Dower, Michael [PROCESS/MMI/BOUL]

From:	Dower, Michael [PROCESS/MMI/BOUL]
Sent:	Sunday, December 21, 2008 7:25 PM
То:	Ken Huson (khuson@comcast.net); pmv_flyer@yahoo.com; Lynn Hargrove (lynndh53 @yahoo.com); Tom Smith (tsmith@tristategt.org); Craig Sheard (sheardc@comcast.net)
Subject:	Meeting Minutes

IMPORTANT-----NEXT MEETING TOMORROW, MONDAY 22.DEC AT 7PM. EARL WILL BE PRESENT AT TOMORROW'S MEETING.

Date of Meeting: Thursday 17.Dec.2008

Topic of Meeting: Sewer Plant Committee (focused on system improvements to regain compliance)

Attendees:

- Craig Sheard
- Tom Smith
- Mike Dower (Board member and committee leader)
- Mark McGee
- Lynn Hargrove
- Ken Huson
- 1. Reviewed correspondence from the State of Colorado. Identified the following action items:
 - a. Need for repair of damage to pond 1. There was a minor erosion of a small portion of the pond when the liquid from pond 3 was pumped in to enable valve replacement near pond 3. Mike Dower has purchased bentonite sealer. Will install/repair as weather permits. More details below.
 - b. Need for better control of E. Coli. (see 1.f below)
 - c. Need to review the need return all ponds to service.
 - d. Need to identify source of algae and the possibility that the discharge pipe is placed at a level that gives a inaccurate count.
 - e. Need to pump sludge in pond(s).
 - f. Need to review chlorination system.
 - g. Need to add a de-chlorination element to the system for treated water that outflows from the treatment plant.
 - h. Need to review/correct the problem of our plant operator's expired license.
 - i. Actions planned send letter to the State identifying the actions we are taking to bring our facility into compliance with the terms of our permit. Routine maintenance (such as pumping sludge) and a few upgrades to the system are expected to bring us into compliance.
- 2. Reviewed the permitting process and the fact that it is a negotiable process, not a mandated process.
- 3. Repair to pond 3 and return to service.
 - a. Mike Dower has sent a sample of the bentonite to CSU for testing. Results provided to State and approval to perform the repair has been received from State.
 - b. Action planned Need to chop weeds while pond is low. Tom Smith and Lynn Hargrove have weed choppers on wheels that they will use. The committee will work with Tom and Lynn and perform at possible earliest date, weather permitting.
 - c. Action planned Fill minor cut with bentonite.
 - d. Action planned Perc test after repair made, possibly some other tests as well.
 - e. Action planned Perform an additional test called a "proctor test", described by Ken. This test is expected to help us learn the water content that will provide maximum effectiveness for our bentonite, to enable us to pre-mix at the optimum ratio before applying the material. Ken believes that performing this test and using the result during our repair will go a long way in building credibility with the state engineer. Mike owns this action to get a sample tested for this property called "Maximum Bulk Density".
 - f. Action planned Return first pond to service, after all repairs are made.
- 4. Reviewed the status of our Plant Operator (Earl Sterkle).
 - a. Earl's permit as a Treatment Operator was expired during an inspection.
 - b. Earl has stated that he has an extension.
 - c. Action planned follow up with Earl regarding his license status.
 - d. Earl's assistants are going thru operator training and are expected to obtain certification.

- e. Recommend that we implement the following:
 - i. Action for the RHOA board. Provide funding for the additional operators to obtain certification.
 - ii. Action TBD. Establish a monthly performance review of the plant. The Ad Hoc committee should provide a list of metrics to be met
- 5. Reviewed the lack of access to the Riverside Farm lift station.
 - a. Action planned Obtain access, coordinate with Earl and Dan Grove (Riverside Farm). Once access obtained, review their flowmeter output (if any) and discuss how to incorporate this data into our own calculations and record-keeping.
- 6. Reviewed the problem of irrigation run-off on Riverview Dr. (east side of Gray property). There is a manhole cover that is now below grade. When irrigation water is collecting in the ditch it flows into the sewer pipes through this manhole cover. Action for Mike to contact a contractor to get this repair performed quickly.
 - a. Action planned Need to procure and install a collar for the manhole and raise the level of the access point to prevent irrigation water from flowing into the sewer system.
- 7. Reviewed the potential for use of Ultra-Violet(UV) treatment system instead of chlorination. Investigation reveals that these systems are both expensive and somewhat unreliable. They are unreliable because the glass element that allows the light to pass through the water tends to cloud up with algae and require constant maintenance. Committee does NOT recommend further investigation of UV system at this time.

Actions/investigation to follow:

- 1. Determine the need to operate all 3 ponds. (Action TBD, discuss with Earl, possibly have engineer review).
- 2. Determine the need to operate aerators in two ponds. (Usually one is aerated and one or two are settling ponds, two aerators may not make sense). (Action TBD review at next meeting).
- 3. Get price/availability of PAM (poly-achrylimide) as a weed control. (PAM is an approved weed control for treatment facilities). (Action McGee call for quotes).
- 4. Get price/availability of sensor controlled chlorination system. Current system may be retro-fitted to add chlorine based on a measuring device rather than manual setting of system. (Action TBD review at next meeting).
- 5. Get price/availability of de-chlorination system. (Action TBD review at next meeting).
- 6. Topics for discussion with Earl:
 - a. Why we are using 2 ponds.
 - b. Flowmeter calibration(s)
 - c. Operator certification status.
 - d. Algae count, location of discharge pipe.
 - e. Depth of ponds (for estimating sludge pumping/removal).
 - f. Wet or dry pumping of ponds.
- 7. Obtain bids for sludge pumping. (Action Tom Smith)

Next meeting schedule Monday, December 22nd 2008.

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