2023 pertaining to the Authority to Construct an emergency generator for the Fountain Wind Project east of Round Mountain, CA. Below are responses to the data requests contained therein. The updated application form is included as Attachment A.

SCAQMD QUESTION 1

Please clarify and/or correct the following contradictions within the submitted application materials:

- The ATC application and engine supplemental forms state the engine rating is 268 BHP, however in the "Statement of Exhaust Emissions" in the manufacturer's equipment specification (spec) sheets, the rated power is listed as 129 BHP or 107 BHP, depending on the engine displacement.
- **Applicant Response:** 107 is the appropriate BHP
- The "Engine Specifications" table in the spec sheets and the ATC engine supplemental form indicate the engine will have a total displacement of 2.4 L, however, in the "Statement of Exhaust Emissions" the highlighted emissions specifications are for a 4.5 L displacement engine.
- **Applicant Response:** 2.4L is the correct displacement for the 60kW generator
- The ATC engine supplemental form indicated the maximum fuel usage rate of the generator unit will be 1.47 cuft/hr, however the "Engine Fuel Consumption" table in the provided spec sheets indicated the fuel usage at 100% of the rated load is 327 cuft/hr.
- **Applicant Response:** Fuel usage is 327 cuft/hr. at 100%.
- The "Engine Operation" section of the ATC engine supplemental form indicated the engine's average operation, that is, its testing and maintenance schedule, will be to run for 10 minutes once every week (0.167 hrs/day, 1 day/week, 52 weeks/yr) however then the description of periodic maintenance procedures below indicates "periodic testing of emergency gensets is typically conducted monthly".

Reference: Fountain Wind LLC Authority to Construct an Emergency Generator – East of Round Mountain, CA (AP# 029-190-010-000) – Response to Incompleteness Letter

- **Applicant Response:** Testing and maintenance will typically occur once a week for approximately 10 minutes (0.167 hrs/day, 1 day/week, 52 weeks/yr)

SCAQMD QUESTION 2

The Maximum Operating Schedule in the ATC engine supplemental form suggests the engine will operate no more than 16 hour per day. Please confirm that in a power loss situation, that the backup generator will be operated for no longer than 16 hours each day as many emergency backup generators are required to provide power for 24 hours each day until power is restored.

Applicant Response: In a power loss situation, the generator would only be used to power critical equipment, including the HVAC system, within the substation control house. The generator would operate continuously until power is restored, but is not anticipated to exceed 24 hours per event.

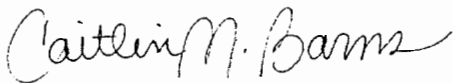
SCAQMD QUESTION 3

The version of the spec sheet diagrams received by the District does not show any dimensions of the genset, therefore the district is unable to determine the stack height and diameter of the engine exhaust from the materials submitted.

Applicant Response: There is no stack on the generator. It will be a standard exhaust with an approximately 2.5" diameter pipe.

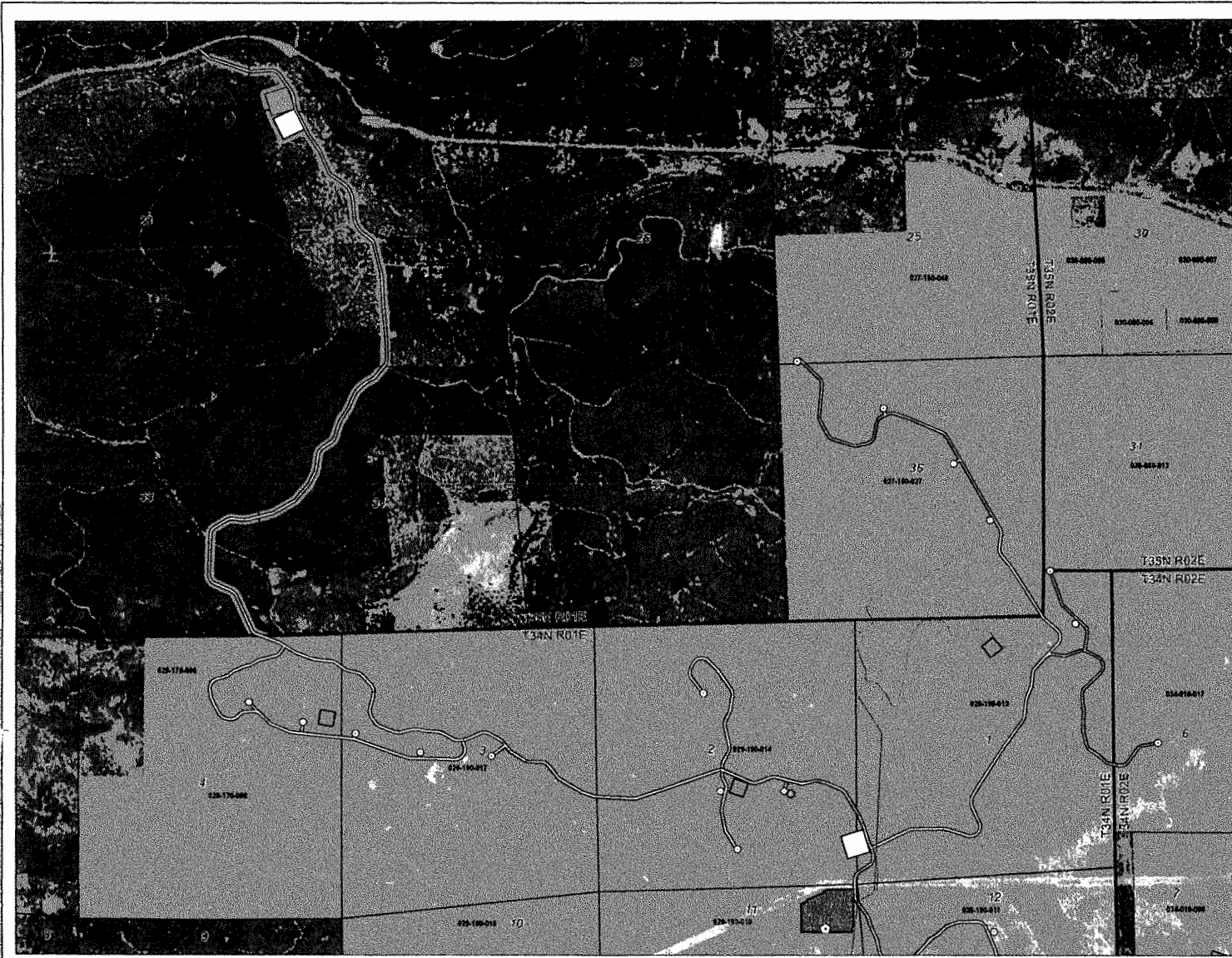
Regards,

Stantec Consulting Services Inc.



Caitlin Barnes
Senior Environmental Scientist
Phone: 503-207-4368

Attachment: Attachment A: Revised Authority to Construct Form

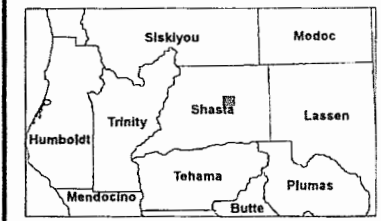


- Legend**
- Turbine Location
 - ◇ Met Tower Location
 - ◻ Microwave Tower Location
 - ◻ Storage Shed Location
 - Overhead Collection
 - - - Underground Collection
 - Access Road
 - ▭ Batch Plant
 - ▭ O&M Facility
 - ▭ Staging Area
 - ▭ Substation/Switchyard Site
 - - - Lease Hold Area
 - ▭ PLSS Section Boundary
 - ▭ PLSS Township Range Boundary



0 3,000 Feet
(At original document size of 11x17)
1:24,000

Notes
1. Coordinate System: NAD 1983 UTM Zone 10N
2. Data Sources: Shasta County GIS Division
3. Background: Esri World Imagery Base Map



Project Location
Shasta County
California

Client/Project
Fountain Wind LLC
Fountain Wind Project

Prepared by GC on 2023-05-24
TR Review by CA on 2023-05-25
IR Review by CB on 2023-05-25
2023723157

Figure No.
1

Title
Project Overview
Map 1 of 3

Disclaimer: This document has been prepared based on information provided by others as cited in the Notes section. Stantec has not verified the accuracy and/or completeness of this information and shall not be responsible for any errors or omissions which may be incorporated herein as a result. Stantec assumes no responsibility for data supplied in electronic form and the recipient accepts full responsibility for verifying the accuracy and completeness of the data.

