

LDEQ Inspections & Common Violations

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Why are compliance inspections conducted?

- To verify that the WWTP is operating in accordance with the issued LPDES (Louisiana Pollutant Discharge Elimination System) Permit
- Check operations and maintenance at the facility
- Confirm that the discharge from the facility or WWTP is not having an adverse affect on the receiving waterbody (solids, color change, smell/odor, etc.)



Duty to Comply with LPDES Permit

Duty to Comply: The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.



WWTPs have 3 main/major components

- Collection system
- Treatment
- Disposal/Effluent



Facility tour/walk-thru: what do we look for?

- Influent – is a bar screen present, how is it cleaned, drum rollers, where are floatables disposed, if centrifugal grit is present is it operational?
- Aeration basin – good mix/MLSS, proper color
- Clarifier (primary and/or secondary) – what is the condition, color of water, build-up on weirs, floating sludge, sludge blanket, if skimmer is used is it operating
- Contact chamber – chlorine present (being used), UV lights operating and in good condition (how often are they cleaned), color of water, floating solids present, sludge blanket present
- Is there a maintenance schedule (preventive or reactive)?
- How often is sludge being wasted, where to, condition of drying beds if being used
- Evidence of hydraulic overloads



Facility tour/walk-thru (cont.)

- Digester – aerobic or anaerobic
- EQ basins
- Are you disposing sludge in a pond?
- Sampling – representative location, grabs or composites, flow proportioned?
- Most important – what is the condition of the effluent and receiving stream (color, odor, visible solids, turbidity, foam)



Records/Reports Review

- Permit – is the permit current, how long before the permit expires, has application been sent to LDEQ if within 180 days of expiration, does the permit “match” the facility (all discharge points permitted and location of discharge points), is the permit on site or available electronically
- DMRs – typically reviewed prior to inspection but the inspector will normally ask for some of the them at the time of inspection (note that at this time facilities should be using Net DMR), inspector will confirm that all information is correct (including facility name, permit number, parameters sampled for, frequency of sampling, and sampling types, and designated officials signature)



Records/Reports Review (cont.)

- Lab analytical sheets – reviewed and compared to DMRs to confirm that the data on the lab sheets matches the DMRs, date and time sample collected, date and time analyzed, name of sampler, initials or name of lab tech conducting analysis, holding times on each sample, and method used for sample analysis
- Sludge records – appropriate forms being filled out, going to approved site, sludge management adequate to maintain effluent quality, only submit sludge forms to LDEQ if going to a landfill
- MWPP (Municipal Water Pollution Prevention) – if applicable to the permit, is this being completed as required and are the reports available?



Records/Reports Review (cont.)

- Are overflows in the collection system being reported?
- SWP3 (Stormwater Pollution Prevention Plan) – if applicable to the permit, has the facility developed and implemented the plan within the specified time period, plan available for review, plan accurate, site inspections being conducted, site maps with direction of storm water flow, storage areas indicated, etc.
- Indirect discharges – has the facility identified any indirect commercial or sewage sludge discharges into the facility



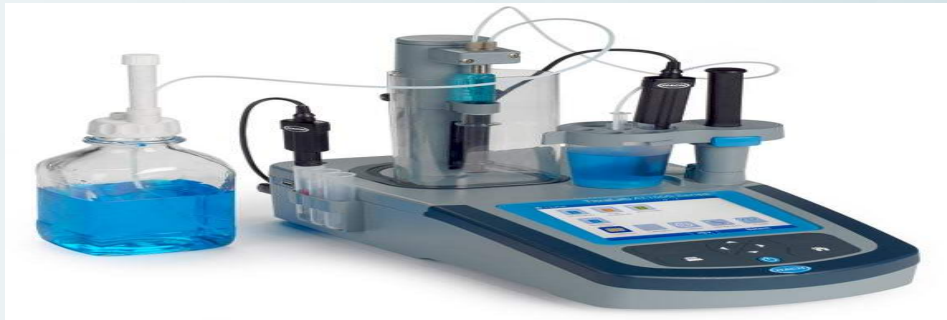
Records/Reports Review (cont.)

- Mercury Minimization Plan (MMP) – if applicable, has this plan been developed and is the annual report being completed
- Monthly flow logs – used by inspector to conduct loading calculations (if applicable), allows inspector to determine issues with hydraulic overloading
- If flow meter is used to continuously record, the certificate of calibration will be needed



Lab Review

- Most WWTPs now have a contract lab conduct the analysis on the effluent samples; some WWTPs also have the contract lab collect the samples
- If the WWTP does conduct any analysis, then those areas will be reviewed during the inspection
- Calibration logs –pH meter calibrations will be reviewed, dissolved oxygen meter calibration records will be reviewed, any other calibrations that are applicable will be looked at



Lab Review (cont.)

- pH meter – 2-pt or 3-pt calibration conducted, what is calibrated first, calibration buffers available and not expired (current); calibration logs
- Dissolved oxygen meter – how is this meter calibrated (or is it calibrated), calibration logs
- TSS – oven temperature will be checked (103-105C), filters, last calibration date on scale
- Fecal coliform – procedure will be reviewed by inspector and discussed
- If effluent samples are stored in a refrigerator in the lab, is there a thermometer present?
- Also a good idea to maintain a temperature log for the refrigerator



Exit Interview



- Once the facility walk-thru and records review is completed, then the exit interview will be conducted
- Inspector will gather facility representative(s) who participated in the inspection and anyone else who is requested
- Violations noted during the inspection will be discussed along with areas that are in compliance
- The FIF (Field Interview Form) will be completed and reviewed with the facility representative and questions/concerns from the facility representative will be addressed
- The facility representative will be asked to sign the FIF and a copy will be given for the facility's records
- Remember that signing the FIF does not mean that you agree with all the observations



Common Violations

- Failure to sample or failure to sample for particular parameters
- Failure to complete and/or submit DMRs, MWPP, etc.
- Composite samples are not flow-proportioned
- Various O&M issues
- Failure to report overflows either at the treatment plant or in the collection system
- Failure to develop & implement SWP3
- Permit limit exceedances
- Permit application does not match facility processes
- Failure to complete & maintain biosolids reports or submit biosolids reports



Photos



What we don't want to see on an inspection!







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Photos



What we like to see on an inspection!









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