

Jefferson County On-Site Sewage Program

Operational Checklist: System Description

(This form is used for the initial system evaluation for the facility and the site. It should be kept on file, and a copy should accompany the service provider at each CMP service visit. Any changes to the system/facility should be recorded on the form, along with the date the change was noted.)

A. Client Contact Information

Name of owner: _____ System ref. #: _____

Phone: _____ T: _____ R: _____ Sec: _____ No.: _____

Cell: _____

Site address/County: _____

Mailing address/County (if different): _____

Directions to site: _____

B. System Documentation Available (If no documentation, fill out.)

Date installed: _____

Installer: _____ License #: _____

Phone: _____ Cell: _____ Fax: _____

E-mail: _____

Designer: _____ License #: _____

Phone: _____ Cell: _____ Fax: _____

E-mail: _____

Previous service provider: _____ License #: _____

Phone: _____ Cell: _____ Fax: _____

E-mail: _____

Design flow: _____ Gal per day

C. Operational Checklists

Identify operational checklists for components included in system. Number the components of the treatment train in order in the spaces provided after the titles.

Site Assessment on File. ☐ Yes ☐ No

Tanks and advanced treatment component operational checklists

☐ Pump: Demand-Dosed system: _____ ☐ Aerobic treatment unit: _____

☐ Pump: Timer-Dosed system: _____ ☐ Constructed wetland: _____

☐ Holding tank: _____ ☐ Lagoon: _____

☐ Septic/trash/processing (tank): _____ ☐ Disinfection unit –chlorine: _____

☐ Pump tank(s): _____ ☐ Disinfection unit –ultraviolet light: _____

☐ Media filter: _____ ☐ Disinfection unit –ozone: _____

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Final treatment and dispersal component operational checklists:

- | | |
|---|--|
| <input type="checkbox"/> Gravity Distribution: _____ | <input type="checkbox"/> Drip field: _____ |
| <input type="checkbox"/> Evapotranspiration bed: _____ | <input type="checkbox"/> Spray field: _____ |
| <input type="checkbox"/> Mound system: _____ | <input type="checkbox"/> Outfalls: _____ |
| <input type="checkbox"/> Bottomless sand filter: _____ | <input type="checkbox"/> Bottomless peat filter: _____ |
| <input type="checkbox"/> Low-pressure drainfield: _____ | |

D. No System Documentation Available

Complete the remaining information if it is not available in the permit or as-built drawings.

Facility Details

1. Number of bedrooms: _____
2. Square footage of facility: _____ sq ft
3. Number of current occupants: _____
4. Design flow: _____ gpd
5. Water supply:
 - ☐ Private water supply
 - ☐ Public water supply
6. Water source (if private supply): Lateral distance to water supply
 - ☐ Groundwater well: _____ ft
 - ☐ Spring: _____ ft
 - ☐ Surface water (i.e. creek, lake, etc.): _____ ft
7. Garbage disposal present. Yes____No____
8. Are any water softener or water treatment chemicals used. Yes____No____
 - ☐ Softener backwash drains to system: Yes____No____
 - ☐ Softener backwash does not drain to system: Yes____No____
9. Has facility been remodeled since original construction. Yes____No____

System Details

1. Site

- a. Landscape position: _____
- b. Drainage: ☐ Surface/gravity ☐ Subsurface/gravity ☐ Subsurface/pump

2. Pretreatment components - Tanks

- a. Holding tank
 - 1) Capacity: _____ gal
 - 2) Material: ☐ Concrete ☐ Fiberglass ☐ Plastic ☐ Other
 - i) Manufacturer: _____
 - 3) Access to surface. Yes____No____
- b. Septic tank /Trash tank
 - 1) Capacity (total): _____ gal
 - i) Compartmented. Yes____No____
 - ii) Capacities for compartmented system: 1)_____gal 2)_____gal
 - 2) Material: ☐ Concrete ☐ Fiberglass ☐ Plastic ☐ Other
 - i) Manufacturer: _____

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- 3) Access to surface. Yes____No____
4) Effluent screen. Yes____No____
i) Manufacturer:_____ Model: _____

c. Flow equalization tank (surge, etc.)

- 1) Capacity: _____ gal/in
2) Material: ☐ Concrete ☐ Fiberglass ☐ Plastic
3) Access to surface. Yes____No____
4) Pump tank: _____ N.A.
i) Manufacturer: _____
5) Pump: _____ N.A.
i) Manufacturer: _____ Model: _____ HP: _____
6) Pump operating condition
i) Discharge Rate: _____ gal/min
ii) Operating Pressure: _____ ft
7) Control method
i) Sensors: ☐ Floats ☐ Pressure transducer ☐ Ultrasonic ☐ Other
ii) Description: _____
8) Pump dose settings
i) Frequency _____ doses/day
ii) Interval _____ sec/dose
iii) Volume _____ gal/dose
9) Control panel
i) Manufacturer: _____ Model: _____
10) Electrical
i) Separate circuits (pump, alarm). Yes____No____
ii) Breaker size: _____
11) Alarm
i) Manufacturer: _____
ii) Sensors: ☐ Floats ☐ Pressure transducer ☐ Ultrasonic ☐ Other
iii) Description: _____

