

# San Joaquin Valley Air Pollution Control District

www.valleyair.org

## Facility Emission Mitigation Plan (FEMP) and Authority to Construct (ATC) Application Forms For Compliance with Rule 4566 - Organic Material Composting Operations

Facility Name: _____		
Mailing Address: _____	City: _____	State & Zip: _____
Facility Address: _____	City: _____	State & Zip: _____
Name of Applicant: _____		Title of Applicant: _____
Signature of Applicant: _____	Date: _____	Phone: (    ) Fax: (    ) E-Mail: _____
Does your facility have any existing permits with the District at this location? <input type="checkbox"/> No <input type="checkbox"/> Yes.		
If yes, please provide your District Facility Identification Number: _____		
Permit Review Period: Please check the applicable box to indicate whether you would like to review the draft ATC permit and conditions of approval before final issuance of the permit. If none of the three boxes is checked, we will assume no review period is requested. Be aware that requesting a review period may delay final approval of your ATC permit until the requested review period elapses, although the District can finalize the permit at the applicant's request at any time during a requested review period.		
		<input type="checkbox"/> 3-day review <input type="checkbox"/> 10-day review <input type="checkbox"/> No review requested
Maximum daily quantity of organic material received on site for composting: _____ (in wet tons/day)		
Maximum number of days organic material received for composting is stored on site prior to removal from facility, active-phase composting, or covering with a waterproof cover: _____ (in days)		
Maximum annual quantity of received organic material stockpiled on site for composting: _____ (in wet tons/year)		
Maximum annual quantity of stockpiled organic materials composted: _____ (in wet tons/year)		

**Note:** Refer to the Definitions Section of District Rule 4566 (Organic Material Composting Operations) for an explanation of the terms used in this form. You may view this rule at the following internet link:  
<http://www.valleyair.org/rules/currnrules/Rule4566CleanRule.pdf>.

**FOR APCD USE ONLY:**

DATE STAMP	FILING FEE RECEIVED: \$ _____ CHECK #: _____  DATE PAID: _____  PROJECT #: _____ FACILITY ID: _____
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## 1. Stockpile Requirements

To comply with the stockpile requirements of Rule 4566, Section 5.1, please check each box that corresponds to the mitigation measures that you are proposing to utilize at your facility based on the total annual organic material throughput limits as stated in Table A below.

<b>Table A - Stockpile Requirements</b>		
<b>Facility with a Total Throughput of Less Than 100,000 Wet Tons/Year of Organic Material</b>		<b>Proposed by Facility</b>
1.	Within 10 days of receipt of organic material for composting the owner/operator will comply with at least one of the mitigation measures listed in the attached Rule 4566 Information Sheet on page 4 for Stockpile Mitigation Measures.	[ ]
2.	Implement an alternative mitigation measure not listed in the attached Rule 4566 Information Sheet on page 4 for Stockpile Mitigation Measures. Please note the use of this option requires both District and EPA approval. If you propose the use of this option please also include the information listed in Table C (Facility Proposed Mitigation Measure Compliance Plan) on page 3 of this form.	[ ]
<b>Facility with a Total Throughput of Greater Than or Equal to 100,000 Wet Tons/Year of Organic Material</b>		<b>Proposed by Facility</b>
1.	Within 3 days of receipt of organic material for composting the owner/operator will comply with at least one of the mitigation measures listed in the attached Rule 4566 Information Sheet on page 4 for Stockpile Mitigation Measures.	[ ]
2.	Implement an alternative mitigation measure not listed in the attached Rule 4566 Information Sheet for Stockpile Mitigation Measures. Please note the use of this option requires both District and EPA approval. If you propose the use of this option please also include the information listed in Table C (Facility Proposed Mitigation Measure Compliance Plan) on page 3 of this form.	[ ]

## 2. Composting Requirements

To comply with the composting requirements of Rule 4566, Section 5.2, please check each box that corresponds to the mitigation measure that you are proposing to utilize at your facility based on the maximum annual organic material throughput limits as stated in Table B below.

<b>Table B - Composting Requirements</b>		
<b>Composting Operation with a Total Throughput of Less Than 200,000 Wet Tons/Year of Organic Material</b>		<b>Proposed by Facility</b>
1.	During active-phase windrow composting, implement at least three turns of the windrow pile along with the use of an Independent Watering Systems Mitigation Measure. Please refer to the attached Rule 4566 Information Sheet on page 4 under Composting Mitigation Measures for the specific requirements when using an Independent Watering System.	[ ]
2.	During active-phase windrow composting, implement at least three turns of the windrow pile along with the use of an Integrated Watering Systems Mitigation Measure. Please refer to the attached Rule 4566 Information Sheet on page 4 under Composting Mitigation Measures for the specific requirements when using an Integrated Watering System.	[ ]
3.	Implement an alternative mitigation measure not identified above that demonstrates at least a 19% reduction (by weight) in VOC emissions. Please note the use of this option requires both District and EPA approval. If you propose the use of this option please also include the information listed in Table C (Facility Proposed Mitigation Measure Compliance Plan) on page 3 of this form.	[ ]