EXHIBIT B

**EMAILS BETWEEN JOSEPH
HUGHES, BREWSTER BIRDSALL,
AND RACHAEL DAL PORTO
(MAY 30 – JUNE 14, 2023)**

Cc: Rachael Dal Porto[RDPorto@aspeneg.com]
To: Brewster Birdsall[bbirdsall@aspeneg.com]
From: Hughes, Joseph@Energy[/o=ExchangeLabs/ou=Exchange Administrative Group (FYDIBOHF23SPDLT)/cn=Recipients/cn=7dd5e80572b644209e9607ba7bdc630-Hughes, Jos]
Sent: Wed 6/14/2023 12:55:41 PM (UTC-07:00)
Subject: Re: Fountain Wind Project - Data Adequacy Tracker Sheet

Yes, I think so. Although this will be minimal since they would only be permitting a small propane engine. But nonetheless we'll need something from them. I think the applicant and the district is both aware of this. Thanks!

From: Brewster Birdsall <Bbirdsall@aspeneg.com>
Sent: Wednesday, June 14, 2023 12:36 PM
To: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Cc: Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: RE: Fountain Wind Project - Data Adequacy Tracker Sheet

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Joey –

Oh, I misunderstood Opt-in. I guess Fountain would get a EIR – and also a “license” – from CEC, where the CEC license has all the ‘one-stop-shop’ conditions. Really quite different from SPPE’s where the ATC/PTO comes after the EIR.

Our checklist asks for a “Determination of Compliance” like those required for a conventional power plant. But in Shasta AQMD, I don’t see specific power plant rules. But they do have a “preliminary decision” in Part 603 of their NSR rule. Let’s ask for that.

Maybe we revise now **AIR-002 & AIR-024**–
Prior to Draft EIR release, the applicant must file the application for an ATC/PTO for the emergency generator and the Shasta County AQMD must provide a written preliminary decision, as in Part 603 of Shasta County AQMD Rule 2.1, New Source Review.

I wonder: do we need AQMD’s analysis now or later? It looks like CEC needs this AQMD input before releasing Draft EIR & Conditions of Certification (COC’s). Right?

- Brewster

From: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Sent: Wednesday, June 14, 2023 11:14 AM
To: Brewster Birdsall <Bbirdsall@aspeneg.com>
Cc: Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: Re: Fountain Wind Project - Data Adequacy Tracker Sheet

Quick question. For AIR-024 you said, "no further info needed. The applicant may file the application for ATC/PTO for emergency generator after Energy Commission action." But won't we need the district's ATC/PTO to fold in the conditions from that permit to our license?

Joey

From: Brewster Birdsall <Bbirdsall@aspeneg.com>
Sent: Tuesday, June 6, 2023 10:12 AM
To: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Cc: Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: RE: Fountain Wind Project - Data Adequacy Tracker Sheet

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Okay – It makes sense if we use this phase of “adequacy” to hopefully have fewer or even no later Data Requests.

- B

From: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Sent: Tuesday, June 6, 2023 10:04 AM
To: Brewster Birdsall <Bbirdsall@aspeneg.com>
Cc: Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: Re: Fountain Wind Project - Data Adequacy Tracker Sheet

I added the request for live spreadsheets and additional information on turbine locations, etc to the disposition. I'm worried if we say it's data adequate we may have trouble obtaining what we need during the expedited timeframe.

Thanks for your help,
Joey

From: Brewster Birdsall <Bbirdsall@aspeneg.com>
Sent: Tuesday, June 6, 2023 9:49 AM
To: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Cc: Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: RE: Fountain Wind Project - Data Adequacy Tracker Sheet

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Joey –

I wrote my disposition by looking at the “information required” column. For AIR-001, that column looks like a Data Request.

I think they should provide live spreadsheets, if they haven’t already. That seems like a completeness issue. Those other requests could be moved from “information required” to Data Requests.

Happy to talk about it if you like.

- Brewster Birdsall, P.E., QEP
Aspen Environmental Group, San Francisco
Office: 415-696-5305
Cell: 415-269-8174

From: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Sent: Tuesday, June 6, 2023 8:48 AM
To: Brewster Birdsall <Bbirdsall@aspeneg.com>
Cc: Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: Re: Fountain Wind Project - Data Adequacy Tracker Sheet

Hi Brewster,

I am adding the disposition info to the matrix now. For AIR-001 you said the "Request" under "Information Required" asks for a lot of detail that is not in the Response. Do we have the live spreadsheets for TN 250274?

Do you think the live spreadsheet would suffice? And if so, can we request through a data request? Or do you want to have this before deeming this item data adequate? Additionally, are you looking for more information on the assumptions used? For example, a description of how long construction would occur at each wind turbine tower pad and the locations and distances of sensitive receptors with respect to these activities?

Thanks,
Joey

From: Brewster Birdsall <Bbirdsall@aspeneg.com>
Sent: Thursday, June 1, 2023 2:26 PM
To: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Cc: Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: RE: Fountain Wind Project - Data Adequacy Tracker Sheet

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Joey –

Although I was able to look at the response tracker spreadsheet on the Extranet, I couldn't directly edit the responses. The "disposition" cells have a data validation restriction that I couldn't get around.

For your review, attached is a small version including just the AQ items of the response tracker.

This file has one added column that I shaded blue for you to see my draft of the disposition. If they look good to you, these dispositions could be copied into the Extranet version of the tracker.

Hope this makes sense.

- Brewster Birdsall, P.E., QEP
Aspen Environmental Group, San Francisco
Office: 415-696-5305
Cell: 415-269-8174

From: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Sent: Thursday, June 1, 2023 10:23 AM
To: Brewster Birdsall <Bbirdsall@aspeneg.com>; Rachael Dal Porto <RDPorto@aspeneg.com>
Subject: Re: Fountain Wind Project - Data Adequacy Tracker Sheet

Hello Brewster, hello Rachael,

it looks like data requests are being prepared to get a better understanding of the project description, including the site boundary and exact locations of the wind turbines. The lack of useful visuals was something I found frustrating during my initial review. Hopefully this helps us better analyze potential construction related impacts.

Thanks,
Joey

From: Brewster Birdsall <Bbirdsall@aspeneg.com>
Sent: Tuesday, May 30, 2023 3:09 PM
To: Rachael Dal Porto <RDPorto@aspeneg.com>
Cc: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>
Subject: FW: Fountain Wind Project - Data Adequacy Tracker Sheet

CAUTION: This email originated from outside of the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Rachael –

Introducing you to Joey Hughes of the Energy Commission, cc'd above. He will be directing our new work on Fountain Wind for the CEC.

For us, this will be 1995.010. The CEC's project manager (Lon Payne) should eventually invite us to a Sharepoint "extranet" site where work will be consolidated.

The CEC's docket is here: <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-OPT-01>

You can sign up for auto email notifications here: <https://www.energy.ca.gov/powerplant/wind/fountain-wind-project>

Stay tuned for more. Thanks!

- Brewster Birdsall, P.E., QEP
Aspen Environmental Group, San Francisco
Office: 415-696-5305
Cell: 415-269-8174

From: Hughes, Joseph@Energy <Joseph.Hughes@energy.ca.gov>

Sent: Tuesday, May 30, 2023 1:28 PM

To: Brewster Birdsall <Bbirdsall@aspeneg.com>

Subject: Fountain Wind Project - Data Adequacy Tracker Sheet

Attached.

