

**San Joaquin Valley
Unified Air Pollution Control District**

Best Available Control Technology (BACT) Guideline 6.4.1*

Emissions Unit: Transportable Screening Operation **Industry Type:** Composting Operation
– Green Waste, Wood Waste, and Compost Materials

Equipment Rating: All

Last Update: March 22, 2022

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	Use of a water sprinkler system or maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity		

BACT is the most stringent control technique for the emissions unit and class of source. Control techniques that are not achieved in practice or contained in a state implementation plan must be cost effective as well as feasible. Economic analysis to demonstrate cost effectiveness is required for all determinations that are not achieved in practice or contained in an EPA approved State Implementation Plan.

***This is a Summary Page for this Class of Source - Permit Specific BACT**

Proactive Best Available Control Technology Analysis

District BACT Guideline 6.4.1

Composted Materials – Screening, Transportable, Wood Waste Processing

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I. Introduction

The objective of this project is to proactively update the Best Available Control Technology (BACT) guideline 6.4.1, which is applicable for transportable screening operations that process green waste, wood waste, and compost materials. This guideline was last updated on April 3, 1998.

The current update will incorporate any applicable and more stringent emission control standards that have been achieved in practice or determined to be technologically feasible since the last update. Any corrections and/or changes needed to ensure consistency with the District’s BACT policy and other District practices will also be made.

The discussions in this update will be limited to the following topics:

- Source of emissions
- Current BACT requirements
- Top-Down BACT Analysis for each pollutant
- Recommendation

II. Source of emissions

PM₁₀ emissions will be emitted from the screening of green waste, wood waste, and compost materials. The screening equipment is used to prepare the material to the required specification prior to composting.

Please note, the transportable IC engine powering the screener is considered a separate emissions unit and will therefore be subject to a different BACT Guideline, such as BACT Guideline 3.2.11 *Transportable Compression – Ignited IC Engines (Non-Agricultural)*.

III. Current BACT Requirements

The current requirements of SJVAPCD BACT Guideline 6.4.1 are as summarized in the following table:

Pollutant	Achieved in Practice or contained in SIP	Technologically Feasible	Alternate Basic Equipment
PM ₁₀	Use of a water sprinkler system or maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity		

IV. Top-Down BACT Analysis

BACT analysis for PM₁₀ Emissions

As explained earlier, PM₁₀ is emitted from the screening of green waste, wood waste, and compost materials.

Step 1 - Identify All Possible Control Technologies

The following BACT clearinghouse references were reviewed to determine whether any green waste, wood waste, and compost materials screening operations have been required to employ PM₁₀ controls:

- EPA RACT/BACT/LAER clearinghouse
- CARB BACT clearinghouse
- South Coast AQMD (SCAQMD) BACT clearinghouse
- Bay Area AQMD (BAAQMD) BACT clearinghouse
- Sacramento Metro AQMD (SMAQMD) BACT clearinghouse
- San Diego AQMD (SDAQMD) BACT clearinghouse
- San Joaquin Valley APCD (SJVAPCD) BACT clearinghouse

Survey of BACT Guidelines:

The U.S. Environmental Protection Agency (USEPA) RACT/BACT/LAER Clearinghouse, the California Air Pollution Control Officers Association (CAPCOA) BACT Clearinghouse, the South Coast Air Quality Management District (SCAQMD) BACT Clearinghouse, Bay Area Air Quality Management District (BAAQMD) BACT Guidelines, Sacramento Metropolitan Air Quality Management District (SMAQMD) BACT Clearinghouse, and San Diego Air Quality Management District (SDAQMD) BACT Guidance Document were reviewed to determine potential control technologies for this class and category of operation.

The EPA RACT/BACT/LAER clearinghouse does include any guidelines for transportable green waste, wood waste, and compost materials screening operations.

The CARB BACT clearinghouse does not include guidelines for transportable green waste, wood waste, and compost materials screening operations.

The BAAQMD BACT clearinghouse does not include guidelines for transportable green waste, wood waste, and compost materials screening operations.

The SDAQMD clearinghouse does not include any BACT requirements for transportable green waste, wood waste, and compost materials screening operations.

The SCAQMD BACT clearinghouse does not include any BACT for transportable green waste, wood waste, and compost materials screening operations.

The SMAQMD clearinghouse has expired BACT Guideline 167 for PM₁₀ emissions for transportable green waste, wood waste, and compost materials screening operations. Although the BACT Guideline has expired, the AIP requirements will be listed to ensure this proactive BACT is at least as stringent as SMAQMD BACT Guideline 167:

Pollutant	Category & Class	Achieved in Practice
PM ₁₀	Portable Greenwaste Trommel Screen	Visible Emissions Evaluation (VEE) ≤ 5% Opacity

Summary of BACT Guidelines:

Based on the above information, the current most stringent BACT emissions limitation for green waste, wood waste, and compost material screening operations would be:

- Visible Emissions Evaluation (VEE) ≤ 5% Opacity

Step 2 - Eliminate Technologically Infeasible Options

There are no technologically infeasible options listed in Step 1. All of the emission control options under consideration are based on either current BACT requirements, current rule requirements, or actual source test data. Therefore, no further discussion is required.

Step 3 - Rank Remaining Control Technologies by Control Effectiveness

The most stringent PM₁₀ emission control technology option under consideration is considered to be achieved in practice. All other control options considered are less stringent. Therefore, ranking is not necessary.

Step 4 - Cost Effectiveness Analysis

As discussed above, this BACT analysis is being performed as a proactive update to this BACT guideline and is not part of a specific permitting action. Therefore, a cost effective analysis is not necessary and will not be included as a part of this analysis.

Step 5 - Select BACT

This is a proactive determination that is not part of a specific permitting action. Therefore, selecting BACT is not necessary. However, the following PM₁₀ emission control standard has been determined to be achieved in practice and is therefore determined to be BACT for green waste, wood waste, and compost materials screening operations:

- Use of a water sprinkler system or maintaining adequate moisture content of the process materials to prevent visible emissions in excess of 5% opacity

V. Recommendation

No new AIP requirements were found during this proactive BACT guideline process. Therefore, the current AIP BACT requirements for PM₁₀ emissions from transportable screening of green waste, wood waste, and compost material operations will remain.

However, the current BACT guideline description should be updated to be more descriptive of the equipment subject to these requirements.

Current Emissions Unit Description:

- Compost Materials – Screening, Transportable, Wood Waste Processing

Proposed Emissions Unit Description:

- Transportable Screening Operation – Green Waste, Wood Waste, and Compost Materials

Appendix

Appendix A: Proposed Draft BACT Guideline 6.4.1

Appendix B: Current BACT Guideline 6.4.1

Appendix A
Proposed Draft BACT Guideline 6.4.1

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6.4.1

Appendix B
Current BACT Guideline 6.4.1

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Best Available Control Technology (BACT) Guideline 6.4.1*

Emissions Unit: Composted Materials - Screening, Transportable, Wood Waste Processing **Industry Type:** Composting Operation

Equipment Rating: All

Last Update: April 3, 1998

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