

Form 1.1 SYSTEM DESCRIPTION (SD)

(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 O&M 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: _____ E-mail: _____

Site address/County: _____

Mailing address/County (if different): _____

Directions to site: _____

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

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.

Form 4.1 Site Assessment on File? Yes No

Tanks and advanced treatment component operational checklists (Chapters 5, 6 and 7):

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: _____

System ref. #: _____

Final treatment and dispersal component operational checklists (Chapter 8):

- Gravity Distribution: _____
- Evapotranspiration bed: _____
- Mound system: _____
- Low-pressure drainfield: _____
- Drip distribution system: _____
- Spray distribution system: _____
- Discharging systems outfall: _____

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. Design strength: _____ BOD (mg/L) _____ TSS (mg/L) _____ FOG (mg/L)
6. Water supply:
 - Private water supply
 - Public water supply
7. Water source (if private supply): _____ UULateral distance to water supply
 - Groundwater well: _____ ft
 - Spring: _____ ft
 - Surface water (i.e. creek, lake, etc.): _____ ft
8. Garbage disposal present? Yes ___ No ___
9. Are any water softener or water treatment chemicals used? Yes ___ No ___
10. Has facility been remodeled since original construction? Yes ___ No ___

System Details

1. Site

- a. Landscape position: _____
- b. Drainage: Surface/gravity Subsurface/gravity Subsurface/pump
- c. Monitoring well present? Yes ___ No ___

2. Pretreatment components - Tanks

- a. Holding tank
 - 1) Capacity: _____ gal
 - 2) Material: Concrete Fiberglass Plastic
 - i) Manufacturer: _____
 - 3) Access to surface? Yes ___ No ___
 - 4) Location (GIS): _____ / _____
- 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
 - i) Manufacturer: _____

System ref. #: _____

- 3) Access to surface? Yes ___ No ___
4) Location (GIS): _____/_____
5) 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) Location (GIS): _____/_____
5) Pump tank: _____ N.A.
 i) Manufacturer: _____
6) Pump: _____ N.A.
 i) Manufacturer: _____ Model: _____ HP: _____
7) Pump operating condition
 i) Discharge Rate: _____ gal/min
 ii) Head: _____ ft
8) Control method
 i) Sensors: Floats Pressure transducer Ultrasonic
 ii) Description: _____
9) Pump dose settings
 i) Frequency _____ doses/day
 ii) Interval _____ sec/dose
 iii) Volume _____ gal/dose
10) Control panel
 i) Manufacturer: _____ Model: _____
11) Electrical
 i) Separate circuits (pump, alarm)? Yes ___ No ___
 ii) Breaker size: _____
12) Alarm
 i) Manufacturer: _____
 ii) Sensors: Floats Pressure transducer Ultrasonic
 iii) Description: _____

d. Dosing pump tank

- 1) Capacity: _____ gal/in
2) Material: Concrete Fiberglass Plastic
3) Access to surface? Yes ___ No ___
4) Location (GIS): _____/_____
5) Pump tank: _____ N.A.
 i) Manufacturer: _____
6) Pump: _____ N.A.
 i) Manufacturer: _____ Model: _____ HP: _____
7) Pump operating condition
 i) Discharge Rate: _____ gal/min
 ii) Head: _____ ft
8) Control method
 i) Sensors: Floats Pressure transducer Ultrasonic
 ii) Description: _____
9) Pump dose settings
 i) Frequency: _____ doses/day

System ref. #: _____

ii) Interval: _____ sec/dose

iii) Volume: _____ gal/dose

10) Panel for sensors

i) Manufacturer: _____ Model: _____

11) Electrical

i) Separate circuits (pump, alarm)? Yes ___ No ___

ii) Breaker size: _____

12) Alarm

i) Manufacturer: _____

ii) Sensors: Floats Pressure transducer Ultrasonic

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

i) Manufacturer: _____ Model #: _____

ii) Product serial #: _____

4) Access to surface? Yes ___ No ___

5) Location (GIS): _____ / _____

6) Effluent screen / Tertiary filter _____ N.A.

i) Manufacturer: _____

7) Air supply

i) Air supply method: Aspirator Compressor Blower Free Air

ii) Manufacturer: _____ Model #: _____

8) 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 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: _____

System ref. #: _____

c. Recirculating Filter

- 1) Media: Sand Gravel 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 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: _____

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

System ref. #: _____

- 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 head: _____ 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:
 - i) Dimensions: _____ sq ft
_____ 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) Surface loading rate: _____ gpd/sq ft
- 5) Monitoring location: _____
- 6) Vegetation: _____ N.A.
 - i) Description: _____
- 7) Water level control: _____ 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: _____

System ref. #: _____

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 Continuous serial
- 4) Distribution approach: Distribution box Solid header pipe Drop box Rollover
- 5) Distribution media
 - i) Material: Gravelless Multi-pipe Chamber
 Rock Synthetic 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) Distribution field: Surface Subsurface
 - ii) Drip tubing manufacturer: _____ Model: _____
 - iii) Filtration: Screen Disk Sand
Manufacturer: _____ Model: _____
 - iv) Filter cleaning: Automated Manual/Continuous flush
 - v) Number of zones: _____
 - a) If multiple, switching device: _____
 - b) Zone area(s): _____ sq ft _____ sq ft _____ sq ft
 - vi) Field flushing: Automated Continuous Manual
 - vii) Air release/Vacuum breaker: _____ N.A.
 - a) Manufacturer: _____ Model: _____

System ref. #: _____

viii) Inspection ports? Yes ___ No ___

a) Locations: _____

4) Spray distribution

i) Number of zones: _____

a) If multiple, switching device: _____

ii) Distribution heads per zone: _____

a) Manufacturer: _____ Model(s): _____

b) Pattern(s): _____

iii) In-line filtration: None Screen Disk Sand

a) Manufacturer: _____ Model: _____

iv) Total area of spray distribution fields: _____ sq ft

v) Gauging Device: _____

5) Surface discharge

i) Permit number: _____

ii) Permit requirements: _____

iii) Location: _____

iv) Monitoring location: _____

System ref. #: _____

E. Sketch of system

Scale 1 in = _____ ft

