



Mendocino County
Air Quality Management District

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TO: Mendocino County Board of Supervisors

FROM: Barbara A. Moed
Air Pollution Control Officer

SUBJECT: Overview of the Mendocino County Air Quality Management District

An Air District is one of 35 local regulatory agencies in California responsible for ambient (outdoor) air quality in its geographic region. Air Districts are a form of local government, created by state law and separate from county and city government.¹ The primary mission of a District is to implement District, State, and Federal air quality regulations that pertain to stationary sources. The California Air Resource Board (CARB) has primary authority over mobile sources (cars), portable equipment (generators, tractors) and greenhouse gases (GHG). Authority for the District's business comes from the United States Environmental Protection Agency (EPA), CARB, the California Health and Safety Code (HSC), and locally adopted District regulations. The District regulations are found on the District's (and CARB's) website. The District is governed by a Board of elected officials, and in the case of Mendocino County AQMD, it is the County Board of Supervisors.

One aspect of the District's business is enforcement of its Rules. It also enforces a number of state and federal laws that have been delegated to the District. The Air Pollution Control Officer (APCO) position, and duties, are defined in statute. The APCO has the direct responsibility to oversee most enforcement actions, while the District Hearing Board has responsibility for the remaining aspects of enforcement.² The District Hearing Board is comprised of five District residents, and they sit on the Board for staggered terms.³ The Hearing Board ideally includes an attorney, a professional engineer, a medical professional, but in districts with less than 750,000, population, any person can fill a vacancy.⁴ This Board hears requests for variances (exceptions to rules or permits), abatement hearings, and

¹ Cal Health and Safety Code 40000

² Cal Health and Safety Code 40752 regarding APCO, and 40800 et seq. regarding hearing boards. See also District Rule 1 series.

³ Cal Health and Safety Code 40801- 40804

⁴ Cal Health and Safety Code 40802

appeals to permit decisions made by the District.⁵ Formal decisions are rendered by the Hearing Board.⁶ These decisions are final, unless challenged in Court through a limited review process.⁷

When permits are issued to stationary sources, it is the responsibility of the District to ensure compliance. District permits are enforced through the APCO. [HSC §42300](#) establishes the District's authority to institute a permit system. It also mandates that the permit system must be in District regulation; that a permit must be valid for a specified time period; and that upon expiration, a permit must be evaluated for extension, suspension, or revocation. Annual payment of fees is required, and non-payment is grounds for suspension or revocation.

District and EPA permit roles and authorities are more clearly defined within the District Rules. Pollutants of concern are criteria pollutants (Particulate Matter (PM)2.5, PM10, Sulfur Dioxide (SO2) Nitrous Dioxide (NO2, Ozone (O3), and Lead) and Hazardous Air Pollutants (HAPs). The District is in Attainment for all federal and California air quality standards except for California PM10.

HAPs are pollutants listed by EPA (40 CFR Part 63) that are believed to cause or contribute to cancer. HAPs are also referred to as "toxics", and due to their carcinogenic properties they are often weighted with more importance than criteria pollutants listed above.

Note that a more stringent set of rules apply to a "Major Source" under federal law that has the potential to emit ≥ 100 TPY of a single criteria pollutant, or ≥ 10 tons per year (TPY) of a single HAP or ≥ 25 TPY of all HAPs combined.⁸ These projects must obtain a federal Title V permit.

Another set of thresholds apply when a facility is considered an indirect source according to Rule 1 (i)2. A facility, building, structure or installation, or combination thereof, that indirectly results in, or is projected to result in unmitigated emissions in excess of rule requirements.⁹ Projected unmitigated emissions are to be generated using the latest ARB approved models with the Mountain and Rural Counties default settings, currently AERMOD and HARP2 software). In any model the latest available fleet, meteorology, and trip generation information will be used and the model run for each season.