<b>Table B - Composting Requirements (Continued)</b>		
<b>Composting Operation with a Total Throughput of Greater Than or Equal to 200,000 Wet Tons/Year and less than 750,000 wet tons/year of Organic Material</b>		<b>Proposed by Facility</b>
1.	During active-phase windrow composting, implement at least three turns of the windrow pile along with the use of an Independent Watering System and Finished Compost Cover mitigation measures. Please refer to the attached Rule 4566 Information Sheet on page 4 under Composting Mitigation Measures for the specific requirements when using an Independent Watering System and Finished Compost Cover.	[ ]
2.	During active-phase windrow composting, implement at least three turns of the windrow pile along with the use of an Integrated Watering System and Finished Compost Cover mitigation measures. Please refer to the attached Rule 4566 Information Sheet on page 4 under Composting Mitigation Measures for the specific requirements when using an Integrated Watering System and Finished Compost Cover.	[ ]
3.	Implement an alternative mitigation measure not identified above that demonstrates at least a 60% reduction (by weight) in VOC emissions. Please note the use of this option requires both District and EPA approval. If you propose the use of this option please also include the information listed below in Table C (Facility Proposed Mitigation Measures Compliance Plan).	[ ]
<b>Composting Operation with a Total Throughput of Greater Than or Equal to 750,000 wet tons/year of Organic Material</b>		<b>Proposed by Facility</b>
Implement a mitigation measure that demonstrates at least 80% reduction (by weight) in VOC emissions for organic material during the active phase of composting. Please note the proposed mitigation measure requires both District and EPA approval. Please also include the information listed below in Table C (Facility Proposed Mitigation Measures Compliance Plan).		[ ]

**3. Additional Information for Facility Proposed Mitigation Measure Compliance Plan:**

<b>Table C - Facility Proposed Mitigation Measure Compliance Plan</b>
<p>If you are proposing to utilize a mitigation measure compliance plan that requires both District and EPA approval please include the following information:</p> <ul style="list-style-type: none"> <li>• The name(s), address(s) and telephone number(s) of person(s) responsible for the preparation, submittal, and implementation of the compliance plan.</li> <li>• Description and process diagram of the operation.</li> <li>• Complete description of the control method(s) that will be used in place of the above listed mitigation method.</li> <li>• All data, calculations methodology, calculations, records, manufacturer specifications, and all other information necessary to determine that proposed mitigation method will achieve the required emission reductions.</li> <li>• Methodology and calculations establishing the daily and annual VOC emissions or projected VOC emissions.</li> <li>• List of all equipment (including the make, model #, and type) utilized in the proposed mitigation method.</li> </ul>

## Rule 4566 Information Sheet

### **Stockpile Mitigation Measures**

- |    |   |
|----|---|
| 1. | Remove the organic material from the facility.  |
| 2. | Place the organic material into the active phase windrows and start active phase composting.  |
| 3. | Cover the organic material with a waterproof cover that have at least a six-foot overlap of adjacent sheets and be securely anchored. |

### **Composting Mitigation Measures**

#### **Watering Systems**

- |    |  |
|----|--|
| 1. | <p><u>Independent Watering System:</u></p> <ol style="list-style-type: none"><li>a. Apply water to the surface area of each windrow prior to turning. Test each windrow within three hours before turning for adequate water by taking a sample of the compostable material from between the vertical midpoint and the peak of the windrow, at least three inches below the outer surface. For the ball test, form the material into a ball using hand pressure. There should be at least enough water to form a ball when compressed by hand, but the ball may break when tapped.</li><li>b. If the ball crumbles during the hand pressure test, apply additional water to the windrow prior to turning until the material passes the ball test, as described in Section 1.a.</li></ol>   |
| 2. | <p><u>Integrated Watering System:</u></p> <ol style="list-style-type: none"><li>a. For windrows that will be turned on the same day and will require the same water volume, mechanically turn the first windrow while operating the integrated watering system. Within three hours after turning the first windrow, take a sample of the compostable material from between the vertical midpoint and the peak of the windrow, at least three inches below the outer surface. For the ball test, form the material into a ball using hand pressure. There should be at least enough water to form a ball when compressed by hand, but the ball may break when tapped.</li><li>b. If the ball crumbles during the hand pressure test, apply additional water and mechanically turn the same windrow, then retest until the material passes the ball test. Subsequent windrows shall not be turned until the initial windrow passes the ball test. Utilize the established water volume for the remaining windrows to be turned with the same water volume on the same day. Repeat the method in Section 2.a. for windrows that will be turned with a different water application rate.</li></ol> |
- For either the independent or integrated watering systems, if a rain event occurs prior to turning the windrow; take a sample of the compostable material from between the vertical midpoint and the peak of the windrow within three hours before turning and at least three inches below the outer surface. Form the material into a ball using hand pressure. There should be at least enough water to form a ball when compressed by hand, but the ball may break when tapped.
  - If the ball crumbles during the hand pressure test, apply additional water to the windrow prior to turning until the material passes the ball test.

#### **Finished Compost Cover**

The operator will cover the surface area of at least the top third of each windrow with finished compost cover so that there is at least six inches in height of finished compost cover as measured at the peak of each windrow. The operator will cover the surface area of each windrow as described within three hours of initial windrow formation and within three hours after each turning of the windrow for at least three turns of each windrow. For any windrows that are mechanically turned after 2:00 PM, the operator will cover the surface area of at least the top third of each windrow with finished compost cover by 12:00 PM the following day.