

# MLE / ENR FIELD REPORT

Date	<input type="text"/>
Client	<input type="text"/>
Address	<input type="text"/>
City	<input type="text"/>
State	<input type="text"/>
Inspector	<input type="text"/>
Effluent Standards	<input type="text"/>

**Reason For Site Visit:**

- O & M       Commissioning  
 Testing       Other:

## (1) Odor

1) Is there odor around the site?  Yes  No

2) Where is the source of odor?

3) If odor is present, check all that apply:  Mild       Medium       Strong  
 Musty       Septic

## (2) Sludge & Scum Depth Measurements

	Scum	Sludge		Scum	Sludge
Grease Trap (if applicable)	<input type="text"/>	<input type="text"/>	Clarifier # 1	<input type="text"/>	<input type="text"/>
Primary Tank #1 (if applicable)	<input type="text"/>	<input type="text"/>	Clarifier # 2 (if applicable)	<input type="text"/>	<input type="text"/>
Primary Tank #2 (if applicable)	<input type="text"/>	<input type="text"/>	Clarifier # 3 (if applicable)	<input type="text"/>	<input type="text"/>
Sludge Digester (if applicable)	<input type="text"/>	<input type="text"/>	Clarifier # 4 (if applicable)	<input type="text"/>	<input type="text"/>
Effluent Tank (if applicable)	<input type="text"/>	<input type="text"/>	Other: _____	<input type="text"/>	<input type="text"/>

## (3) General

1) Any external damage to treatment tank(s) or mechanical equipment?  Yes  No  
*Provide details in notes section.*

2) Hatches, compressor housing(s) and control panels securely locked?  Yes  No

3) Is foam present in any process tanks?  Yes  No

*Location of foam & approximate thickness.*

4) Air leaks at blower output connections or in manifold piping at tank(s)?  Yes  No

5) Media retaining screen(s) free of debris and scum build up?  Yes  No

*If >3" head loss is observed in reactor basin, pump down reactor to visually inspect screen(s). Remove debris as necessary.*

**(3) General Continued**

Were influent/effluent samples taken for lab analysis?  Yes  No  
Please send analytical data to Aquapoint for review

If process control field samples were taken, please provide the following information:

Alkalinity (as CaCO <sub>3</sub> )	<input type="text"/>	pH	<input type="text"/>	Turbidity (NTU)	<input type="text"/>
Sample Locations:	<input type="text"/>	Temperature (F)	<input type="text"/>	DO (mg/l)	<input type="text"/>
		NO <sub>3</sub> -N (mg/l)	<input type="text"/>	NH <sub>3</sub> -N (mg/l)	<input type="text"/>
		Other:	<input type="text"/>		

**(4) Blowers**

1) Are the blowers operating properly?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2) Record the pressure gauge on the compressor housing. <i>0.5 bar is equal to 7.25 PSI</i>	Bar <input type="text"/>	PSI <input type="text"/>
3) Record the blower(s) VFD frequency (Hz).	Blower # 1 <input type="text"/>	Blower # 2 <input type="text"/> Blower # 3 <input type="text"/>
4) Record the blower(s) running amperage.	Blower # 1 <input type="text"/>	Blower # 2 <input type="text"/> Blower # 3 <input type="text"/>
5) Record the blower(s) elapsed run time.	Blower # 1 <input type="text"/>	Blower # 2 <input type="text"/> Blower # 3 <input type="text"/>
6) Record the blower(s) discharge temperature (If applicable).	Blower # 1 <input type="text"/>	Blower # 2 <input type="text"/> Blower # 3 <input type="text"/>
7) Record the blower(s) oil level.	Blower # 1 <input type="text"/>	Blower # 2 <input type="text"/> Blower # 3 <input type="text"/>
8) If multiple blowers are installed, indicate how frequently they alternate.	<input type="text"/>	
9) Are the blower cooling fans operational (if applicable)?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
10) Inspect the air intake filters. Are they clean and free of debris?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

*Check blower O&M Manual for complete operating instructions ie: oil changes, air filter replacement, etc...*

**(5) MBBR Aerobic Characterization**

	Reactor # 1	Reactor # 2	Reactor # 3
1) What is the color of the biofilm on the media? <i>(White, Grey, Grey/Brown, Brown, Red/Brown, Black)</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
2) Classify the thickness of the biofilm on the media. <i>(1=light, 2=medium, 3= heavy) Inspect while submerged.</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
3) Measure or classify the turbidity of the water in the MBBR. <i>(1=low, 2=medium, 3= high particulate levels)</i>	<input type="text"/>	<input type="text"/>	<input type="text"/>
4) What is the Dissolved Oxygen concentration? <i>Measure at effluent end of reactor basin.</i>	<input type="text"/> mg/l	<input type="text"/> mg/l	<input type="text"/> mg/l
5) What is the water temperature?	<input type="text"/> Deg. C	<input type="text"/> Deg. C	<input type="text"/> Deg. C
6) Basin satisfactorily mixed (media 100% submerged)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
7) Is foam present in the reactor?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