EXHIBIT C

AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE EVALUATION – FOUNTAIN WIND

AUTHORITY TO CONSTRUCT/PERMIT TO OPERATE EVALUATION

**Shasta County Air Quality Management District
1855 Placer Street, Suite 101
Redding, CA 96001**

**Prepared by Chad Peterson, Senior Air Pollution Inspector
February 23, 2024**

COMPANY NAME: Fountain Wind LLC
FACILITY ADDRESS: 40.823144 degrees, -121.821985 degrees
MAILING ADDRESS: 100 McKinney Street, Suite 700, Houston, TX 77002
AP NUMBER: 029-190-010-000
APPLICATION DATE: July 12, 2023
ATC NUMBER: 23-PO-07
DEVICE/PROCESS: Propane Engine (Emergency Backup)

EMISSION UNIT/PROJECT DESCRIPTION

Fountain Wind LLC (applicant) has submitted an application for an Authority to Construct/Permit to Operate for a propane generator to be located at 40.823144°, -121.821985°. The nearest resident is located approximately 2 miles northwest of the proposed generator. The proposed genset is powered by a 107-horsepower propane-fired Generac Power Systems engine, Model RG060. The unit will be operated during emergency situations and for periodic exercise, testing and maintenance.

Equipment

One (1) 107 hp Generac Power Systems Propane Engine
One (1) Generac Generator, Model RG060

APPLICABLE RULES AND POLICY

Shasta County Air Quality Management District

Rule 2:1 New Source Review
Rule 2:1A Permits Required
Rule 2:3 Toxics New Source Review for Complying with Federal Clean Air Act,
Section 112(g)

Policy Establishing Guidelines for Toxic Health Risk Assessment

Rule 2:5 Exemptions
Rule 2:11 Fees
Rule 3:2 Specific Air Contaminants
Rule 3:28 Stationary Internal Combustion Engines

California Health and Safety Code

Section 41700	No Person Shall Discharge Pollutants “Public Nuisance”
Section 41701	No Emissions Shall Exceed Ringelmann 2
Section 42301.6	Public Notice for Possible Sources of Air Hazardous Emissions near School Prior to Approving Permit.

Shasta County Environmental Review Guidelines- Procedures for Implementing the California Environmental Quality Act

CEQA

CCR Title 14 Section 15000-15387 Guidelines for California Environmental Quality Act (CEQA) (Shasta County AQMD Environmental Review Guidelines)

17 CCR, §93115

Airborne Toxic Control Measure for Stationary Compression Ignition (CI) Engines

40 CFR, Part 63, Subpart ZZZZ

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

40 CFR, Part 60, Subpart JJJJ

Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

ATC EVALUATION

This evaluation sets forth the legal and factual basis for the conditions contained in the proposed Authority to Construct. This section evaluates rules and regulations as they apply to the specific device or process being proposed. Non-applicable sections of District rules may not be evaluated in this document. For a complete list of District rules, please contact the District or visit: <https://www.shastacounty.gov/air-quality>

Rule 2:1 New Source Review

(Amended 3-10-92, 12-23-92, 8-31-93, 6-24-97)

PART 100. GENERAL

102. Applicability:

- a. This Rule shall apply to all new and modified stationary sources that are subject to District permit requirements, and after construction, emit or may emit any affected pollutants. The requirements of this regulation in effect at the time any application for an Authority to Construct is deemed complete shall apply.*

Discussion:

This source is not exempt by Section 42310 of the *California Health and Safety Code*. Therefore, a New Source Review (NSR) is required per Rule 2:1A.

Part 300. REQUIREMENTS

a. *Purpose:*

Any emissions unit subject to this Rule shall be subject to the following requirements:

301. *Best Available Control Technology (BACT)*

a. *Purpose:*

This rule requires that an applicant shall apply BACT to any new emissions unit or modification of an existing emissions unit that results in an emission increase and the potential to emit for the emission unit equals or exceeds the following amounts:

<u>Pollutant</u>	<u>Pounds/Day</u>
Reactive organic compounds	25.0
Nitrogen oxides	25.0
Sulfur oxides	80.0
Particulate matter (PM ₁₀)	80.0
Carbon monoxide	500.0

Discussion:

The proposed equipment, once operational, will emit reactive organic compounds, nitrogen oxides, sulfur dioxides, particulate matter, and carbon monoxide. Rule 3:28 limits operation for testing and maintenance to 100 hours per year. The proposed engine trigger BACT for CO when operated continuously for 24 hours, Refer Appendix 1 and 2 for BACT calculations. The proposed engine will have a daily operational limit of 15 hours for testing and maintenance. Refer to Table 1 below for engine emissions when operated for 15 hours. There will not be a limit for emergency use hours of operation. The Authority to Construct will also contain a permit condition limiting annual testing and maintenance to no more than 100 hours per year.

TABLE 1			
Pollutant	Daily Potential to Emit (lbs/day)	BACT Threshold (lbs/day)	BACT Required?
PM ₁₀	0.117	80.0	No
NO _x	7.61	25.0	No
CO	491.22	500.0	No
SO _x	0.007	80.0	No
VOC	3.252	25.0	No

306. *Ambient Air Quality Standards:*

- a. *In no case shall the emissions from the new or modified stationary source cause or make worse the violation of an ambient air quality standard. An impact analysis shall be used to estimate the effects of a new or modified source. In making this determination, the APCO shall take into account the mitigation of emissions through offsets obtained pursuant to this Rule.*

Discussion:

Emissions from the proposed engine will emit less than Level B threshold as defined in the Procedure for Implementing the California Environmental Quality Act, therefore, the emissions from the proposed engine are below the District's significant standard. A project that does not result in the generation of emissions beyond the District's significance standards would not result in an increase in the frequency or severity of any existing air quality violations, and thus could be considered to conform to the overall reduction goals of the 2021 Air Quality Attainment Plan and does not conflict with its overall implementation.

PART 400. CALCULATIONS***401. Purpose:******a. The following calculation procedures shall be used to determine:***

- a. The emissions change for all new or modified emissions units; and*
- b. Actual emission reductions (AERs) for all shutdowns and modified emissions units; and*
- c. The cumulative emissions increase from all new and modified emissions units for a stationary source.*

404. Calculating Emissions Changes:***a. Emissions Increase******New or Modified Emissions Unit:***

The emissions change for a new or modified emissions unit shall be calculated by subtracting historic emissions from proposed emissions.

$$\text{Emissions change} = (\text{proposed emissions}) - (\text{historic emissions})$$

Discussion:

The proposed engine will be newly constructed, therefore historical emissions will be zero. District Rule 3:28 and 40 CFR, Part 60, Subpart JJJJ limit emergency back-up engines to 100 hours per year for testing and maintenance. Proposed emissions and health risk calculations are based on this maximum allowance. The Authority to Construct will contain a permit condition limiting annual testing and maintenance to no more than 100 hours. Table 2 below breaks down the change in emissions of the proposed engine, refer to Appendix 1 for calculations.

TABLE 2

Pollutant	Historic Emissions (Tons/Year)	Proposed Emissions (Tons/Year)	Emissions Increase (Tons/Year)
PM ₁₀	0.000	0.000	0.000
NO _x	0.000	0.026	0.026
CO	0.000	1.637	1.637
SO _x	0.000	0.000	0.0000
VOC	0.000	0.011	0.011

500. AIR QUALITY IMPACT ANALYSIS

a. Purpose

In no case shall emissions from a new or modified emissions unit, cause or make worse the violation of an ambient air quality standard. The Air Pollution Control Officer (APCO) may require an applicant to use an air quality model to estimate the effects of a new or modified emissions unit. For the purpose of performing an impact analysis the following shall apply:

- a. Air quality models shall be consistent with the requirements contained in the most recent edition of EPA's "Guidelines on Air Quality Models, OAQPS 1.2-080" unless the APCO finds that such model is inappropriate for use. After making such a finding, the APCO may designate an alternate model only after allowing for public comment and only with the concurrence of the Air Resources Board and the Environmental Protection Agency. All modeling costs associated with the siting of a new or modified emissions unit shall be borne by the applicant;*
- b. In performing an impact analysis, if the proposed stack height is higher than is dictated by good engineering practices, the actual height used for the purposes of modeling shall be calculated in accordance with good engineering practices.*

Discussion:

Currently available modeling tools are appropriate for regional evaluations, but not individual projects like this proposed project. Since ozone is not formed at the location of the source this would necessitate the use of complex and more sophisticated modeling that is not reasonably feasible for the proposed project. Since this permitting action is evaluated under the existing District permitting program and emission calculations indicate that emissions are insignificant, the District will not require modeling of emissions specific to the facilities operation.

