SEPTIC TANK(ST)
Operational Checklist

Service provided on: Date:_____ Time:_____
Service provided by: Company: _____ Employee:
Date of last service: _____ By: You Other:
Date of last inspection: _____

NOTES

1 Conditions at the tank
   a. Evaluate presence of odor within 10 ft of perimeter of system:
      None Mild Strong Chemical Sour
   b. Source of odor, if present: _____

2 . Tank description
   a. Material: Fiberglass
   b. Capacity: 10, 000 gal
   c. Multiple chambers. Yes ____ No
   d. Capacities for chamber system: 1)_____ gal 2) _____ gal 3)_____gal

3 . Tank access
   a. Access location: Inlet Outlet Center
   b. Located at grade. Yes____No_____
   c. If „No', how deep is lid buried. _____
   d. Risers on tank. Yes_____No
   e. Evidence of infiltration in risers. Yes_____ No
   f. Lids securely fastened. Yes_____No
   g. Lid in operable condition. Yes____No_____

4. Alarm(s) (Tank only) Camber 1 3
   a. Alarm(s) present.(Sludge and scum)?_____
   b. Sludge Sensor condition? _____

5. Current tank operating conditions
   a. Tank without pumps:Liquid level relative to outlet in last Chamber: _____in
      At Above Below
   b. Evidence liquid level has been higher. Yes____No_____
   c. Evidence liquid level dropped without pumping from lift station. Yes____No_____
   d. Evidence of continuous inflow. Yes____No_____
   e. Date of last pumpout: _____
   f. Presence of flocculant in last chamber? Yes____No___
   g. Evaluation of layers in tank:

1. Acceptable Unacceptable

3. Acceptable Unacceptable

4. Acceptable Unacceptable

5. Acceptable Unacceptable

Chamber Number	Scum (in)		Clear Zone (in)		Sludge (in)		Odor	Other
	Depth	Color*	Depth	Color	Depth	Color		
1								
2								
3								

*Color Choices: Clear Flocced Milky Muddy Grainy
Black Brown Mustard Gray White

6. Tank pumping recommended. Yes____No_____

7. Baffles currently structurally sound. Yes_____No
   a. Inlet baffle in place. Yes_____No
   b. Outlet baffle in place. Yes____No_____
   c. Compartment baffle in place. N.A. _____Yes_____No_____
   d. Effluent screen. Yes____No_____
      Manufacturer:_____ Model:
   e. Is screen accessible from ground surface. Yes_____ No
   f. If screened, percent plugged: _____%
   g. Was screen cleaned. Yes____No_____

8. Tank structural condition (evaluate if tank pumped): N.A.
   a. Appears to be watertight (no visual leaks). Yes_____ No
   b. Rebar exposed. Yes_____ No
   c. Corrosion present. Yes_____No
   d. Spalling present. Yes_____ No
   e. Cracks present. Yes_____ No
   f. Root intrusion. Yes_____ No
   g. Deflection noted. N.A.____Yes____No_____

9. Contractor responsible for pumping: _____
   a. Gal removed:_____ Date:_____
   _____
   _____

7.	Acceptable Unacceptable
8.	Acceptable Unacceptable

CONSTRUCTED WETLANDS (CW)
Operational Checklist

Service provided on: Date:_____Time:_____
Service provided by: Company: _____ Employee:
Date of last service: _____ By: You Other:
Date of last inspection: _____

1. Constructed wetland: Cell # : _____/ _____
   a. Media: Gravel, average diameter: _____in
      Wood chips:_____in
      Lime stone:: _____in

2. Conditions at the constructed wetland
   a. Evaluate presence of odor within 10 ft of perimeter of system:
      None Mild Strong Chemical Sour
   b. Source of odor, if present: _____
   c. Type of liner material: _____
   d. Border material in good repair? Yes_____ No
   e. Evidence of water/soil entering wetland? Yes_____ No
   f. Fence present and operable? N.A. _____Yes_____No
   g. Animal activity at wetland surface? Yes____No_____
3. Water level management
   a. Outlet plugged? Yes____No_____
   b. Outlet cleaned?
   c. Water level adjustment needed? Yes____No_____
   d. Water temperature _____F
4. Vegetation
   a. Is vegetation alive? Yes____No_____
   b. Replanting needed? Yes____No_____
   c. Vegetation removal required? Yes____No_____
5. Effluent quality
   a. Oily film on the surface of effluent? Yes____No_____
   b. DO in outlet: _____mg/l
   c. pH in outlet: _____
   d. Temperature in outlet: _____
   e. Bypass or overflow noticed? Yes____No_____
   f. Effluent odor after passing through wetland:
      None Mild Strong
   g. Effluent color after passing through wetland:
      Clear Brown Black
6. Additional tasks for subsurface flow wetlands
   a. Media surface at design elevation? Yes____No_____
   b. Water level below media surface: _____in
7. Additional tasks for recirculating wetlands
   a. DO in recirculation tank: _____mg/l
   b. Inspected recirculating device? N.A.____Yes____No_____
   c. Cleaned recirculating device? N.A.___Yes____No_____
   d. Design recirculation ratio: _____:
   e. Actual recirculation ratio: _____:
   f. Recirculation changed to: _____:_____
8. Sampling ports
   a. Sampling ports present? Yes____No_____
   b. Sampling ports intact? Yes____No_____
9. Pressure distribution:
   a. Distal head before and after cleaning
      Equal height? Yes____No_____
      Height (inches)? ____in
   b. Lateral condition – Need cleaning? Yes_____No_____Method of cleaning_____

