Santa Barbara County ReSource Center
Petition for Variance Findings – October 4, 2023
ReSource Center Materials Recovery Facility (MRF) Overview

- **Tipping Area**: All Incoming MSW and CSSR is “tipped” onto the tipping area for processing.
- **Materials Sorting Area**: mixed waste & recyclable processing equipment area.

- Building air is exhausted to respective baghouse filters.
- Baghouse filters vent to Biofilter Scrubbers.
- Biofilter Scrubbers vent to Biofilter woodchip media.
Odor/Emission Control (NH₃, H₂S & VOC’s)

- All processing activities with potential to emit odors in enclosed buildings with all HVAC routed through biofilters prior to exhausting to the atmosphere (min. 6 air changes per hour).
Alisal Fire Impacts to MRF Biofilters

Fire consumed 6' of Wood Chip Media & destroyed scrubbers and baghouse fans
Progress Since Variance Ext. Issued 12/22

- 24 mos. weekly monitoring: H2S, NH3 & PM2.5 & PM10
- Consistent indoor air levels averaging 0.004 & 0.30 ppmv H2S & NH3
- The levels of H2S & NH3 are 0.4% and 6.0% of their biofilter permit emission limits of 1 & 5 ppmv, respectively
- Based on discussions and agreement with District engineering staff, the MRF biofilter including its scrubbers will not be rebuilt but the baghouse filters will be rebuilt
- Triggered a permit modification (ATC 14500-10)
And scrubbers?
Current Status

• ATC Mod 14500-10 permit app.: 8 Incompleteness letters (March 22-May 23) resulted in Completeness in June ‘23
• Public Works completed related CEQA memo (August ‘23)
• BOS approval of Alisal Fire rebuild & CEQA (November ‘23)
• Demo of existing biofilter then 6 mos. Construction (Estimated for completion by June 2024)
The District has not received a final CEQA document and cannot proceed with permitting until the final document is received.
Aimee E. Long, 2023-09-28T23:08:37.970

You may want to confirm this timeline with the County, if permit issuance is still pending final CEQA document.
Aimee E. Long, 2023-09-28T23:09:55.567
Six Explicit Findings

1. APPLICANT IN VIOLATION of district rule or HSC 41701 (Visible Emissions)
2. NONCOMPLIANCE due to CONDITIONS BEYOND APPLICANTS REASONABLE CONTROL and requiring compliance would result in UNREASONABLE TAKING OF PROPERTY or CLOSING of BUSINESS
3. SUCH TAKING is WITHOUT CORRESPONDING BENEFIT in reducing pollution.
4. APPLICANT has considered CURTAILING OPERATIONS.
5. APPLICANT will REDUCE EMISSIONS to maximum extent feasible.
6. APPLICANT will MONITOR and REPORT emissions.
Two Implicit Findings

1. OPERATION under variance NOT a NUISANCE.
2. OTHER REQUIREMENTS to guarantee EXPEDITIOUS COMPLIANCE with emissions standards or increments of progress.
1. APPLICANT IN VIOLATION of district rule or HSC 41701 (Visible Emissions)

District Rule 206 (ATC/PTO) & Permit Conditions

Compliance impossible due to Alisal Fire catastrophic losses

- 9.C.1. MRF Tipping Area
  - Exhaust vented to baghouse
  - Building negative pressure monitoring and recording
- 9.C.2. MRF Materials Sorting Area
  - Exhaust vented to baghouse
- 9.C.4. MRF Tipping Area and Materials Sorting Area Baghouses
  - Shall not accept or handle MSW or CSSR while respective baghouses are not in operation
  - Building negative pressure monitoring and recording
  - Design flowrates and operational hours
  - Bag maintenance
  - All baghouse exhaust shall be vented to a biofilter
District Rule 206 (ATC/PTO) and Permit Conditions

- 9.C.5. MRF Tipping Area and MRF Materials Sorting Area Biofilters
  - Shall not accept or handle MSW or CSSR while respective biofilters are not in operation
  - Design flowrates and operational temperatures
  - Subsurface moisture content, hydrogen sulfide and ammonia measurements.
- 9.C.6. MRF Tipping Area and MRF Materials Sorting Area Biofilter Scrubbers
  - Shall not accept or handle MSW or CSSR while respective biofilter scrubbers are not in operation
  - Design pH, recirculating flowrate, and pressure drop
- 9.C.33.a. Baghouse Inspection and Maintenance Plan
2. NONCOMPLIANCE due to CONDITIONS BEYOND APPLICANTS’ REASONABLE CONTROL and requiring compliance would result in UNREASONABLE TAKING OF PROPERTY or CLOSING of BUSINESS?