PART 600. ADMINISTRATIVE REQUIREMENTS

- a. The following administrative requirements shall apply to this Rule:*

601. *Complete Application:*

- a. *The Air Pollution Control Officer (APCO) shall determine whether the application is complete not later than thirty (30) days after receipts of the application, or after such longer time mutually agreeable to the applicant and the APCO. If the APCO determines that the application is not complete, the applicant shall be notified in writing of the decision and of the required additional information.*

Upon receipt of any resubmission of the application, a new 30-day period to determine completeness shall begin. Completeness of an application or resubmitted application shall be evaluated on the basis of the information requirements set forth in District regulations (adopted pursuant to Article 3, Section 65940 through 65944 of Chapter 4.5 of Division 1 of Title 7 of the Government Code) as they exist on the date on which the application or resubmitted application was received.

Upon determination that the application is complete, the APCO shall notify the applicant in writing. The APCO may, during the processing of the application, request an applicant to clarify, amplify, correct, or otherwise supplement the information submitted in the application.

606. *Authority to Construct, Final Action:*

- a. *Within 180 days after acceptance of an application as complete, the APCO shall take final action on the application after considering all written comments.*

The APCO shall provide written notice of the final action to the applicant, the EPA, and the ARB, and shall make the notice and all supporting documents available for public inspection at the District's office for all Authorities to Construct issued for emissions units subject to the requirements of Section 301 or 302 of this Rule.

Discussion:

The District received an incomplete, unsigned application for this project on July 12, 2023. In response to the District's incompleteness determination letter, a revised application was submitted on August 14, 2023, which was determined to be complete on that same date. Therefore, the District intends to take final action on this application within 180 days of August 14, 2023.

Rule 2:1A Permits Required:
(Amended 5-08-84)

- a. *Authority to Construct:*

Any person who is building, erecting, altering, or replacing any article, machine, equipment or other contrivance, or multi-component system including same, portable or stationary and who is not exempt under Section 42310 of the California Health and Safety Code, the use of which may cause the issuance of air contaminants, shall first obtain written authority for such construction from the Air Pollution Control Officer (APCO).

Discussion:

This source is not exempt by Section 42310 of the California Health and Safety Code. An Authority to Construct/Permit to Operate is required per Rule 2:1A. The application for an Authority to Construct was filed, along with the \$75 filing fee, on July 12, 2023.

Rule 2:3 Toxics New Source Review for Complying with Federal Clean Air Act
Section 112(g)
(Adopted 11/14/00)

a. Purpose

The purpose of this rule is to require the installation of Best Available Control Technology for Toxics (T-BACT) at any constructed or reconstructed major source of hazardous air pollutants (HAPs). All T-BACT determinations shall ensure a level of control that the Air Pollution Control Officer (APCO) has determined to be, at a minimum, no less stringent than new source maximum achievable control technology (MACT) as required by the Federal Clean Air Act (CAA), §112(g)(2)(B) and implemented through 40 CFR subpart B, §§63.40-63.44.

Discussion

A major source of HAPs is defined as a stationary source that has the potential to emit ten tons per year or more (≥ 10 Tons/yr) of a single HAP or Twenty-five tons per year or more (≥ 25 Tons/yr) of any combination of HAPs. The proposed engine does not have the potential to emit ≥ 10 Tons/yr of a single HAP or ≥ 25 Tons/yr of any combination of HAPs. T-BACT is not required by Rule 2:3. Refer to Appendix 1 for calculations.

Policy Establishing Guidelines for Toxic Health Risk Assessment

a. Purpose

This policy establishes guidelines whereby permitting decisions may be made based on the quantitative effects of contaminant toxicity. This policy may also be used to implement the screening risk assessment provisions of the AB 2588 Air Toxics “Hot Spots” Emission Inventory Criteria and Guidelines Report. These guidelines are in large part composed of risk assessment procedures outlined in the California Air Pollution Control Officer’s Association (CAPCOA) Air Toxics “Hot Spots” Program Risk Assessment Guidelines.

Discussion

The *Policy Establishing Guidelines for Toxic Health Risk Assessment* establishes limits where T-BACT is required and permitting threshold for cancer risk, chronic hazard index and acute hazard index. Sources that exceed the cancer risk, chronic hazard index or acute hazard index thresholds cannot be permitted by the APCO.

The District performed a health risk assessment (HRA) for the proposed engine on February 21, 2024. The results of the HRA are provided in Table 3. AP-42 does not provide products of combustion for propane fuel, therefore, due to the similarity of propane and natural gas fuels, the products of combustion for a natural gas was utilized from AP-42 Section 3.2 for the HRA. Products of combustion for a natural gas-fired engine include:

- 1,1,2,2 Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,1,-Dichloroethane
- 1,3 Butadiene (TAC)
- Acetaldehyde
- Acrolein

- Benzene (TAC)
- Carbon Tetrachloride (TAC)
- Chlorobenzene
- Chloroform (TAC)
- Ethylene Dibromide (TAC)
- Formaldehyde (TAC)
- Methanol
- Methylene Chloride (TAC)
- PAH
- Styrene
- Toluene
- Vinyl Chloride (TAC)
- Xylene

All of these compounds are listed in Table 1, of the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* with Inhalation, Acute Inhalation or Chronic Inhalation Unit Risk Factors. HARP2 Air Dispersion & Risk Tool was utilized, using the parameters given in the Authority to Construct application and 100 hours of operation, to calculate health risk. A Grid Spacing of 20 meters was used to locate the maximally exposed individual resident (MEIR). Refer to Health Risk Assessment (HRA) for the locations of the MEIRs.

TABLE 3: HRA Results

Receptor	Cancer Risk 1 (per million)	Chronic Hazard Index	Acute Hazard Index
MEIR	0.000155	0.00000212	0.00546
T-BACT Threshold	1.0	1.0	1.0
Exceeds T-BACT Threshold?	No	No	No
Permitting Threshold	10	1.0	1.0
Exceeds Permitting Threshold?	No	No	No

The proposed engine does not exceed permitting thresholds when operated 100 hours per year. T-BACT is not required.

Rule 2:5 Exemptions

- a. *Purpose:*
The APCO may exempt any kind or type of machines or devices within specific categories.

Discussion

The proposed engine is subject to District, State, and Federal regulations and therefore, is not exempt from District permitting.

Rule 2:11 Fees

- a. *Purpose:*
Rule 2:11 establishes fees for specific device categories, processes and other District services.

Discussion

The emergency standby engine has been designated an insignificant source. Based on this rule, the Authorization to Operate fee is \$20.00 per year for *Insignificant Source/Emission Inventory Tracking*.

Rule 3:2 Specific Air Contaminants

a. *Rule 3:2:*

No person shall discharge contaminants from any single source into the atmosphere in amounts greater than those designated in Table 1 of this Rule.

Discussion:

Rule 3 is composed of 33 specific rules. It is district policy that the specific rule for a source category applies. Rule 3:2 applies if no source category fits for that particular equipment. Rule 3:28, Internal Combustion Engines is the specific prohibitory rule for emergency use engines.

Rule 3:28 Stationary Internal Combustion Engine

a. *Applicability:*

Rule 3:28 applies to any gaseous, diesel, or any other liquid-fueled stationary internal combustion engine within the boundaries of the District.

Discussion

This engine meets the requirement for an emergency stand-by engine. The engine will be exempt from permitting by section C.1. of Rule 3:28. The administrative requirements of section F.3. shall apply, therefore, an Authorization to Operate (ATO) will be issued which will include the following enforceable conditions:

- Maintain an engine operating log for each month or any part of a month that includes hours of operation; quantity of fuel used; and date and type of all maintenance performed.
- Maintain log for an on-going period of two years and shall be submitted to the APCO upon request.

