

October 7, 2021

Victoria Bogdan Tejeda Staff Attorney Center for Biological Diversity vbogdantejada@biologicaldiversity.org

Subject: Fresno Renewable Energy Station (FREES)

Dear Ms. Tejeda:

We are in receipt of your letter expressing your concerns about our planned renewable energy project in Fresno. West Coast Waste is a family business and we have lived and farmed in the Fresno area for over 100 years. We are also active in the local community and have long supported the welfare of the residents of Fresno. Believe me when I say, your concerns are our concerns.

I think there is a misunderstanding of our project and I hope that you will agree that your goals align with our goals after you read this letter. Here are some of the key points:

- The FREES project creates 5 MW of 100% renewable electricity, using as feedstock agricultural wood from orchard removal and green waste. This supports our local farmers who struggle to find beneficial means of recycling this material, and often must resort to open field burning which pollutes the air. It also supports State mandates for greater use of renewable electricity and diversion requirements.
- 2. Our project is not a traditional biomass power plant. It is a much more advanced and cleaner technology that focuses on gasification in a proprietary system that destroys contaminates in the heating process. We also use Best Available Control Technology as required by the San Joaquin Valley APCD and as a result the ambient air is actually purified as it passes through our system coming out cleaner than when it went in.
- 3. By converting 200 tons per day of wood and green waste into electricity and heat, we eliminate eight semi-truck trips per day because this organic waste, that would have had to be hauled off site, is now converted to renewable energy. As a result, traffic from our facility will actually go down.

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- 4. As we are all painfully aware, the water crisis in all of California is acute, particularly so in the Central Valley where we are located. The FREES project, in conjunction with other already permitted activities at our site, will actually generate nearly 7,000,000 gallons of water per year.
- 5. Our plant will not only produce 3 MW of renewable electricity for sale to the PG&E grid (enough to power over 2,000 homes), but we will use the remaining 2 MW to power the plant itself and also new electric grinders, screens and other equipment. This will replace the current diesel equipment. This combination of renewable energy uses will result in a significant reduction in Greenhouse Gas emissions in support of our collective efforts to combat climate change.
- 6. This project must obtain an Authority to Construct Permit from the San Joaquin Valley APCD before construction can begin, and a Permit to Operate based on actual source testing and ongoing monitoring once the plant becomes operational. The SJVPCD has among the most stringent air quality standards in the U.S. and only a very clean operating facility has a chance to get these approvals.
- This project will enable the City and County of Fresno and surrounding jurisdictions to comply with California's tough new laws requiring organic waste to be diverted from landfills, and to thus avoid significant financial penalties and other sanctions.
- 8. The project will generate significant local construction jobs over a one year period as well as 16 permanent highpaying positions - and this in an area that is experiencing declines in agriculture that has long sustained the region.

In closing, it is extremely important to our Balakian family that we develop a terrific project that is good for the community in which we live and work. It was a vision of my father's that we expand from our farming roots into new technologies that would support sustainable farming, clean air and water, and renewable energy for all of us.

That's what the FREES project does.

We are willing to meet with you to discuss this project and answer any technical questions you may have.

Best Regards,

Dennis Balakian

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West Coast Waste (WCW)

Fresno Renewable Energy Station (FREES)

AIR QUALITY

- The FREES project is not a traditional, large biomass combustion plant that burns wood as a fuel. FREES will utilize gasification. Instead of burning the wood, the gasifier will convert the solid woody biomass feedstock into a clean-burning synthesis gas under tightly controlled conditions which minimizes the creation of air emissions.
- FREES is relatively small in size, generating only 5 MW of power and sits on two acres of land as compared to many of the large biomass combustion plants that generate up to 50 MW and require up to 50 acres or more. See the attached concept renderings of the FREES plant as compared to the photos of large traditional biomass combustion power plants. The distinction is clear.
- 3. In contrast to traditional biomass combustion plants that used less effective air emission control systems, FREES will utilize state-of-the-art, high efficiency Best Available Control Technology air emission control equipment consisting of:
 - a. Selective Catalytic Reduction (SCR)
 - b. Dust Collection
 - c. Wet Scrubbing
 - d. Wet Electrostatic Precipitation (ESP)
- 4. Because of the unique design and operation of the gasification system, potential hazardous air pollutants are destroyed in the FREES thermal process.
- 5. FREES's combination of controlled gasification, followed by comprehensive exhaust gas cleaning, yields final emissions that are below all San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds of significance.
- 6. FREES must obtain an Authority to Construct (ATC) Permit from the SJVAPCD, which has among the strictest permitting requirements in the nation. In order to obtain a Permit to Operate, FREES will undergo source testing during actual operations to demonstrate that the levels of air quality promised in the ATC are indeed met. The FREES plant will also have a Continuous Emissions Monitor for constant reporting to the Air District.

CLIMATE CHANGE (Greenhouse Gas (GHG) Emissions)

1. FREES cannot be compared to fossil fuel-fired power plants (which burn coal, oil or natural gas) because the feedstocks for the plant are 100% organic woody biomass.

