
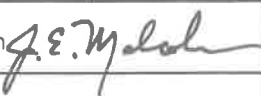




MUNICIPAL WASTEWATER FACILITY INSPECTION REPORT - RECONNAISSANCE

Purpose of Inspection Comprehensive		DEC Region 4	Date of Inspection 06/08/16
SPDES No. NY0022039	Facility Name Hudson WWTP		Location (C,T,V) Hudson (C)
County Columbia	Name of Inspector James E. Malcolm, P.E. 		Part II Attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Summary Rating: Satisfactory			
Weather Conditions: Clear, 61 deg. F		Key: TOI = Time of inspection	
Rating Codes: S = Satisfactory U = Unsatisfactory M = Marginal NI = Not Inspected NA = Not Applicable			
Items	Rating	Comments (Note units out of operation/outstanding operation/etc.)	
A. General			
1. Buildings/Grounds/Housekeeping	S	Grounds: Neat -> Office & lab: Cleaning & organization needed	
2. Flow Metering	S	P/F w/U/S detector @ influent: Calibrated by Flo-Tech on 10/13/15	
3. Stand-by Power	S	Unit can operate entire plant -> Tested under full load	
4. Alarm Systems	S	Calls Christian/Les -> SCADA operational -> Call outs operational	
5. Odors/Odor Control	S	No complaints received by Chief Operator	
6. Influent Impact on Operations	S	Three sewer separation projects being pursued by City (see below)	
7. Preventive Maintenance	S	All PM work on schedule (erase board) for critical equipment	
8. NY-Alert/SPRTK	S	Les Coon (primary notifier) & Rob Perry (secondary) -> Good!	
B. Preliminary/Primary			
1. Influent Pumps	S	Collection system: pump stations with portions of gravity sewer lines	
2. Bar Screen/Comminutor	S	Replaced tensioner springs & chain guiderail bearings in April 2016	
3. Disposal of Grit/Screenings	S	Grit classifier X 2 -> Screen X 2-> bucket -> dumpster w/sludge	
4. Grit Removal	S	One unit plugged -> liquid level lowered & solids removed in April 2016	
5. Settling Tanks	NA		
6. Scum/Sludge Removal	NA		
7. Effluent	NA		
8. Primary Clarifiers X 2	S	Annual inspection in spring -> Replaced links in chain (polyethylene)	
C. Secondary/Tertiary			
1. Aeration Basin X 2	S	WWTP op's: Switched from contact-stab to extended air mode in 06/16	
2.			
3.		MLSS target of 4,000 mg/L -> Potential for loss of solids during	
4.		wet weather events -> RONE form on 06/05/16 for violation of	
5.		settleable solids limit during rain event is an example of this concern	
6.			
7. Secondary clarifiers X 2	S	Blanket rising on one side of system -> Due to piping?-> Photographed	
8.		Metal brackets installed for tarp -> To reduce algae -> CY 2016?	
D. Effluent			
1. Disinfection	S	Flow paced: ~ 30 gpd of NaOCl: dry weather & ~ 100 gpd: wet weather	
2. Effluent Condition	S	Clear -> No loss of solids, floatables, or odor (photographed)	
3. Receiving Water Condition	NI		
4.			
E. Sludge Handling/Disposal			
1. Digesters	S	Level probes installed in Digester No. 1 (South) & No. 2 (North)	
2. Sludge Pumps	S	36,600 gallons wasted on 06/07/16: Run press daily -> ~15,000 gal.	
3. Sludge Dewatering	S	Polydyne EA-222 used at press: ~ 25 - 30% solids	
4. Sludge Disposal	S	Ontario County Landfill (Batavia, N.Y.): 3 trips in May 2016	
5. Septage Receiving Area	S	Problem of basket plugging resolved -> Cleaned by operators	
Signature of Inspector: James E. Malcolm 		Title: Environmental Engineer II	Date: 06/08/16
Name of Facility Representative: Perry/Coon		Title: DPW/Chief Operator	Date: 06/08/16

MUNICIPAL WASTEWATER FACILITY INSPECTION REPORT - COMPREHENSIVE (Part II)

Facility Name Hudson WWTP	SPDES Number NY0022039	Comments See Page 5 of 5
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A. Collection System