California Health and Safety Code – Emission Limitations Section 41700 -- No Person Shall Discharge Pollutants “Public Nuisance”

a. §41700:

Except as otherwise provided in Section 41705, a person shall not discharge from any source whatsoever quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any of those persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property.

Discussion

The District does not anticipate this facility discharging any such pollutants to the atmosphere that would 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. This requirement is included in the ATC/ATO as an enforceable condition.

California Health and Safety Code Section 41701 - No Emissions Shall Exceed Ringelmann 2

a. §41701:

Except as otherwise provided in Section 41704, or Article 2 (commencing with Section 41800) of this chapter other than Section 41812, or Article 2 (commencing with Section 42350) of Chapter

4, no person shall discharge into the atmosphere from any source whatsoever any air contaminant, other than uncombined water vapor, for a period or periods aggregating more than three minutes in any one hour which is:

- a. As dark or darker in shade as that designated as No. 2 on the Ringelmann Chart, as published by the United States Bureau of Mines, or
- b. Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subdivision (a).

Discussion

Due to the nature of the proposed operation of the engine, the District does not anticipate this facility discharging any contaminant which is as dark or darker than Ringelmann No. 2. This requirement is included in the ATC/ATO as an enforceable condition.

California Health and Safety Code -Public Notice for Possible Sources of Air Hazardous Emissions near School Prior to Approving Permit – Section 42301.6.

- a. §42301.6:
The air pollution control officer shall, at the permit applicant's expense, distribute or mail the public notice to the parents or guardians of children enrolled in a school that is located within one-quarter mile of the proposed new or modified source and to each address within a radius of 1,000 feet of the source at least 30 days prior to the date final action on the application is to be taken by the officer. The officer shall review and consider all comments received during the 30 days after the notice is distributed and shall include written responses to the comments in the permit application file prior to taking final action on the application.

Discussion

The District has completed a survey of the surrounding area and has determined that this facility is within 1,000 feet of a school boundary; therefore, a school/public notice is required.

Shasta County Environmental Review Guidelines- Procedures for Implementing the California Environmental Quality Act

- a. *Purpose:*
The Districts Environmental Review Guidelines- Procedures for Implementing the California Environmental Quality Act (Guidelines) was adopted by the Air Pollution Control Board in 2003 and states the following purpose:

This document fulfills California Environmental Quality Act (CEQA) and CEQA Guidelines requirements for agencies to adopt procedures and guidelines for implementing CEQA. The document is intended to guide Shasta County Air Quality Management District (SCAQMD) staff in carrying out CEQA and to assure the public that environmental impacts related to SCAQMD actions are thoroughly and consistently addressed.

Discussion:

The direct emissions from the source were calculated by District staff after receiving complete emission data from the applicant proposing the project. Projects are usually not recognized as having a significant environmental impact unless the direct stationary source emissions of either NO_x, ROG's, or inhalable PM₁₀ exceed 25 Tons/yr. The project emissions are below these thresholds and therefore the project was determined to be exempt from CEQA pursuant to State CEQA Guidelines section 15061(b)(3) which

states, in part, “The activity is covered by the common sense exemption that CEQA only applies to projects which have the potential for causing a significant effect on the environment.”

This CEQA determination is only for the 107 hp emergency standby engine evaluated in this document and does not represent a CEQA determination for the Fountain Wind Project. The California Energy Commission (CEC) is Lead Agency for the Fountain Wind Project and is responsible for making a CEQA determination for the project in its entirety.

California Code of Regulations Title 14, Division 6, Chapter 3 - The California Environmental Quality Act (CEQA).

a. Purpose:

The CEQA process is primarily designed to identify and disclose to decision makers and the public the significant environmental impacts of a proposed project prior to its consideration and approval. This is accomplished by the preparation of the following types of CEQA documents:

- a. Initial Studies*
- b. Negative Declarations*
- c. Environmental Impact Reports*

Discussion:

The State Legislature recognizes that certain types of projects will not have significant environmental impacts or have overriding benefits that make compliance with CEQA unwarranted and provided a variety of ways to qualify for exemptions from CEQA.

The proposed stationary emergency backup engine is an insignificant emission sources and, therefore, has been determined to be exempt from CEQA pursuant to State CEQA Guidelines section 15061(b)(3).

This CEQA determination is only for the 107 hp emergency standby engine evaluated in this document and does not represent a CEQA determination for the Fountain Wind Project. The CEC is Lead Agency for the Fountain Wind Project and is responsible for making a CEQA determination for the project in its entirety.

40 CFR Part 60, subpart JJJJ – Standard of Performance for Stationary Spark Ignition Internal Combustion Engines

a. Applicability:

The provisions of this subpart are applicable to manufactures, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE)....

Discussion:

The emission limitations for emergency, propane-fired ICE engines are specified in §60.4231 of this subpart. Section 60.4231 (c) specifies that rich burn propane engines greater than 25 horsepower and less than 130 horsepower must comply with the phase 1 emission standards for a Class II engine in 40 CFR 90.103. Per 40 CFR 90.103 propane-fired emergency engine must meet HC+NO_x emission standard of 13.4 g/KW-hr and CO emission standard of 519 g/KW-hr. The proposed engine meets these requirements. See Table 4 below.

TABLE 4			
25>HP<130 Phase 1 Emissions Standards in 40 CFR 90.103			
Class II engine displacement			
	g/kW-hr	g/kW-hr	
	HC + NO _x	CO	
25>HP<130	13.4	519	Standard
	4.14	185.18	Actual

40 CFR Part 63, subpart ZZZZ– National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

a. Applicability:

Subpart ZZZZ establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE) located at major and area sources of HAP emissions. This subpart also establishes requirements to demonstrate initial and continuous compliance limitations and operating limitations.

Discussion:

This subpart is applicable to all stationary reciprocating internal combustion engines at major sources or area sources of Hazardous Air Pollutants. The EPA has defined “area sources” are those sources that emit less than 10 tons annually of a single hazardous air pollutant or less than 25 tons annually of a combination of hazardous air pollutants. The combustion of propane fuel produces several compounds that are listed as hazardous air pollutants and the engine will emit less than the threshold levels of a major source, therefore this project is an area source. A new stationary engine that is located at an area source must comply with the requirements codified in 40 CFR 63.6590(c). As specified in this section a new spark ignition engine must meet the requirements of 40 CFR part 60 subpart JJJJ. This engine meets the requirements of 40 CFR part 60 subpart JJJJ, therefore, no further requirements apply for this engine under this part.

DISTRICT RECOMMENDATION

The District recommends the following permit conditions:

1. Although a Shasta County Air Quality Management District (District) permit is not required, your facility must continue to comply with all applicable Federal, State, and local air pollution regulations.
2. A violation of any of the applicable regulations will constitute grounds for enforcement action.
3. You will periodically receive update forms that must be completed and returned to the District on a timely basis.
4. Any anticipated change in equipment shall be reported to the District prior to installation in order for the District to determine if an application for an Authority to Construct is necessary.
5. This designation is not transferable from either one location to another, one piece of equipment to another, or from one person to another.
6. Equipment is to be maintained so that it operates as it did when the designation was issued.
7. The District reserves the right to amend this designation, if the need arises, in order to ensure compliance of this facility or to abate any public nuisance.
8. Periods of excess emission levels with respect to emission limitations specified in this Authorization to Operate shall be reported to the District within four (4) hours of the occurrence. In no event, shall the equipment be operated in a manner that creates excessive emissions beyond the end of the first shift or twenty-four (24) hours, whichever occurs first.
9. The right of entry described in the *California Health and Safety Code* (CH&SC) Section 41510, Division 26, shall apply at all times.
10. The operating staff of this facility shall be advised of and familiar with all the conditions of this Authorization to Operate.
11. This facility is subject to all applicable requirements of the Air Toxics “Hot Spots” Information and Assessment Act of 1987, as cited in the CH&SC Section 44300 et seq.