These include City of Fresno greenwaste and orchard wood. These materials are 100% renewable, as during their growth the trees and plants have absorbed the same CO2 that they release during the FREES process.

- FREES eliminates the need to haul eight semi-truck loads per day of processed organic materials from the WCW facility because those materials have been transformed into renewable energy. This eliminates the GHG emissions and other air contamination that would have resulted from this diesel-fueled trucking.
- 3. The 2MW of additional electricity (beyond the 3MW to be sold into the PG&E grid) will be used to power new electric grinders and screens that will replace the current diesel-fueled units, thus eliminating the GHG and other air emissions of from that equipment.
- 4. FREES will also provide power to charge the batteries of new long-range, fully electrified semi-trucks for hauling of incoming feedstocks. WCW has committed to buying these trucks once the FREES plant is operational.

ENVIRONMENTAL JUSTICE

- The WCW site has received and processed greenwaste for the City of Fresno and the Valley for the past 20 years. The construction and operation of the FREES plant, as part of WCW's integrated facility, will make an already green operation even greener by further reducing carbon.
- 2. FREES will be located on an existing heavy industrial operation (the WCW Fresno yard) on property zoned for and surrounded by other heavy industrial uses. This is the best and most appropriate location for such a plant according to the zoning code of the City of Fresno. The purpose of such codes is to allow for and support needed industrial facilities with strict environmental conditions on the operations.
- 3. The City of Fresno has determined this plant will not have significant environmental impacts because of its unique and efficient gasification process and superior air emission control system, along with the conditions placed upon the operation by the regulatory agencies.
- 4. The Conditional Use Permit (C.U.P.) prepared by the City of Fresno includes a comprehensive Mitigation Monitoring Plan that mandates conditions of operation for the FREES plant and specifies which agency is responsible for ensuring that those mitigation procedures are carried out.

CONSTRUCTION IMPACTS

 Construction of the FREES plant must comply with the regulations for such activities by the City, State and Federal agencies, including the City of Fresno Planning Department, Building & Safety, and OSHA. This includes control and minimization of dust, noise, vibration and other factors within regulatory limits throughout the construction process. 2. As with all projects, the construction process for FREES will be closely monitored by City inspectors for adherence to regulations.

SOLID RESIDUALS

- 1. Residual from the gasification process can be used by itself or blended with the mulch and compost material, that WCW produces onsite, and sold to farmers as a fertilizer and soil conditioner.
- 2. Fine, residual solids from the Dust Collector can be beneficially reused in construction aggregates and concrete manufacturing.
- 3. Residual slurries from the wet scrubber and wet electrostatic precipitator control systems will be processed through a Reverse Osmosis unit, and the resulting solids recycled back to the gasifier where they will ultimately be recovered as ash to be recycled and reused as described above.
- 4. There are no hazardous materials generated by the FREES plant, which has been proven by laboratory chemical testing of the ash produced from gasifying this type of woody biomass feedstock.

WATER

- The FREES plant, in conjunction with other operations on the WCW site, will reclaim water inherent in the organic feedstocks, totaling 7,000,000 gallons per year. This water will be used in onsite processes, to control dust on internal roads, and potentially to augment the water supplies of the Fresno Irrigation District via the irrigation channel that crosses the site.
- 2. In this way, FREES will contribute to a net production of water rather than consumption.

FORESTS

- 1. No deforestation will result through development and operation of the FREES plant or the Pellet Mill.
- 2. The primary feedstocks will be greenwaste from the City's green can collection system and agricultural wood waste.
- 3. Any minimal amount of forest wood received, if any, as feedstock will come from fire prevention activities (utility line clearing) performed by SCE or PG&E.
- 4. To date, no forestry feedstock has been received at the WCW site.

PELLET MILL

- 1. The pellet mill will be located inside an existing, fully-enclosed building and will be electric driven.
- 2. All feedstock to be pelletized is already being received at the site.
- 3. No significant impacts are expected due to the enclosure described above, and the use of electricity to power the mill.

FIGURES

SECTIONS:

- (1) FREES Renderings
- (2) Rio Bravo Biomass Co-generation Plant
- (3) Covanta, Mendota Biomass Co-generation Plant
- (4) Shasta Biomass Co-generation Plant

SECTION 1: FREES RENDERINGS

Figure 1.1-FREES Rendering, Street-view



Figure 1.2- FREES Rendering, Side-view



Figure 1.3- FREES Rendering, Aerial Side-view



SECTION 2: RIO BRAVO BIOMASS CO-GENERATION PLANT



Figure 2.1- Rio Bravo Plant, View from Southern Vantage Point

Figure 2.2- Rio Bravo, Ground-level View



SECTION 3: CONVANTA, MENDOTA BIOMASS CO-GENERATION PLANT

Figure 3.1- Mendota Plant, Street-view



SECTION 4: SHASTA BIOMASS CO-GENERATION PLANT



Figure 4.1- Shasta Plant