

## Reduced Sulfur Compounds Emission Estimates

Biofiltration Reduction (VOCs) 80%  
 Biofiltration Reduction (H2S) 80%

| Sulfur Compounds   |          | Low   | High  | Ave  | Low     | High   |
|--------------------|----------|-------|-------|------|---------|--------|
| Name               | Formula  | ug/m3 |       |      | Kg/year |        |
| Hydrogen sulfide   | H2S      | 0.7   | 735   | 217  | 0.03    | 26.25  |
| Dimethyl sulfide   | (CH3)2S  | 2.5   | 4875  | 1189 | 0.09    | 174.11 |
| Dimethyl disulfide | (CH3)2S2 | 0.1   | 12600 | 3479 | 0.00    | 450.00 |
| Ethanethiol        | CH3SH    | 0.04  | 6960  | 2100 | 0.00    | 248.57 |
|                    |          |       |       |      |         |        |

### Airflow

|         | cfm (max) | m3/min | m3/day | m3/year    |
|---------|-----------|--------|--------|------------|
| Compost |           |        |        |            |
| Cure    | 1400      | 39.64  | 57078  | 20,833,522 |
| TOTAL   | 1000      | 28.31  | 40770  | 14,881,087 |
|         |           |        |        | 35,714,609 |

### Assumptions

1. Emission concentrations from Tables 3 and 4, Odors and Volatile Organic Compound Emissions from Composting
2. All Compost and All Curing running positive aeration, at maximum airflow 24/7 X 365 days

| Ave    | Uncontrolled |      |     | Controlled |      |     |  |  | lb/hr<br>(total) |
|--------|--------------|------|-----|------------|------|-----|--|--|------------------|
|        | Low          | High | Ave | Low        | High | Ave |  |  |                  |
|        | lb/year      |      |     | lb/year    |      |     |  |  |                  |
| 7.75   | 0.06         | 58   | 17  | 0.011      | 12   | 3   |  |  | 1.32E-03         |
| 42.46  | 0.20         | 384  | 94  | 0.039      | 77   | 19  |  |  | 8.77E-03         |
| 124.25 | 0.01         | 992  | 274 | 0.002      | 198  | 55  |  |  | 2.27E-02         |
| 75.00  | 0.00         | 548  | 165 | 0.001      | 110  | 33  |  |  | 1.25E-02         |
|        |              |      |     |            |      |     |  |  |                  |

0.001322

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0.014841

| <b>lb/24-hr<br/>(total)</b> | <b>lb/year<br/>(total)</b> |
|-----------------------------|----------------------------|
| 3.17E-02                    | 12                         |
| 2.10E-01                    | 77                         |
| 5.44E-01                    | 198                        |
| 3.00E-01                    | 110                        |
|                             |                            |