OPERATING CONDITIONS

12. Visible emissions from the operation of the engine shall not be discharged for a period or periods aggregating more than three (3) minutes in any one (1) hour which are as dark or darker than Ringelmann 2 or equivalent 40% opacity as determined by EPA Method 9.
13. Daily engine operation records shall be maintained. These records shall be retained for a period of two (2) years and shall be made available for review upon request of the Air Pollution Control Office (APCO). Daily engine records shall include:
 - a. Total recorded hours of operation
 - b. Date(s) and type of maintenance performed.

14. Operation for testing and maintenance purposes shall be limited to no more than one hundred (100) hours per year for the engine.
15. Operation for testing and maintenance purposes shall be limited to no more than fifteen (15) hours per any twenty-four (24) hour period for the engine.
16. The subject engine shall be fired exclusively on propane. Any change in the type of fuel used shall first be reviewed and approved by the District.
17. A non-resettable hour meter shall be installed on the engine.

APPENDICES

Appendix 1

Emissions Estimate

Chad Peterson

Inventory Year: ATC
 Company: Fountain Wind project
 Device: Propane Emergency Backup Engine
 Permit Number: 23-PO-07

05/26/23

Emissions:		(TONS/YR)	(LBS/DAY)
PM10 =	✓	0.000	✓ 0.12
NOX =	✓	0.026	✓ 7.67
CO =	✓	1.637	✓ 491.22
SOX =	✓	0.000	✓ 0.01
VOC =	✓	0.011	✓ 3.25

Operating Schedule (1):

15 hrs/day

engine rating: 107 horsepower(2)

Emissions:				Propane:
PM ₁₀	0.0095000	lb/MMBtu	✓ (1)	2516.0 Btu/cf
NOx	2.17	g/hp-hr	✓ (2)	Fuel usage:
CO	139.0	g/hp-hr	✓ (2)	327.0 cfh ✓ (2)
SOx	5.88E-04	lb/MMBtu	✓ (1)	Heat input:
VOC	0.9	g/hp-hr	✓ (2)	0.82 MMBtu/hr
Heat input:	0.82	MMBtu/hr	✓ (3)	

Emission Calculations:

#1			Emission Factor		Emissions	
Pollutant	Hours/yr	horsepower	g/hr	lb/hr	(Tons/Yr)	(Lbs/day)
PM ₁₀	100	107	3.55	0.0078	0.0004	0.117
NOx	100	107	232.19	0.5114	0.0256	7.671
CO	100	107	14867.65	32.7481	1.6374	491.222
SOx	100	107	0.22	0.0005	0.0000	0.007
VOC	100	107	98.44	0.2168	0.0108	3.252

Notes:

- (1) From AP-42, 3.2, 7/00 (Natural Gas-fired Reciprocating Engines) No data available for propane engines
- (2) From supplemental information form
- (3) Calculated from information on supplemental information form

Appendix 2							
Emissions Estimate				Chad Peterson			
	Inventory Year:		ATC		02/21/24		
	Company:		Fountain Wind				
	Device:		Propane Emergency Backup Engine				
	Permit Number:		23-PO-07				
Emissions:		(TONS/YR)	(LBS/DAY)				
	PM10 =	0.000	0.19				
	NOX =	0.026	12.27				
	CO =	1.637	785.96				
	SOX =	0.000	0.01				
	VOC =	0.011	5.20				
Operating Schedule (1):							
	24 hrs/day						
Totals Hra Max		100					
engine rating:	107	horsepower(2)					
Emissions:				Propane:			
	PM ₁₀	0.0095000 lb/MMBtu	(1)		2516.0 Btu/cf		
	NOx	2.17 g/hp-hr	(2)	Fuel usage (2):			
	CO	139.0 g/hp-hr	(2)		327.0 cfh		
	SOx	5.88E-04 lb/MMBtu	(1)	Heat input:			
	VOC	0.9 g/hp-hr	(2)		0.82 MMBtu/hr		
Heat input:	0.82	MMBtu/hr	(3)				
Emission Calculations:							
#1							
			Emission Factor	Emissions			
Pollutant	Hours/yr	horsepower	g/hr	lb/hr	(Tons/Yr)	(Lbs/day)	
PM ₁₀	100	107	3.55	0.0078	0.0004	0.188	
NOx	100	107	232.19	0.5114	0.0256	12.274	
CO	100	107	14867.65	32.7481	1.6374	785.955	
SOx	100	107	0.22	0.0005	0.0000	0.012	
VOC	100	107	98.44	0.2168	0.0108	5.204	
Notes:							
(1)	From AP-42, 3.2, 7/00 (Natural Gas-fired Reciprocating Engines) No data available for propane engines						
(2)	From supplemental information form						
(3)	Calculated from information on supplemental information form						

Appendix 3					
Toxic Emissions				Chad Peterson	
	Inventory Year:	ATC		02/21/24	
	Company:	Fountain Wind			
	Device:	Propane Emergency Backup Engine			
	Permit Number:	23-PO-07			
Health Risk Analysis		Operating Schedule: (2)			
Fuel usage (ft ³ /hr)(2)	327	hrs/day	0.25		
LPG HHV (Btu/ft ³)	2516	days/wk	1		
Heat input (MMBtu/hr)	0.823	wks/yr	52		
		hrs/yr	13		
		Max hrs/yr	100		
Unit Risk Factor = URF					
Component	Emission Factor(2) (lb/MMBtu)	Emissions (lbs/hr)	Emissions (lbs/yr)	Pol Id	
1,1,2,2 Tetrachloroethane	2.53E-05	2.08E-05	2.08E-03	811972	
1,1,2-Trichloroethane	1.53E-05	1.26E-05	1.26E-03	79005	
1,1,-Dichloroethane	1.13E-05	9.30E-06	9.30E-04	75343	
1,3 Butadiene TAC	6.63E-04	5.45E-04	5.45E-02	106990	
Acetaldehyde	2.79E-03	2.30E-03	2.30E-01	75070	
Acrolein	2.63E-03	2.16E-03	2.16E-01	107028	
Benzene TAC	1.58E-03	1.30E-03	1.30E-01	71432	
Carbon Tetrachloride TAC	1.77E-05	1.46E-05	1.46E-03	56235	
Chlorobenzene	1.29E-05	1.06E-05	1.06E-03	108907	
Chloroform TAC	1.37E-05	1.13E-05	1.13E-03	67663	
Ethylene Dibromide TAC	2.13E-05	1.75E-05	1.75E-03	106934	
Formaldehyde TAC	2.05E-02	1.69E-02	1.69E+00	50000	
Methanol	3.06E-03	2.52E-03	2.52E-01	67561	
Methylene Chloride TAC	4.12E-05	3.39E-05	3.39E-03	75092	
PAH	1.41E-04	1.16E-04	1.16E-02	1151	
Styrene	1.19E-05	9.79E-06	9.79E-04	100425	
Toluene	5.58E-04	4.59E-04	4.59E-02	108883	
Vinyl Chloride TAC	7.18E-06	5.91E-06	5.91E-04	75014	
Xylene	1.95E-04	1.60E-04	1.60E-02	1330207	
Notes:					
(1)	From AP-42, 3.2, 7/00				
(2)	From supplemental information form				
(3)	Calculated from information on supplemental information form				

EXHIBIT D

HEALTH RISK ASSESSMENT – FOUNTAIN WIND

Health Risk Assessment

Shasta County Air Quality Management District
1855 Placer Street, Suite 101
Redding, CA 96001

Prepared by Chad Peterson, Senior Air Pollution Inspector
February 21, 2024

COMPANY NAME: Fountain Wind LLC
FACILITY ADDRESS: 40.823144 degrees, -121.821985 degrees
MAILING ADDRESS: 100 McKinney Street, Suite 700, Houston, TX 77002
AP NUMBER: 029-190-010-000
APPLICATION DATE: July 12, 2023
ATC NUMBER: 23-PO-07
DEVICE/PROCESS: Propane Engine (Emergency Backup)

EMISSION UNIT/PROJECT DESCRIPTION

Fountain Wind LLC (applicant) has submitted an application for an Authority to Construct/Permit to Operate for a propane generator to be located at 40.823144°, -121.821985°. The nearest resident is located approximately 2 miles northwest of the proposed generator. The proposed genset is powered by a 107-horsepower propane-fired Generac Power Systems engine, Model RG060. The unit will be operated during emergency situations and for periodic exercise, testing and maintenance.