Based on these thresholds, the District requires permits from businesses in several circumstances. First, a permit shall be obtained from the District prior to starting construction, modification, operation or use of any stationary, portable, indirect source or large grading operations which may cause, potentially cause, reduce, control or eliminate the emission of air contaminants. A single authorization may be issued for all components of an integrated system or process.¹⁰ Then a facility must obtain a Permit to Operate, under

⁵ Cal Health and Safety Code 40824-40826

⁶ Cal Health and Safety Code 40860

⁷ Cal Health and Safety Code 40864

⁸ District Rule 5-200 M1 (Title V)

⁹ District Rule

¹⁰ District Rule 1-200(a)

District Rule 1-240. Facilities must submit emissions reports as described in their permit describing the air issues covered above, and often in those cases must submit source test data to remain compliant. The District requires a fee be paid in order for a permit to remain in place.¹¹

Overview of the Forest Energy Mendocino/Mendocino Forest Products Pellet Mill

Forest Energy Mendocino (FEM) operates a Wood Pellet Mill located at 6505 N. State St., Ukiah CA. The mill uses clean wood shavings, chips and sawdust generated by local sawmills as pellet feedstock. The feedstock is conveyed from its storage and preparation area to a wet hammermill, which improves uniformity of the feedstock before it is conveyed to the rotary drum dryer. A wood-fired burner produces heat for the dryer which reduces moisture of the feedstock. This process produces emissions, including water vapor, smoke from the burner exhaust, and other PM that could impact the air quality. Exhaust from the burner and dryer is currently conveyed to a Venturi wet scrubber for control of emissions.

Feedstock is conveyed from the dryer to a dry hammermill for sizing before being extruded through a pellet mill. No adhesives or other additives are used. Pellets are then screened and cooled prior to packaging. The particulate matter emissions created as a result of sizing the feedstock material in the dry hammer mill, pellet formation in the pellet mill, the screening and cooling of pellets are controlled first with cyclones, and then with a baghouse.

The facility's Air District permit limits emission rates of criteria pollutants from the wet scrubber and the baghouse control devices, and requires annual emission compliance testing. It requires gauges to measure pressure drops across the control devices, as an indicator of performance. All conveyors are enclosed. All conveyors, pneumatic ducting, and process equipment are required to be free of visible leaks. The permit also limits production rates and requires recordkeeping and reporting to demonstrate compliance with this production limit.

Timeline of the project: Permit History

- 4/14/2017: District completed its Engineering Evaluation of the proposed wood pellet mill. Estimates of Potentials to Emit for carbon monoxide, nitrous oxides, sulfur dioxide, particulate matter (PM), volatile organic compounds, single and total Hazardous Air Pollutants and Greenhouse Gases were compared with the District's respective significance thresholds. The pellet mill was determined to be a minor, as opposed to a major, source of emissions. Based upon submitted facility emissions estimates and the Engineering Evaluation, it was concluded that operation of the facility and equipment described was expected to comply with all applicable state and federal laws and District Rules. The District believed sufficient evidence existed to make the determinations required under District Regulation 1, Rule 1-200(c) and conditional approval was therefore granted to the applicant to operate the authorized equipment in accordance with those rules and a District Authority to Construct.
- 5/26/2017: District issued Authority to Construct (ATC) Permit 0210-5-21-16-45 for processing of saw dust and wood shavings into wood pellets with wood-fired dryer and high-efficiency multiclone/baghouse dust collection.

¹¹ See District Rule 1-300(a)

- 8/25/2017: Date that the ATC converted to a Permit to Operate (PTO)
- 3/27/2019: District issued ATC Permit 0212-5-21-18-44 for processing of saw dust and wood shavings into wood pellets with wood-fired dryer and venturi wet scrubber and high efficiency cyclone/baghouse dust collection system. The Project replaced the multiclone which was controlling emissions from the dryer with a wet scrubber. The new venturi wet scrubber came with a manufacturer's performance guarantee that it would reduce inlet emissions by 70% or will not exceed 1.1 lbs/hr, the PM emissions rate limit in its District permit at a specified pressure drop.
- 3/20/ 2020: District issued a third ATC Permit 0212-5-21-20-13 for processing of saw dust and wood shavings into wood pellets with wood-fired dryer and venturi wet scrubber and high efficiency cyclone/baghouse dust collection system adding a wet hammer mill. Emissions from the wet hammermill were included in the Engineering Evaluation conducted for ATC Permit 0210-5-21-16-45.
- 8/14/2020: Date that the ATC with wet hammermill converted to PTO which will be approved by the APCO as Operating Permit before 2/16/21, unless the project violates its permit or applies for a new ATC.