Requiring Immediate Compliance Results in Suspension of Critical Infrastructure Operations (i.e., Closing of Business)

- The Alisal Fire and resulting catastrophic damage is beyond the reasonable control of the Petitioner.
- Since the granting of the Dec 2021 variance, Covid-based supply chain delays for the replacement of damaged equipment has been beyond the reasonable control of petitioner.
- Immediate compliance would put the facility in non-compliance with other State Regulations, such as SB 1383 (60% reduction in organic waste disposal by 2023 and 75% by 2025).
- Diverting waste to another processing facility increases the cost to ratepayers and contributes adversely to air quality and traffic impacts with numerous trucks added to Highway 101 (~$20M/Year-200,000 TPY @ $100/ton T&D).
- ~110 Full-time employees ($6.5M payroll).
In the Petition, you also describe how you are a contractor and the County has not yet provided a budget for the project, the 8 incompleteness letters, the final CEQA document, and how you are unable to do anything further until these items are complete. You may want to consider adding these items to this section.
3. SUCH TAKING is WITHOUT CORRESPONDING BENEFIT in reducing pollution. Emissions are 0.4-6% of Permit Limits w/o Biofilters

- Scrubbers are designed to remove ammonia (NH$_3$) from the MRF air stream.
- 24 months of indoor air measurements of ammonia averaged 0.3 ppmv (5.0 ppmv permit limit). Ammonia concentrations 6% of permitted levels as materials received in the Tipping Area are processed within 1-2 hours.
- 24 months of indoor air measurements of hydrogen sulfide (H$_2$S) averaged 0.004 ppmv, 0.4% of permitted level (1 ppmv permit limit).
- Operating the MRF without the MRF Biofilter emission and odor control equipment will not pose any significant air quality impacts.
4. APPLICANT has considered CURTAILING OPERATIONS. Curtailment would have negligible emission impacts while imposing economic & other regulatory compliance burdens on County potentially increasing GHG emissions.

- MRF compliance with State Regulations (SB 1383) requires 60% diversion of (2023) organic waste from landfilling increasing to 75% (2025). The MRF operations are critical and necessary waste infrastructure as it sorts and recovers recyclable commodities and organic waste to reduce volume of material landfill by ~60%.
- From October 12th – 25th, 2021 waste normally processed at the MRF with residue disposed at the Tajiguas Landfill was exported and buried in remote landfills, contrary to various CalRecycle regulations mandating recycling and organic waste diversion.
- $20M/year additional cost to ratepayers if curtailment were imposed (~200,000 tons per year at ~$100/ton for remote landfill transport & disposal) with ~50 additional trucks on US 101 to Ventura County increasing traffic and GHG impacts.
- ~110 full-time employees with annual payroll estimated at ~$6.5 million.
5. APPLICANT will REDUCE EMISSIONS to maximum extent feasible

Continued efficient waste processing at MRF to ADF will Reduce Emissions During Variance Period

- Constituent emissions will be reduced to the maximum extent feasible by expeditiously processing the MSW and immediately transporting recovered organics to the Anaerobic Digestion Facility (ADF) for in-vessel processing.

- The brief MRF waste retention time efficiently diverts (~average of 1.5 hours of tip floor time + <2 minutes processing time) potential NH$_3$ and H$_2$S emissions to the ADF where there is an operational scrubber and biofilter.
6. APPLICANT will MONITOR and REPORT emissions. H$_2$S, NH$_3$ and PM levels have been and will continue to be recorded & reported.

- Measurements of H$_2$S, NH$_3$ and PM recorded for the past 24 months show emission levels far below permit limits (NH$_3$ <6%, H$_2$S <0.4%).
- Weekly measurements of H$_2$S, NH$_3$ and PM will continue to be recorded and reported to the District during the Variance Period until the new baghouse filters are placed into operation.
- There may be some MRF PM emissions while baghouse filters are inoperable; however, PM emissions are not expected to exceed permit limits.
Two Implicit Findings

1. OPERATION under variance NOT a NUISANCE.
Continued efficient MRF waste processing and ADF transfer for in-vessel processing mitigates and nearly eliminates potential to emit constituents of concern (NH$_3$, H$_2$S & PM)

2. OTHER REQUIREMENTS to guarantee EXPEDITIOUS COMPLIANCE with emissions standards or increments of progress.
Baghouse filter replacement to commence following November 2023 BOS Approval and be completed within Diani’s estimated ~6-7 mos. construction schedule (i.e., June 2024)
Variance - Overview

- The MRF operations is required for compliance with State regs. and to serve the Community
- SB 1383 Organics Diversion Compliance.
- ~110 Full-time employees.
- Annual transporting and processing costs of ~$20M for export of Santa Barbara County waste to Ventura County.
- MRF Operations without the biofilters will not result in emissions in excess of the limits set in the Project’s Current Air Permit 14500-05.