NOTES

2. Acceptable
   Unacceptable
3. Acceptable
   Unacceptable
4. Acceptable
   Unacceptable
5. Acceptable
   Unacceptable
6. Acceptable
   Unacceptable
7. Acceptable
   Unacceptable
8. Acceptable
   Unacceptable
9. Acceptable
   Unacceptable

10. Lab samples collected for monitoring. Yes____No_____
    Follow sampling schedule See attached table A for sampling schedule.
    Submit results to Resident Engineer.
    Types of analysis:_____
    _____
    _____
11. . Planting checklist(Table B attached) performed? Yes____No_____

RECIRCULATION TANK
(RT) Operational Checklist

Service provided on: Date:_____ Time:_____
Service provided by: Company: _____ Employee:_____
Date of last service: _____ By: You Other:_____
Date of last inspection: _____

1. Type:
   Recirculation tank
   a. Pump intake depth: _____
2. Conditions at the pump tank
   a. Evaluate presence of odor within 10 feet of perimeter of system:
      None Mild Strong Chemical Sour
   b. Source of odor, if present: _____
3. Tank description
   a. Material: Fiberglass
   b. Capacity: 15,000 gal c.
   Diameter: _____sq ft d.
   Operational depth: _____ in
   e. Length: _____gal/in
4. Tank access
   a. Access location: Inlet Outlet Center
   b. Located at grade? Yes____No_____
   c. If „No', how deep is lid buried? _____
   d. Risers on tank? Yes_____No
   e. Evidence of infiltration in risers? Yes_____ No
   f. Lids securely fastened? Yes_____No
   g. Lid in operable condition? Yes____No_____
5. Current tank operating conditions
   a. Liquid level relative to outlet at first chamber: _____
      At Above Below
   b. Liquid level relative to outlet at second chamber: _____
      At Above Below
   c. Evidence liquid level has been higher? Yes____No_____
   d. Evidence of continuous inflow? Yes____No_____
6. Pump/Siphon
   a. Pump/Siphon accessible? Yes____No_____
   b. Pull chain or rope present? N.A.___Yes_____No_____
7. Discharge assembly: N.A._____
   a. Anti siphon/air release device? Yes_____No
   b. Backflow prevention (check valve) present? Yes_____No
   c. Air release located below check valve? Yes_____No
   d. Drain back device present? Yes_____No
   e. Quick disconnect present? Yes____No_____
8. Electrical components sealed and watertight? N.A._____Yes_____No_____
9. Tank structural condition (evaluate if tank pumped): N.A._____
   a. Appears to be watertight (no visual leaks)? Yes____No_____
   b. Rebar exposed? Yes____No_____
   c. Corrosion present? Yes____No_____
   d. Spauling present? Yes____No_____
   e. Cracks present? Yes____No_____
   f. Root intrusion? Yes____No_____
10. Solids accumulation:

NOTES

3. Acceptable
   Unacceptable

4. Acceptable
   Unacceptable

5. Acceptable
   Unacceptable

6. Acceptable
   Unacceptable

7. Acceptable
   Unacceptable

8. Acceptable
   Unacceptable

9. Acceptable
   Unacceptable

Odor	Color	Other

11. Screen(s)
    a. Type of screen: Vault with basket Vault with filter In-line screen
    b. Was screen cleaned? Yes____No_____
12. Lab samples collected for monitoring? Yes____No_____
    Types of analysis:_____
    _____
    _____
13. Alarm(s) (Tank only)
    a. Alarm(s) present? Yes____No_____
    b. Remote telemetry operational? Yes____No_____
14. Sensor/transducer(s) (Tank only)
    a. Sensor(s) present? Yes____No_____
    b. Sensor not operational or require replacement _____
15. Ball Float valve
    a. present in first chamber? Yes____No_____
    b. Operational? Yes____No_____
    c. Needs urgent replacement? Yes_____No____
    d. Any overflow condition in first chamber? Yes_____No____

PUMP (Sewage lift station, Recirculation pump and Leach field pump) TIME-DOSED SYSTEM Operational Checklist

Service provided on: Date:_____ Time:_____
Service provided by: Company: _____ Employee:
Date of last service: _____ By: You Other:
Date of last inspection: _____