Equipment

One (1) 107 hp Generac Power Systems Propane Engine
One (1) Generac Generator, Model RG060

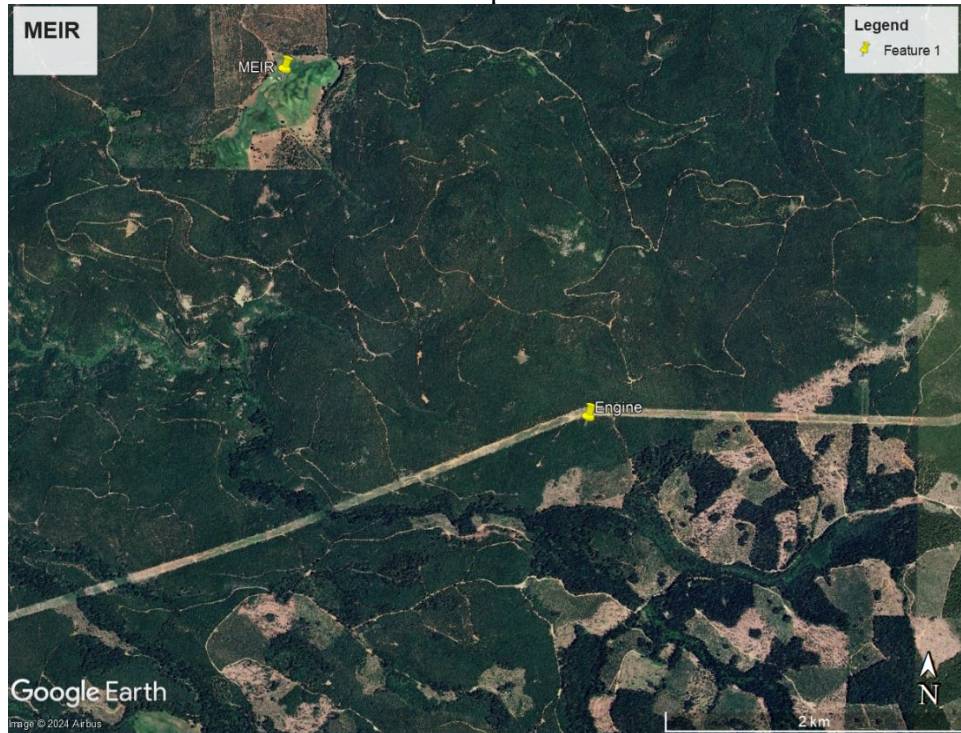
Emissions Inventory

The products of combustion for propane-fired internal combustion engines are not available. AP-42 Section 3.2, Natural Gas-fired Reciprocating Engines was used to determine the pollutants emitted from the propane-fired internal combustion engine as the best available information. The following pollutants are listed in AP-42 Section 3.2, Table 3.4-3 and are listed in Table 1, of the *Consolidated Table of OEHHHA/ARB Approved Risk Assessment Health Values* with Inhalation, Acute Inhalation or Chronic Inhalation Unit Risk Factors. These pollutants were used for the health risk assessment (HRA).

- 1,1,2,2 Tetrachloroethane
- 1,1,2-Trichloroethane
- 1,1,-Dichloroethane
- 1,3 Butadiene (TAC)
- Acetaldehyde
- Acrolein
- Benzene (TAC)
- Carbon Tetrachloride (TAC)
- Chlorobenzene
- Chloroform (TAC)
- Ethylene Dibromide (TAC)
- Formaldehyde (TAC)
- Methanol
- Methylene Chloride (TAC)
- PAH
- Styrene
- Toluene
- Vinyl Chloride (TAC)
- Xylene

All of these compounds are listed in Table 1, of the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* with Inhalation, Acute Inhalation or Chronic Inhalation Unit Risk Factors. HARP2 Air Dispersion & Risk Tool was utilized, using the parameters given in the Authority to Construct application and 100 hours of operation, to calculate health risk. A Grid Spacing of 20 meters was used to locate the maximally exposed individual resident (MEIR). Refer to Map 1 for the locations of the MEIR.

Map 1



Engine specifications provided with the application and 100 hours of operation, the maximum allowable operation for testing and maintenance, was used for the emissions inventory.

Table 1
Emissions Inventory

Toxic Emissions				Chad Peterson
	Inventory Year:	ATC		02/21/24
	Company:	Fountain Wind		
	Device:	Propane Emergency Backup Engine		
	Permit Number:	23-PO-07		
Health Risk Analysis		Operating Schedule: (2)		
Fuel usage (ft ³ /hr)(2)	327	hrs/day	0.25	
LPG HHV (Btu/ft ³)	2516	days/wk	1	
Heat input (MMBtu/hr)	0.823	wks/yr	52	
		hrs/yr	13	
		Max hrs/yr	100	
Unit Risk Factor = URF	Emission Factor(2)	Emissions	Emissions	
Component	(lb/MMBtu)	(lbs/hr)	(lbs/yr)	Pol Id
1,1,2,2 Tetrachloroethane	2.53E-05	2.08E-05	2.08E-03	811972
1,1,2-Trichloroethane	1.53E-05	1.26E-05	1.26E-03	79005
1,1,-Dichloroethane	1.13E-05	9.30E-06	9.30E-04	75343
1,3 Butadiene TAC	6.63E-04	5.45E-04	5.45E-02	106990
Acetaldehyde	2.79E-03	2.30E-03	2.30E-01	75070
Acrolein	2.63E-03	2.16E-03	2.16E-01	107028
Benzene TAC	1.58E-03	1.30E-03	1.30E-01	71432
Carbon Tetrachloride TAC	1.77E-05	1.46E-05	1.46E-03	56235
Chlorobenzene	1.29E-05	1.06E-05	1.06E-03	108907
Chloroform TAC	1.37E-05	1.13E-05	1.13E-03	67663
Ethylene Dibromide TAC	2.13E-05	1.75E-05	1.75E-03	106934
Formaldehyde TAC	2.05E-02	1.69E-02	1.69E+00	50000
Methanol	3.06E-03	2.52E-03	2.52E-01	67561
Methylene Chloride TAC	4.12E-05	3.39E-05	3.39E-03	75092
PAH	1.41E-04	1.16E-04	1.16E-02	1151
Styrene	1.19E-05	9.79E-06	9.79E-04	100425
Toluene	5.58E-04	4.59E-04	4.59E-02	108883
Vinyl Chloride TAC	7.18E-06	5.91E-06	5.91E-04	75014
Xylene	1.95E-04	1.60E-04	1.60E-02	1330207
Notes:				
(1)	From AP-42, 3.2, 7/00			
(2)	From supplemental information form			
(3)	Calculated from information on supplemental information form			

Air Dispersion Modeling

To assess the impact of emitted compounds on receptors near the project, air quality modeling using the AERMOD atmospheric dispersion model was performed. The model is a steady state Gaussian plume model and is an approved model by Office of Environmental Health Hazard Assessment (OEHHA) for estimating ground-level impacts from point and fugitive sources in simple and complex terrain. The model requires additional input parameters, including local meteorology. Meteorological (MET) data provided by CARB for the nearest representative MET station with the five latest available years of record. (Redding Municipal Airport, 2017-2021) was used to represent local weather conditions and prevailing winds.

The modeling analysis also considers the spatial distribution and elevation of each emitting source in relation to receptors. To accommodate the model's Cartesian grid format, direction-dependent calculations were obtained by identifying the Universal Transverse Mercator (UTM) coordinates for source and receptor locations. In addition, digital elevation model (DEM) data for the area were obtained and included in AERMOD to account for complex terrain.

