

Biosolids Annual Report Form

Facility Information

DEQ File Number: _____

Permit Number: _____

Name City of Toledo WWTP Permit Type: NPDES x
 Location Address 1105 SE Fir ST Toledo OR WPCF _____

Mailing Address PO Box 220 Toledo OR 97391

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Biosolids Process Descriptions

Generation

Wastewater Sources & Volumes:

| | Gallons/yr |
|----------------------|---------------|
| Municipal | 216000 |
| Industrial | 0 |
| Septage | 0 |
| Total Gallons | 216000 |

Solids Produced:

| | Dry Tons (DT)/yr |
|-----------------|------------------|
| primary | |
| secondary | 36.12 |
| other | |
| Total DT | 36.12 |

Preparation

Mark applicable processes and on separate sheet describe the processes and equipment used for:

- screening**
- grit removal**
- settling**
- thickening**
- digestion**
- dewatering**

Storage

For each container type, list numbers, sizes, materials (i.e. steel, etc.) and volume.

| <u>Containers</u> | X number of units | X volumes of each storage container | (material) | = total volume |
|------------------------|-------------------|-------------------------------------|------------|----------------|
| tanks | 1 | 191,000 | MLSS | 191,000 |
| clarifiers | 3 | 358K, 36K, 42K | | 437,000 |
| lagoons | | | | |
| drying beds | 1 | varies | sludge | |
| other | 1 | 92,000 | sludge | 92,000 |
| other | 2 | 100,000 | sludge | 200,000 |
| TOTAL CAPACITY: | | | | |

Application

List transport equipment used from facility to sites (e.g. 3,000 gal. tanker truck).

→ 3,000 gallon tanker truck

List application method and equipment used to apply at sites

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(e.g. truck splash plate, spray gun, manure spreader, etc.).

→ truck splash plate

Biosolids Quality

| | | | | | |
|----|--|---------|--|---------|---|
| EQ | | Class A | | Class B | x |
|----|--|---------|--|---------|---|

| Testing frequency (times/yr) | 1 | 4 | 6 | 12 |
|--|--------|-------------|----------------|------------|
| [in Metric Tons] | [<290] | [290>1,500] | [1,500>15,000] | [≥ 15,000] |
| [in U.S. Tons] | [<319] | [319>1,650] | [1,650>16,500] | [≥ 16,500] |
| [Choose one, based on dry weight of biosolids produced and land applied annually.] | | | | |

Test data

Use Tables below to record quarterly or annual testing results; use average column for annual test data. If testing more frequently (monthly), supply data on separate sheet.

Nutrient Monitoring

| Item | 1 st quarter | 2 nd quarter | 3 rd quarter | 4 th quarter | Average |
|--------------------|-------------------------|-------------------------|-------------------------|-------------------------|----------|
| TKN | | | | | 4.21 |
| NO ³ -N | | | | | <0.00293 |
| NH ⁴ -N | | | | | 0.0101 |
| P | | | | | 2.52 |
| K | | | | | 2030 |
| pH | | | | | 6.55 |
| Total Solids | | | | | 4.01 |
| Vol. Solids | | | | | 2.30 |

Test data is expressed in % dry weight (dw), except pH which is standard units.

Pollutant Monitoring

| Metals | 1 st quarter | 2 nd quarter | 3 rd quarter | 4 th quarter | Average |
|--------|-------------------------|-------------------------|-------------------------|-------------------------|---------|
| As | | | | | 4.31 |
| Cd | | | | | 1.44 |
| Cr | | | | | 35.4 |
| Cu | | | | | 244 |
| Pb | | | | | 35.4 |
| Hg | | | | | .466 |
| Mo | | | | | 5.56 |
| Ni | | | | | 20.6 |
| Se | | | | | <4.81 |
| Zn | | | | | 469 |

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Test data is expressed in mg/kg (ppm) based on dry weight.

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Pathogen Reduction Monitoring & Records

Circle selected pathogen reduction alternative below and on a separate sheet:

- Describe process used to reduce pathogens
- State operational parameters met (e.g. time & temperature)
- Attach monitoring data and certification statement

Part 503.32 Pathogen Reduction Alternatives

Class A Alternatives

[requires tests for fecal coliform &/or *Salmonella* sp.]

1. time & temperature
2. pH >12, 72 hr; @52°C, 12hr, >50%TS
3. pre- & post-testing for enteric virus & helminth ova
4. post-testing for enteric virus & helminth ova
5. PFRP:
 - 1 composting
 - 2 heat drying
 - 3 heat treatment
 - 4 thermophilic aerobic
 - 5 beta ray irradiation
 - 6 gamma ray irradiation
 - 7 pasteurization
6. PFRP equivalent

Class B Alternatives

1. 7 samples, geometric mean < 2,000,000 MPN or CFU/g TS
2. PSRP:
 - 1 aerobic digestion
 - 2 air drying
 - 3 anaerobic digestion
 - 4 composting
 - 5 lime stabilization
3. PSRP equivalent

Vector Attraction Reduction (VAR) Monitoring & Records

Circle selected alternative and on separate sheet:

- Describe VAR process used
- Describe operational parameters met (e.g. pH & time)
- Attach monitoring data and certification statement

Part 503.33 Vector Reduction Alternatives

In-plant alternatives

1. 38% min. reduction of volatile solids
2. anaerobic bench scale digestion
3. aerobic bench scale digestion
4. SOUR aerobic 1.5mg O²/hr/g TS (dw)
5. aerobic 14 days >45°C average temp.
6. pH ≥ 12 for 2 hr, + 22 hr ≥ 11.5 pH
7. secondary solids ≥ 75% solids
8. primary solids ≥ 90% solids

Site management alternatives

9. subsoil injection within 8 hr
10. soil incorporation within 6-8 hr

Other alternatives

11. (for disposal units only)
12. septage only
pH ≥ 12 for at least 30 min.