- (1) 50 % Separate 50 % Combined
- (2) Did sewer overflows occur upstream of the plant in the past year? Yes No N/A
- (3) Reason for overflow(s).
 Combined sewer collection system -> CSO outfalls specified in SPDES permit (003, 005, 006, 007, 009, 010, 011, & 012) -> Inspected weekly & during rain events
- (4) Was overflow sewage chlorinated? Yes No N/A
- (5) Were there any unpermitted overflows/bypasses? Yes No N/A
- (6) Were appropriate agencies notified promptly, when required, of each overflow? Yes No N/A
- (7) Is the capability for bypass designed into the plant? Yes No N/A
 If so, list units which can be bypassed.
 Bypass system in service ~ 6 to 8 times per year -> following 0.5 to 1 inch of rain
 Modified SPDES permit likely to require NY-Alert notification when bypass in use
- (8) Does sewage by-pass the plant? Yes No N/A
 Define conditions under which bypass occurs (e.g. what flow):
 Overflow/contact tank system (solids removal/disinfection with chlorine/settling) placed in service (automatically) when incoming flow is greater than 6 MGD
 Bypass frequency (times per year): 6 - 8
 Average duration of bypass (hours): 2 - 6
- (9) Infiltration/Inflow problems, e.g., is sewage ordinance enforced with respect to illegal stormwater connections?
 Explain as needed (include reference to corrective action or lack thereof).
 Three sewer separation projects being pursued by City
 Results of fecal coliform sampling plan in North Bay to be submitted to R4-DOW
- (10) Is there a BMP/Wet Weather Operations Plan? Yes No N/A
- (11) Number of pump stations in system: 4*
 Number inspected this inspection: 0
 Comments (consider access, ventilation, lighting, emergency power, safety, etc):
 * Inspected daily
 City of Hudson's WQIP application for Power Ave. pump station (jail) was not awarded
 Air bubbler at Power Ave. P/S repaired -> Floats not connected (left for backup)

B. Industrial Waste

- (1) Are industrial waste loadings causing problems at this facility? Yes No N/A
 Explain as needed (describe nature of problem an extent and adequacy of measures to address the problem):
 Hudson Valley Creamery -> washwater transported at Hudson WWTP -> No impacts
 Status of grease trap inspections (30 restaurants)?
 Annual sampling of all septage haulers required (unannounced sampling event by City)
- (2) Is there a sewer use ordinance? Yes No N/A
 Date: 2008
- Based on Model: NYSDEC
 Is it being enforced to control Industrial Waste? Yes No N/A
- (3) Does this facility accept septage? Yes No N/A
 How much?
 50,000 gpd -> Volume tracked by SCADA & by data retained by Rob Perry
 How is it introduced?
 Septage receiving building -> solids removed in basket -> wastewater to primary clarifiers

C. Laboratory Information

- (1) Is the permittee using an ELAP certified laboratory? Yes No N/A
 Details: Samples collected weekly by Les and Christian ->
 Hudson WWTP staff delivers samples to AES on Thursdays
 Staff are utilizing/retaining C-O-C forms as requested
- (2) Is a commercial laboratory used? Yes No N/A
 Lab Name: Adirondack Environmental Services (ELAP #10709)
 Lab Address: 314 N. Pearl Street Albany, N.Y. 12207
- (3) Pertaining to SPDES Self-Monitoring:
- (a) Does the permittee have a written sampling plan? Yes No N/A
 If yes, are they following their plan? Yes No N/A
- (b) Is testing done for all parameters at required frequency and punctually reported? Yes No N/A
- (c) Do sampling techniques meet requirements and intent of permit? Yes No N/A
- (d) Are EPA-approved procedures used? Yes No N/A
- (e) Is calibration and maintenance of instrumentation and equipment satisfactory? Yes No N/A
- (f) Is quality control used? (Spiked/duplicate samples) Yes No N/A
- (g) Should sampling frequencies/types be modified? Yes No N/A
 If yes, please explain:
 pH calibration: 4/7/10 buffers & TRC calibration: 0.24/1.15/2.74 mg/L standards
 New microscope to be purchased (phase contrast) during CY 2016?
- (h) Are lab records satisfactory? Yes No N/A
- (i) Is a minimum of 3 years data kept? Yes No N/A
- (4) Pertaining to Process Control:
- (a) Is testing performed for all necessary parameters? Yes No N/A
- (b) Is testing performed at necessary frequencies? Yes No N/A
- (c) Are procedures technically sound? Yes No N/A
- (d) Is sampling adequate? Yes No N/A
- Activated Sludge Facility:
- (e) Does the facility operator test for the following:
- MLSS? Yes No N/A
- Dissolved Oxygen? Yes No N/A
- Settleability? Yes No N/A
- Microscopic Analysis of Sludge? Yes No N/A
- Final Clarifier Sludge Blanket Depth? Yes No N/A
- Process Control "Target Values"? Yes No N/A
- (f) Does the facility operator calculate the following process control parameters:
- MCRT? Yes No N/A
- Sludge Age? Yes No N/A
- (g) Is the testing applied towards process control adjustments? Yes No N/A
- (h) What approach (if any) is used to determine changes in:
 Sludge Age?
 *Hard copy of SVI data provided (February 2016 through June 2016) ->
 Most data is at or less than 100 mL/g. -> Keep up the good work!
 Waste Sludge Flow?
 SVI data (mL/g.):
 06/01/16: 86 06/06/16: 90 06/07/16: 87: Step feed mode of operation began June 1st
- (i) Was laboratory information used to prepare the DMR and Monthly Operating Report properly? Yes No N/A
- (5) Explanation as needed for any of the above:
- Process Control*: Spreadsheet used for extended air (hard copy provided for 06/06 - 06/12/16)
- | | | |
|----------------------|---|------------------------|
| 1. Settleometer jars | 4. Microscopic Evaluation: 2X/week | 7. SVI: Weekly |
| 2. MLSS: Weekly* | 5. Blanket thickness (3 to 4 feet in back and 6 inches to 1 foot in front): Daily | |
| 3. TRC: Twice/day | 6. Aeration Basin D.O.: 2.0 mg/L by SCADA | * Target of 4,000 mg/L |