NOTES

1. Acceptable
   Unacceptable

1. Controls Manufacturer:_____
   a. Is enclosure watertight? Yes____ No
   b. Alarm test switch working properly? Yes_____ No
   c. At time of inspection, control switch (MANUAL-OFF-AUTO) was set at:
      "Manual"_____
      "Off" _____
      "Auto" _____
   d. If control was changed from above, new setting is: "_____"
   g. Telemetry operational? N.A._____Yes ____No _____
      Type:_____
2. Pump
   a. Pump operating properly? Yes_____No_____
   b. Type of pump: Multi-stage Single-stage
   c. Amps measured: _____amps
   d. Voltage measured: _____volts
   e. Pump turns on/turns off? Yes _____No_____
3. Water level sensors
   a. Type of water level sensor: Floats Pressure transducers
      Ultrasonic Other:_____
   b. Pump sensors functioning properly? Yes_____No_____
   c. Alarm sensor operating? Yes_____No_____
4. Sensor settings:

Sensor Number*	Function	Operational	Set At:		
			Inches**	Datum	
1		Yes No			Yes No
2		Yes No			Yes No
3		Yes No			Yes No
4		Yes No			Yes No
5		Yes No			Yes No

*(Designate starting from bottom of tank)
** Measurements are taken from a fixed point at bottom of tank in inches)

5. Pump delivery rate (PDR)
   Water meter reading _____Gallons
   Pump run time _____Minutes
   Flow rate _____GPM

CPD: cycles per day
DV: dose volume
ETM: elapsed time meter
GPD: gallons per day
GPI: gallons per inch
GPM: gallons per minute
HAND-OFF-AUTO: Hand-Off-Auto Switch
LCR: last cycle reading
LTR: last time reading
PCR: present cycle reading
PDR: pump delivery rate
PTR: present time reading

Leach field (Including Pump-to-Gravity)
Operational Checklist

Service provided on: Date:_____ Time:_____
Service provided by: Company: _____ Employee:
Date of last service: _____ By: You Other:
Date of last inspection: _____

1. Type
   a. Method for dosing to field:
      Pump-to-gravity Pressurized
      b. Method for distribution in the field:

      Parallel trench

2. Conditions at the drain field site
   a. Evaluate presence of odor within 10 ft of perimeter of system:
      None Mild Strong Chemical Sour
   b. Source of odor, if present: _____
   c. Indications of leaks around/above system? Yes_____ No
   d. Vegetation appropriate? Yes_____ No
   e. Excessive vegetative growth? Yes_____ No
   f. Vegetation adequately maintained? Yes_____No
   g. Preventing accessibility for maintenance? Yes____No_____
3. Distribution device
   a. Type:
      Pressure manifold
   b. If pressure manifold, distal head: _____
   c. Accessible? Yes_____No
   d. Intact, providing equal distribution? Yes_____No
   e. Free of solids? Yes_____ No
   f. If „No,' depth of solids below outlet: _____in
   g. Root intrusion? Yes____No_____
4. Distribution in field
   a. Soil treatment area information:

NOTES

2. Acceptable
   Unacceptable

3. Acceptable
   Unacceptable

Reference #:_____

5. Observation wells
    a. Observation wells present? Yes____No_____
    b. Observation wells intact? Yes____No_____
6. Switching valves
    a. Switching valve present? Yes_____No
    b. Type of valve:
    c. Operating properly? Yes____No___ d. Action taken if not:_____
    e. Laterals in operation: _____

5. Acceptable Unacceptable 6. Acceptable Unacceptable

Table A

Sample Schedule

The samples should be analyzed according to the following schedule:

Parameter	Unit	Sample location				
		Potable Supply		Hose Faucet	Water level Control Box	Check Mark
Biochemical oxygen demand, BOD	mg/L	NA		Monthly	Monthly	
Chemical oxygen demand, COD	mg/L	NA		Monthly	Monthly	
Total suspended solids, TSS	mg/L	NA		Monthly	Monthly	
Total dissolved solids, TDS	mg/L	Monthly		Monthly	Monthly	
Total coliform	No./100 mL	Monthly		Monthly	Monthly	
Total nitrogen, TN	mg/L as N	NA		Monthly	Monthly	
Ammonium, NH_4	mg/L as N	NA		Monthly	Monthly	
Nitrite, NO_2	mg/L as N	NA		Monthly	Monthly	
Nitrate, NO_3	mg/L as N	Monthly		Monthly	Monthly	
pH	-	Monthly		Monthly	Monthly	
Alkalinity	mg/L as $CaCO_3$	Monthly		Monthly	Monthly	
Temperature	°C	Monthly	Monthly	Monthly	Monthly	
Dissolved oxygen	mg/L	NA	NA	Monthly	NA	
General Mineral (comprehensive)		Quarterly				

Table B

Planting Checklist

The wetland plants should be monitored according to the following checklist:

	Distressed	Replacement required	Replacement completed
Number of Wetland Plants (Total wetland plants = 130)			

Analysis for wetland plant failure_____

Recommendations to avoid future wetland plant failure _____

Distressed plants shall be replaced within two weeks.