Complaints History

- The District received eleven complaints from ten different parties, one anonymous, about the pellet mill between 10/13/17 and 4/24/18, and conducted nine investigations. None of these investigations resulted in enforcement action.
- During this time some direct interaction with concerned citizens occurred, including observations and inquiries made about the new stationary source. In December 2017 the APCO had an informational conversation about the pellet mill with Ms. Emily Luscombe, Environmental Director for the Coyote Valley Band of Pomo Indians. Ms. Luscombe was relieved to hear that no adhesives were used in the pellet production process. On December 19, 2017, upon request, the District emailed Ms. Luscombe Authority to Construct Permit 0210-5-21-16-45. Other complaints filed during this time period stated concerns about inhalation risk to children at nearby schools.
- A thirteenth complaint was received on 4/11/19 from a school employee who complained about smoke from the pellet mill on 4/1/19 and expressed interest in the PM2.5 data collected by the District.
- A fourteenth complaint was received on 10/21/2019 from an authorized representative of the Coyote Valley Band of Pomo Indians, Polly Girvin, retired Attorney, who expressed concerns about drift of pellet mill plume over the Reservation. After a lengthy conversation with the Air Pollution Control Officer about emissions, compliance status and regulatory enforcement at the pellet mill, the complainant stated her conclusion that not enough mitigation had occurred and the pellet mill should be shut down.
- Ms. Girvin contacted the CA Air Resources Board on October 24, 2019 (that was copied to several other state agencies) and indicated that "a power plant has failed to meet permit requirements on several occasions, is spewing out contaminants, and the Air District says it will not communicate with the tribe as a government, it will only respond to individuals". The District recorded her complaint as an authorized representative of the Coyote Valley Band of Pomo Indians, and communicated with her at length on 10/21/19.

- On July 9, 2020 Polly Girvin, now representing Social Environmental Indigenous Justice (SEIJ), posted an Action Alert on Environmental Protection Information Center's (EPIC) website. The Action Alert alleged that the Wood Pellet Mill in Calpella releases numerous harmful pollutants which threaten the health of the surrounding low income neighborhoods, schools, an Indian Health Clinic and Coyote Valley Reservation. It stated that people with COVID-19 who live in more polluted areas are more likely to die than those who live in less polluted areas, according to a recent Harvard School of Public Health Study. It linked to a chain email that concerned individuals could send to the Air District requesting that the Pellet Mill be shut down during the COVID-19 health crisis until health impacts can be evaluated and emissions are determined to be safe. The District received approximately 425 chain emails sent by people who did not provide their addresses so could be living anywhere.
- During June, July and August 2020 Ms. Girvin complained about grey smoke exhaust at the pellet mill by submitting 6 videos, 2 photographs, and 10 emails to the District. District investigations of these complaints did not verify non-compliance. District staff explained to her the importance of filing complaints while the incident was occurring so District staff could conduct a timely investigation. Staff also explained that visible emissions evaluations cannot be performed on video or photographs.
- On July 28, 2020 the District received a letter via email regarding "request for suspension of facility operations at the Mendocino Forest Products' wood pellet production plant (1) in light of the Covid pandemic and 2) due to (*alleged*) inadequate environmental review in locating the plant in a residential/agricultural neighborhood. The list of senders included Mendocino County-based Priscilla Hunter, Elder of Coyote Valley Band of Pomo; SEIJ; Willits and Mendocino Environmental Centers; and Climate Action Mendocino. Other senders included the CA Environmental Justice Coalition, EPIC, Seventh Generation Fund for Indigenous Peoples, Earth First! and other environmental and environmental justice organizations from Humboldt County and the San Francisco Bay Area. This letter was copied to County Board of Supervisors, Ca Dept. of Justice, CA Air Resources Board, and three individuals at the CalEPA, including the Secretary of Environmental Protection, Deputy Secretary of Environmental Justice and Tribal Affairs, and Asst. General Counsel for Enforcement.
- On October 2 2020 SEIJ, Priscilla Hunter, Polly Girvin and seven other activists sent a letter to the County Board of Supervisors, which was copied to Governor Newsome, Senator Huffman, Assemblyman Wood, Ca Dept. of Justice, CA Air Resources Board, and CalEPA tribal liaisons, and other environmental groups. The letter requested the Supervisors conduct an investigation into the pollution history of Mendocino Forest Products' wood pellet mill in Calpella, and hold a public hearing and take potential action. In addition to the two reasons mentioned in their July 28 letter for suspension of facility operations, this letter added poor or hazardous air quality conditions. They requested that the facility be declared a Public Nuisance because its potential negative health impacts were never evaluated through an environmental health review process.
- District staff conducted 55 compliance inspections of the pellet mill, 16 investigations of complaints, and observed six source tests since October of 2017.