D. Personnel Information

- (1) Is staffing and training adequate? (Consider all aspects, including management/supervision, operations, laboratory, maintenance, safety, availability of training, development of staff, etc). Yes No N/A
- (2) Certified Operators:
 Chief Operator - Name, Certificate Number, Grade, Renewal Date:
 Les Coon: 13859, 2A, 10/01/18
 Two shifts -> 0600 - 1430 & 0830 - 1700 -> Facilitates operation of press
 Third operator needed for proper coverage on weekend, holidays, leave time, etc.
 Assistant Operator - Name, Certificate Number, Grade, Renewal Date:
 Christian Ludwig, Recently passed Grade 2A Exam -> Congratulations!
 Operator-In-Training -> To be hired during CY 2016?
- (3) Is operational staff certified at the appropriate level(s)? Yes No N/A
 Explain if needed:
 WWTP has historically been operated with staff of three (3) operators -> Two staff have been covering all operations since Spring 2016 -> New trainee to be assigned?
- (4) Do facility operators have renewal certification and/or training records? Yes No N/A
- (5) Plant Classification: _____
- (6) Plant Score: To be rescored
- (7) Explain as needed for any of the above:


E. Additional Information

- (1) Is treatment facility properly operated and maintained? Yes No N/A
 Details:
 PM work requested during previous inspection completed ->
 PM schedule listed in office (erase board)
- (2) Check Adequate/Inadequate as appropriate:
- | | | |
|---|--|-------------------------------------|
| (a) Preventive maintenance schedules exist and are followed? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (b) Records are kept for maintenance, repairs and replacement? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (c) Spare parts inventory is maintained? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (d) O&M Manual exists and is available? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (e) O&M Manual kept up-to-date? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (f) As-built plans and specifications exist and are available? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (g) Manufacturers' O&M specifications exist and are available? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (h) Other records kept as needed (e.g. flow recorder charts)? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (i) Alarm system for power or equipment failures is properly maintained and tested? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
| (j) Standby power system exists and is routinely tested? | <input checked="" type="checkbox"/> Adequate | <input type="checkbox"/> Inadequate |
- (3) Current copy of Part I and Part II of SPDES permit on premises? Yes No N/A
- (4) Has facility been subject of complaints (odors, others)? Yes No N/A
 If yes, describe:
 Septage Receiving holding tank -> Maximum daily volume (50,000) tracked by SCADA
 Cards used by haulers & data sent to City to print bills
 Rob Perry also maintains tracking spreadsheet with all haulers listed
- (5) Is sludge disposal satisfactory and are required permits in force? Yes No N/A
- (a) Name and location of sludge disposal site (and/or name and permit number of scavenger):
 Ontario County Landfill (Stanley, N.Y.)
- (b) Is there an alternate sludge disposal site or contingency plan? Yes No N/A
 If yes, please describe:
 None provided during inspection

- (6) Does facility have effective administrative structure and adequate financial systems (e.g. Repair Reserve Fund, Uniform Accounting System)? Yes No N/A
- (7) Is progress on compliance schedule(s) (e.g. Upgrading, CSO, Pretreatment) satisfactory? Yes No N/A
- (8) Explanation as needed for any of the above:
- * Sewer rates: 2,500 flat rate & 2,000 commercial units (meters)
 - * Rob Perry prepares budget with Mayor and Common Council

F. Inspector Comments

1. As we discussed during this inspection, please direct Delaware Engineering to submit the data collected during the fecal coliform sampling (during dry and wet weather) in the North Bay and Underhill Pond. The Department will review the data and determine if any additional sampling or corrective action is required.
2. It was noted during this inspection that ultrasonic level sensing probes (SITRANS by Siemens) have been installed in the North digester (during April 2016) and South digester (during February 2016) in response to the overflowing event that occurred in September 2015. The level data and alarms from the probes are transmitted to the SCADA system for review/response by the WWTP operators. The Department commends the efforts of the City for this investment to reduce the potential for such releases.
3. R4-DOW appreciates the updates on the three (3) sewer separation projects being pursued by the City of Hudson. They include the Upper Union Street Green Stormwater Retrofit (to include the use tree planters with funding by Environmental Facilities Corporation), Front Street (replacement of sanitary and stormwater piping with the plans currently under review by New York Department of State), and Columbia Street (installation of stormwater piping funded by the City with work being delayed by wet weather). Please continue to keep R4-DOW informed as work progresses on these projects.

Signature of Inspector: James E. Malcolm 	Title: Environmental Engineer II	Date: 06/08/16
Name of Facility Representative: Perry/Coon	Title: DPW/Chief Operator	Date: 06/08/16