**(6) Mechanical Mixers**

1) Are the mixer(s) operating properly?  Yes  No

2) Record the mixer(s) VFD frequency (Hz) (if applicable). Mixer # 1  Mixer # 2  Mixer # 3  Mixer # 4

3) Record the mixer(s) running amperage. Mixer # 1  Mixer # 2  Mixer # 3  Mixer # 4

4) Indicate the approximate impeller tip speed (Ft/sec). Mixer # 1  Mixer # 2  Mixer # 3  Mixer # 4

5) Record the mixer(s) elapsed run time. Mixer # 1  Mixer # 2  Mixer # 3  Mixer # 4

6) Record the mixer(s) oil level (if applicable). Mixer # 1  Mixer # 2  Mixer # 3  Mixer # 4

*Check mixer O&M Manual for complete operating instructions ie: oil changes, etc...*

**(7) MBBR Anoxic Characterization**

	Pre-Anoxic Reactor	Post-Anoxic Reactor
1) What is the color of the biofilm on the media? <i>(White, Grey, Grey/Brown, Brown, Red/Brown, Black)</i>	<input type="text"/>	<input type="text"/>
2) Classify the thickness of the biofilm on the media. <i>(1=light, 2=medium, 3=heavy) Inspect while submerged.</i>	<input type="text"/>	<input type="text"/>
3) What is the Dissolved Oxygen concentration? <i>Measure at effluent end of reactor basin.</i>	<input type="text"/> mg/l	<input type="text"/> mg/l
4) What is the effluent Nitrate-N concentration? <i>Measure at effluent end of reactor basin.</i>	<input type="text"/> mg/l	<input type="text"/> mg/l
5) What is the water temperature?	<input type="text"/> Deg. C	<input type="text"/> Deg. C
6) Basin satisfactorily mixed (no dead spots)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

Type of supplemental carbon being used.

Carbon feed rate to Pre-Anoxic Reactor(s)

Carbon feed rate to Post-Anoxic Reactor(s)

If there are discrepancies or test results are not satisfactory, re-calibrate pump and/or adjust the dosing rate based on the influent (nitrate + nitrite) concentration and the average daily flow. Measurement of the influent/effluent Nitrate-N and Nitrite-N will be necessary. Field test kits for Nitrate-N are acceptable for process control. D.O. concentration must remain < 0.5 mg/l to effectively denitrify. See Aquapoint technical manual for assistance with chemical dosing calculations. Call Aquapoint if you require assistance.

**(8) Nitrate Recycle Lift Station**

1) Measure the following with a field test kit. *Samples should be taken from the effluent end of the basin.*

Alkalinity (as CaCO <sub>3</sub> )	<input type="text"/>	DO (mg/l)	<input type="text"/>
Temperature (C)	<input type="text"/>	NH <sub>3</sub> -N (mg/l)	<input type="text"/>
pH	<input type="text"/>	NO <sub>3</sub> -N (mg/l)	<input type="text"/>

2) Indicate the recycle pump timer settings and flow rate. Min On  Min Off  GPM

3) Measure and record the pump amperage. Pump # 1  Pump # 2

**(9) Clarifier(s)**

- 1) Check and record clarity of water in clarifiers.  
*Characterize particulate, color, turbidity, etc...*
- 2) Is there floating scum on the surface of the water?  
*If so, manually activate the scum skimmer pump to remove scum.*  Yes  No
- 3) Measure sludge depth in all clarifier(s).  
*Sludge blanket of < 24" should be maintained.* Clrfr #1  Clrfr #2  Clrfr #3  Clrfr #4
- 4) Record the sludge pump or air compressor amperage. *(Via HMI screen or amp meter).* Clrfr #1  Clrfr #2  Clrfr #3  Clrfr #4
- 5) Record the sludge pump or air lift compressor timer settings. Min On  Min Off
- 6) Are the effluent weir plates and troughs clean and level?  
*If not, clean and adjust weir until overflow is uniform.*  Yes  No

**(10) Control Panel**

- 1) Set pumps, etc to test cycles. Are the timers and contactors operating properly?  Yes  No
- 2) Visually inspect control components for wear and record any problems below.
- 3) Ensure that all components are in "NORMAL" or "AUTO" mode and re-set timer settings when inspection is complete.

**(11) Final Check**

- Main Power set to "On" and toggle for all pumps set to "Normal" (or "Auto").
- Alarm toggle set to the "On" position.
- Control panel, covers/hatches and mechanical equipment enclosures locked.
- Record daily flow rate or water meter reading (if possible):

**(12) Report Summary:**

*Note: Contact Aquapoint for replacement parts.*

Signature: \_\_\_\_\_