Violation history

- 4/13/2018 District issued Notice of Violation 18-18 for failure to demonstrate compliance with dryer emission rate limit within 180 days of startup. Fine paid
- 4/19/2018 District and owner/operators entered into an Interim Operating Agreement which reduced production to ½ mill capacity to keep dryer emissions compliant with permit conditions.
- 5/22/2018 District and owner/operators entered into an Amended and Restated Interim Operating Agreement which reduced production to ½ mill capacity and added additional reporting requirements as indicators of compliance: operator to submit daily visible emissions evaluations and pellet production logs weekly to the District; apply for abatement system modifications at

least 90 days prior to end date of Agreement that will bring emissions from wood-fired dryer into compliance with permit limits; source test within 30 days of startup and demonstrate compliance.

- 9/28/2018 District issued Notice of Violation 18-26 for failure to submit a complete application for pellet mill dryer abatement equipment modifications by July 18, 2018 as required by Amended Interim Operating Agreement dated 5/22/18. In addition to a fine, operator to reimburse District for monitoring PM2.5 with our ebam at Calpella Elementary School through the end of 10/9/18 Agreement.

11/14/19 Compliance of emissions from the dryer/scrubber with emissions limits in District permit was demonstrated, according to TRC Environmental Corp.'s Report of *Emissions Compliance Study, Forest Energy Mendocino, Main Dryer/Scrubber, Calpella, CA* dated 11/26/19. Enforcement action was then closed.

Current Project Status

- 8/25-26 and 9/3/20 Compliance of emissions from the burner, dryer/scrubber and baghouse with emissions limits in District permit was demonstrated, according to TRC Environmental Corp.'s Report of *Emissions Compliance Study, Forest Energy Mendocino, Main Dryer/Scrubber and Dust Collection Baghouse, Calpella, CA*, dated 9/21/2020.
- Dispersion of estimated Toxic Air Contaminants emissions by the pellet mill were modeled and a Health Risk Assessment conducted by Stantec using guidelines from the CA Office of Environmental Health Hazard Assessment and the CA Air Resources' Board's HARP2 risk assessment software. Cancer and non-cancer risks were very low; below thresholds triggering notification of neighbors and far below risk threshold triggering risk reductions.
- No current violations or basis for enforcement action against the facility.
- 10/2/20 letter received requesting the District consider whether or not this project could be considered a public nuisance, which the District will address in coming weeks.

District Public Engagement

- We continue to vigilantly work with facility to ensure compliance.
- We are handling an extensive Public Records Request related to the facility. It includes three Authority to Construct applications and permits, engineering evaluations, emissions estimates, correspondence, two notices of violations, three interim operating agreements, air dispersion modeling report, best control technology report, six emissions compliance test results reports, approximately 55 compliance inspections, 16 investigations of complaints, approximately 1000 emails, 14 months of air monitoring data at Calpella Elementary School, approximately 25 months of daily visible emissions evaluations and daily production reports.
- On 9/9/20 The Air Pollution Control Officer gave a presentation to the Redwood Valley Municipal Advisory Committee on the pellet mill. We continue engaging with RVMAC as community representatives per their request
- District is of course available to the Board to answer any question or discuss at one of our board meetings.
- May host a stakeholder meeting in early 2021 that will include members of the community