d. Dosing pump tank

- 1) Capacity: _____ gal/in
2) Material: ☐ Concrete ☐ Fiberglass ☐ Plastic
3) Access to surface. Yes____No____
4) Dosing tank: _____ N.A.
i) Manufacturer: _____
5) Pump: _____ N.A.
i) Manufacturer: _____ Model: _____ HP: _____
6) Pump operating condition
i) Discharge Rate: _____ gal/min
ii) Head: _____ ft
7) Control method
i) Sensors: ☐ Floats ☐ Pressure transducer ☐ Ultrasonic ☐ Other
ii) Description: _____
8) Pump dose settings
i) Frequency: _____ doses/day

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- ii) Interval: _____ sec/dose
iii) Volume: _____ gal/dose
- 9) Panel for sensors
i) Manufacturer: _____ Model: _____
- 10) Electrical
i) Separate circuits (pump, alarm). Yes ____ No ____
ii) Breaker size: _____
- 11) Alarm
i) Manufacturer: _____
ii) Sensors: ☐ Floats ☐ Pressure transducer ☐ Ultrasonic ☐ Other
iii) Description: _____

3. Pretreatment components – Advanced

- a. Aerobic treatment unit (ATU)
- 1) Treatment method:
☐ Suspended growth ☐ Attached growth ☐ Rotating Biological Contactor
☐ Combination attached/suspended growth ☐ Sequencing Batch Reactor
☐ Other: _____
- 2) Capacity: _____ gpd
- 3) Material: ☐ Concrete ☐ Fiberglass ☐ Plastic
i) Manufacturer: _____ Model #: _____
ii) Product serial #: _____
- 4) Access to surface. Yes ____ No ____
- 5) Effluent screen / Tertiary filter _____ N.A.
i) Manufacturer: _____
- 6) Air supply
i) Air supply method: ☐ Aspirator ☐ Compressor ☐ Blower ☐ Free Air
ii) Manufacturer: _____ Model #: _____
- 7) Sludge return method: _____
- b. Single pass filter
- 1) Media: ☐ Sand ☐ Glass ☐ Foam ☐ Peat ☐ Other: _____
i) Media depth: _____ in
ii) Liner material: _____
- 2) Filter size: _____ sq ft
i) Dimensions: _____ ft x _____ ft
ii) Accessibility: ☐ Buried ☐ Free Access ☐ Covered
iii) Cover material: _____
iv) Lid insulated. Yes ____ No ____
- 3) Distribution method: ☐ Pressure ☐ Gravity
i) Pipe diameter: _____ in
ii) Flow control: ☐ Orifice ☐ Spray nozzle ☐ Other: _____
Orifice orientation: _____
iii) Flow control diameter: _____ in
iv) Number of flow controls (orifices, nozzles, etc.): _____
v) Squirt height/Operating Pressure: _____ in
vi) Clean outs/Inspection ports: Number _____ Yes ____ No ____
vii) Clean out access to surface. Yes ____ No ____
- 4) Filtrate collection system: _____

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c. Recirculating Filter

- 1) Media: ☐ Sand ☐ Gravel ☐ Polystyrene ☐ Bottom Ash ☐ Foam ☐ Textile
☐ Other: _____
- i) Media depth: _____ in
- ii) Liner material: _____
- iii) Recirculation method: _____
- 2) Filter size: _____ sq ft
- i) Dimensions: _____ ft x _____ ft
- ii) Accessibility: ☐ Buried ☐ Free Access
- iii) Cover material: _____
- iv) Lid insulated. Yes ____ No ____
- 3) Distribution method
- i) Pipe diameter: _____ in
- ii) Flow control: ☐ Orifice ☐ Spray nozzle ☐ Other: _____
Orifice position: _____
- iii) Flow control diameter: _____ in
- iv) Number of flow controls (orifices, nozzles, etc.): _____
- v) Squirt height/Operating head: _____ in
- vi) Clean outs/Inspection ports: Number _____ Yes ____ No ____
- vii) Clean out access to surface. Yes ____ No ____
- 4) Filtrate collection system: _____
- 5) Forced aeration: _____ N.A.
- i) Description: _____

d. Trickling filter

- 1) Media: ☐ Gravel ☐ Foam ☐ Textile ☐ Plastic ☐ Other: _____
- i) Media depth: _____ in
- ii) Liner material: _____
- 2) Filter size: _____ sq ft
- i) Dimensions: _____ ft x _____ ft
- 3) Distribution method
- i) Pipe diameter: _____ in
- ii) Flow control: ☐ Orifice ☐ Spray nozzle ☐ Other: _____
Orifice position: _____
- iii) Flow control diameter: _____ in
- iv) Number of flow controls (orifices, nozzles, etc.): _____
- v) Squirt height/Operating Pressure: _____ in
- vi) Clean outs/Inspection ports: Number _____ Yes ____ No ____
- vii) Clean out access to surface. Yes ____ No ____
- 4) Filtrate collection system: _____
- 5) Forced aeration: _____ N.A.
- i) Description: _____

e. Constructed wetland

- 1) Bed media: ☐ None ☐ Gravel ☐ Other: _____
- i) Number of cells: _____
- ii) Media depth: _____ in
- iii) Water depth: _____ in
- iv) Liner material: _____
- v) Border material: _____
- 2) Size: _____ sq ft
- i) Dimensions: _____ ft x _____ ft