Carcinogenic Risk

Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Any exposure, therefore, will have some associated risk. OEHHA and the District have established a threshold of 10 in a million (10×10^{-6}) as a level posing no significant risk for exposures to carcinogens.

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. The District included inhalant, soil, dermal and mothers milk pathways when calculating cancer risk probability. In accordance with the OEHHA guidelines the District used a 30-year exposure duration.

As recommended by OEHHA the District used a refinement to the standard point estimate approach with the use of age-specific breathing rates, age sensitivity factors, exposure duration and fraction of time at home to assess risk for susceptible subpopulations such as children. CARB's HARP2- Air Dispersion and Risk Tool was used to calculate the cancer risk values

Non-Carcinogenic Hazards

An evaluation was conducted of the potential non-cancer effects of chronic and acute chemical exposures. Adverse health effects are evaluated by comparing the annual receptor level (ground-level) concentration of each chemical compound with the appropriate reference exposure limit (REL). Available RELs promulgated by OEHHA were considered in the assessment. To calculate the hazard index, each chemical concentration or dose is divided by the appropriate toxicity value. This ratio is summed for compounds affecting the same toxicological endpoint. A health hazard is presumed to exist where the total equals or exceeds one.

CARB's HARP2- Air Dispersion and Risk Tool was used to calculate the chronic and acute hazard index.

Conclusion

Health risk assessment results are summarized in Table 2 below.

Table 2
Health Risk Assessment Results

Receptor	Cancer Risk 1 (per million)	Chronic Hazard Index	Acute Hazard Index
MEIR	0.000155	0.00000212	0.00546
T-BACT Threshold	1.0	1.0	1.0
Exceeds T-BACT Threshold?	No	No	No
Permitting Threshold	10	1.0	1.0
Exceeds Permitting Threshold?	No	No	No

Appendix 1. HARP 2 Inputs

Source:

Source Parameters

Source Type

Type: POINT

Source ID: 001

Description: Standby engine

X (East): 599338.24 m

Y (North): 4519792.31 m

Elevation: 1411.93 m

Urban Opt:

Import Facility Origin

for Hot Spots use

Facility ID:

Facility Name:

Stack ID:

Stack Description:

Source Release Parameters

Unit Rate Emission Factor (non-pollutant specific): 1 g/s

Release Height: 1.17 m

POINT

Stack Temperature: 838.70 K (enter 0 to use the ambient temperature)

Stack Diameter: 0.0635 m

Exit Velocity: 73.57302 m/s

Exit Flow Rate: .233 m³/s

Save

Cancel

Grid:

Cartesian Grid (GRIDCART)

Net ID: Grid001

Description: 20 Meter Grid

Grid starting point

-Select a source-

Import Source Origin

Import Facility Origin

Center: 599338.24 4519792.31 m

Bottom Left Corner: 598748.24 4519202.31 m

Grid dimensions

X axis

Y axis

No. of Points 60

Grid Spacing 20 20 m

Length 1180 1180 m

Note: The KML contouring feature can only contour a single square Cartesian grid at this time. This feature will be improved over time.

Total No. of Receptors 3600

Save

Cancel

Receptors:

6

Sensitive Receptors					
Import Export Save Delete All					
	ID	X (m)	Y (m)	Elev (m)	Name
	R1	597161.00	4522096.00	1196	R1
	R2	593660.00	4517704.00	1032	R2
					

Risk Scenario:

Select Risk Scenario

Analysis Type

☐ Cancer Risk
☐ Chronic Risk (Non-cancer)
☐ 8-Hour Chronic Risk (Non-cancer)
☐ Acute Risk (Non-cancer)
☒ Cancer, Chronic, and Acute

[Help me choose](#)

Receptor Type

☒ Individual Resident
☐ Population-Wide
☐ Worker

[Help me choose](#)

Exposure Duration

☐ 70 Year
☒ 30 Year
☐ 25 Year (Worker)
☐ 9 Year
☐ User Defined (Tier 2)

Start Age (years)

[Help me choose](#)

Intake Rate Percentile

☒ OEHHA Derived Method
☐ 95th (High End)
☐ 65th (Mean)
☐ Risk Management Policy (RMP) - "Inhalation Only"
☐ RMP using the Derived Method

[Help me choose](#)

Pathways & Site Parameters:

Select Pathways to Evaluate and Define Site Parameters

Pathways to Evaluate: Inh Soil Dem MMilk Drink Water Fish HG Produce Beef & Dairy Pig, Chk

☐ Inhalation Only

☒ Mandatory Minimum Pathways

☐ Worker Pathways

☐ User Defined

☒ Inhalation (Always On)

☐ Soil Ingestion

☐ Dermal

☐ Mother's Milk

☐ Drinking Water

☐ Fish

☐ Homegrown Produce

☐ Beef

☐ Dairy Cows

☐ Pigs

☐ Chickens

☐ Eggs

[Help me choose](#)

[Click to select SCAQMD mandatory minimum pathways](#)

Deposition Rate (for noninhalation pathways only)

☒ 0.05 m/s (uncontrolled sources)

☐ 0.02 m/s (controlled sources)

☐ Other

Advanced Options (Tier 2) - For noninhalation pathways only

☐ Change exposure frequency (days/year): [What's this do?](#)

CancerPMI.txt - Notepad

File Edit Format View Help

HARP POINT OF MAXIMUM IMPACT REPORT FOR CANCER RISK 02/21/2024 3:24:31 PM
RISK SCENARIO: All

LINE	REC	TYPE	X	Y	CANCER RISK
1	1711	CARTGRID	599348	4519763	9.7780000e-08
2	1651	CARTGRID	599348	4519743	8.7344000e-08
3	1591	CARTGRID	599348	4519723	6.4912000e-08
4	1890	CARTGRID	599328	4519823	5.7900000e-08
5	1650	CARTGRID	599328	4519743	5.1097000e-08
6	1950	CARTGRID	599328	4519843	5.0759000e-08
7	1531	CARTGRID	599348	4519703	4.9820000e-08
8	1710	CARTGRID	599328	4519763	4.9305000e-08
9	1592	CARTGRID	599368	4519723	4.7980000e-08
10	1891	CARTGRID	599348	4519823	4.7302000e-08

ChronicPMI.txt - Notepad

File Edit Format View Help

HARP POINT OF MAXIMUM IMPACT FOR CHRONIC RISK 02/21/2024 3:25:11 PM

LINE	REC	TYPE	X	Y	CHRONIC RISK
1	1711	CARTGRID	599348	4519763	1.3336000e-03
2	1651	CARTGRID	599348	4519743	1.1912000e-03
3	1591	CARTGRID	599348	4519723	8.8530000e-04
4	1890	CARTGRID	599328	4519823	7.8966000e-04
5	1650	CARTGRID	599328	4519743	6.9688000e-04
6	1950	CARTGRID	599328	4519843	6.9227000e-04
7	1531	CARTGRID	599348	4519703	6.7947000e-04
8	1710	CARTGRID	599328	4519763	6.7243000e-04
9	1592	CARTGRID	599368	4519723	6.5437000e-04
10	1891	CARTGRID	599348	4519823	6.4512000e-04

HARP POINT OF MAXIMUM IMPACT FOR Acute RISK 02/21/2024 3:25:42 PM

LINE	REC	TYPE	X	Y	ACUTE RISK
1	1771	CARTGRID	599348	4519783	7.6196000e-01
2	1831	CARTGRID	599348	4519803	5.2798000e-01
3	1711	CARTGRID	599348	4519763	4.7852000e-01
4	1710	CARTGRID	599328	4519763	4.6018000e-01
5	1832	CARTGRID	599368	4519803	4.4799000e-01
6	1772	CARTGRID	599368	4519783	4.3411000e-01
7	1770	CARTGRID	599328	4519783	4.1585000e-01
8	1891	CARTGRID	599348	4519823	3.9999000e-01
9	1890	CARTGRID	599328	4519823	3.7514000e-01
10	1830	CARTGRID	599328	4519803	3.4618000e-01