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- ii) Length to width ratio: _____ ; _____
- 3) Distribution method
- i) Pipe diameter: _____ in
- ii) Flow control: ☐ Orifice ☐ Spray nozzle ☐ Other: _____
- Orifice position: _____
- iii) Flow control diameter: _____ in
- iv) Number of flow controls (orifices, nozzles, etc.): _____
- v) Squirt height/Operating Pressure: _____ in
- vi) Clean outs/Inspection ports: Number _____ Yes ___ No ___
- vii) Clean out access to surface. Yes ___ No ___
- 4) Surface loading rate: _____ gpd/sq ft
- 5) Filtrate collection system: _____
- 6) Monitoring location: _____
- 7) Vegetation: _____ N.A.
- i) Description: _____
- 8) Water level control: _____ N.A.
- i) Description: _____

f. Lagoon system

- 1) Type: ☐ Aerobic ☐ Facultative ☐ Partial-mixed aerated ☐ Anaerobic
- i) Water depth: _____ ft
- ii) Liner material: _____
- 2) Lagoon size: _____ sq ft
- i) Dimensions: _____ ft x _____ ft
- ii) Length to width ratio: _____ ; _____
- 3) Inlet to lagoon
- i) Pipe description: _____
- ii) Pipe diameter: _____ in
- iii) Clean outs. Yes ___ No ___
- 4) Vegetation: _____ N.A.
- i) Description: _____

g. Disinfection unit

- 1) Chlorine – tablet
- i) Manufacturer: _____ Model: _____
- 2) Chlorine – liquid
- i) Manufacturer: _____ Model: _____
- 3) Ultraviolet light
- i) Manufacturer: _____ Model: _____
- 4) Ozone
- i) Manufacturer: _____ Model: _____
- 5) Other: _____
- 6) Disinfection monitoring location: _____
- 7) Dechlorination
- i) Type: _____
- ii) Manufacturer: _____ Model: _____
- 8) Dechlorination monitoring location: _____

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4. Final treatment and dispersal

a. Gravity distribution

- 1) Type: ☐ Trench ☐ Bed ☐ ET bed
i) If lined ET bed, describe liner material: _____
- 2) Distribution method: ☐ Gravity-to-gravity ☐ Pump-to-gravity ☐ Siphon-to-gravity
- 3) Configuration: ☐ Parallel ☐ Serial ☐ Sequential
- 4) Distribution approach: ☐ Distribution box ☐ Solid header pipe ☐ Drop box ☐ Stepdown
- 5) Distribution media
i) Material: ☐ Gravelless ☐ Multi-pipe ☐ Chamber
☐ Washed rock ☐ Polystyrene ☐ Other: _____

b. Pressure

1) Low-pressure drainfield

- i) Level. Yes ____ No ____
- ii) Number of zones: _____
a) Switching method: ☐ Hydraulic valves ☐ Separate pumps
☐ Other: _____
- iii) Distribution method
a) Pipe diameter: _____ in
b) Orifice diameter: _____ in
c) Orifice orientation: _____
d) Number of orifices: _____
e) Squirt height/Operating head: _____ in
f) Clean outs/Inspection ports: Number _____ Yes ____ No ____
g) Clean out access to surface. Yes ____ No ____
- iv) Number of trenches/beds: _____
- v) Dimensions of trenches/beds: _____ ft x _____ ft

2) Pressure mound distribution

- i) Distribution method: ☐ Trench ☐ Bed ☐ Other: _____
a) Pipe diameter: _____ in
b) Orifice diameter: _____ in
c) Number of orifices: _____
d) Squirt height/Operating head: _____ in
e) Clean outs/Inspection ports: Number _____ Yes ____ No ____
f) Clean out access to surface. Yes ____ No ____
- ii) Number of trenches/beds: _____
- iii) Dimensions of trenches/beds: _____ ft x _____ ft

3) Drip distribution

- i) Drip tubing manufacturer: _____ Model: _____
- ii) Filtration: ☐ Screen ☐ Disk ☐ Sand
Manufacturer: _____ Model: _____
- iii) Filter cleaning: ☐ Automated ☐ Manual/Continuous flush
- iv) Number of zones: _____
a) If multiple, switching device: _____
b) Zone area(s): _____ sq ft _____ sq ft _____ sq ft
- v) Field flushing: ☐ Automated ☐ Continuous ☐ Manual
- vi) Air release/Vacuum breaker: _____ N.A.
a) Manufacturer: _____ Model: _____

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vii) Inspection ports.

Yes____No____

a) Locations:_____

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E. Sketch of system

Scale 1 in = _____ ft

Signature _____ Printed _____ Date _____