



Environmental
Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director



1PE0000820090217

CLERMONT MOSCOW VILLAGE

WALLER, MICHELLE 2009/02/17



State of Ohio Environmental Protection Agency

Southwest District Office

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Ted Strickland, Governor
Lee Fisher, Lieutenant Governor
Chris Korleski, Director

February 18, 2009

Mayor and Council
P.O. Box 93
Moscow, Ohio 45153

RE: Village of Moscow Wastewater Treatment Works/Compliance Evaluation
Inspection, NPDES Permit No. OH0096571/ OEPA Permit No. 1PE00008

Ladies and Gentlemen:

On February 11, 2009, I conducted an NPDES Compliance Evaluation Inspection at the Village of Moscow Wastewater Treatment Works. Steve Roark, Maintenance Supervisor and Rick Fuested, Contract Operator were present for the facility. The purpose of the inspection was to evaluate compliance with the terms and condition of the facility's NPDES permit.

Observations and findings of the inspection are included in the attached report. As indicated in the report, three areas of the inspection rated less than a Satisfactory rating. An explanation of the ratings is included in the attached report.

If you have any questions, please contact me by phone at (937) 285-6028 or by e-mail at michelle.waller@epa.state.oh.us.

Respectfully,

Michelle Waller
Environmental Specialist II
Division of Surface Water

Enclosures

Cc: Steve Roark, Maintenance Supervisor

Village of Moscow Inspection Report
 (Items for Correction in Bold)

Records/Reports

A search of compliance records for the Village of Moscow from January 2007 to January 2009 showed the following violations of the NPDES permit:

Effluent Limit Violations

Reporting Period	Parameter	Limit Type	Unit	Limit	Reported Value
March 2007	Total Suspended Solids	7D Conc	mg/l	65	92.
September 2007	pH	1D Conc	S.U.	9.0	9.1
September 2007	pH	1D Conc	S.U.	9.0	9.4
May 2007	Total Suspended Solids	7D Conc	mg/l	65	79.5
May 2007	pH	1D Conc	S.U.	9.0	9.1
August 2007	Fecal Coliform	30D Conc	#/100 ml	200	233.3
May 2008	pH	1D Conc	S.U.	9.0	9.3
May 2008	pH	1D Conc	S.U.	9.0	9.4
May 2008	pH	1D Conc	S.U.	9.0	9.2
May 2008	pH	1D Conc	S.U.	9.0	9.5
July 2008	Total Suspended Solids	7D Conc	mg/l	65	77.2
February 2008	Total Suspended Solids	7D Qty	kg/day	5.9	6.12659
February 2008	Total Suspended Solids	7D Qty	kg/day	5.9	5.98446
March 2008	Total Suspended Solids	7D Qty	kg/day	5.9	6.16879
September 2008	pH	1D Conc	S.U.	9.0	9.2
October 2007	Total Suspended Solids	7D Qty	kg/day	5.9	8.91844
October 2007	pH	1D Conc	S.U.	9.0	9.2

No notification was given to the Ohio EPA regarding these above violations. This lead to the Unsatisfactory rating for the Records/Reports section of the inspection. **All effluent and frequency limit violations are to be reported as required by the NPDES Permit as detailed in Part III Item 12 titled "Noncompliance Notification."**

Flow Measurement

It was noted during the inspection that the flow meter is calibrated every few years. **Flow meter calibration is required on an annual basis.**

Effluent/Receiving Waters

17 effluent violations were noted during the review period of January 2007 to January 2009, resulting in a Marginal rating for this category. The effluent also had a slight green color to it, presumably from algae.

It was noted during the inspection that the facility has issues with algae in the last lagoon. For the last several years Moscow has used barley to control the algae. Steve Roark mentioned that he did not feel method was adequately addressing the issue. Mr. Roark asked for any advice Ohio EPA could give on this matter. While Ohio EPA does not recommend any particular method or device, barley straw is used at many sites. It may be helpful to note that in ponds with slow flowing water the barley bales are recommended to be broken up and contained in some sort of netting or cage (IACR-Center for Aquatic Plant Management, 1999), as tightly packed bales will not allow adequate water movement through the barley. Some other methods for algae control that have been seen in the district are the Solar Bee and sonic devices which use pulses to break up the algae formation.



State of Ohio Environmental Protection Agency
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1PE00008*CD	OH0096571	2/11/2009	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Moscow Village Wastewater Treatment Works Second Street Moscow, Ohio 45153	10:00 AM	3/1/2004
	Exit Time	Permit Expiration Date
	11:00 AM	2/28/2009
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Steve Roark – Maintenance Supervisor Rick Fueston – Contract Operator	(513) 553-7802 (513) 967-2665	
Name, Address and Title of Responsible Official	Phone Number	
Village of Moscow P.O. Box 93 Wells Street and Second Street Moscow, Ohio 45153	(513) 553-7802	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	M	Flow Measurement	S	Pretreatment
U	Records/Reports	N	Laboratory	N/A	Compliance Schedule
S	Operations & Maintenance	M	Effluent/Receiving Waters	S	Self-Monitoring Program
S	Facility Site Review	N/A	Sludge Storage/Disposal	S	Other
N	Collection System				

Section D: Summary of Findings (Attach additional sheets if necessary)
See attached report.

Inspector	Reviewer
<i>Michelle Waller</i> 2/19/2009 Michelle Waller Division of Surface Water Southwest District Office	<i>Maryn Burt</i> 2/19/09 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office

Sections E thru K: Complete on all inspections as appropriate
 Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

Section E: Permit Verification

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee Y
- (b) Correct name and location of receiving waters..... Y
- (c) Product(s) and production rates conform with permit application (Industries)..... N/A
- (d) Flows and loadings conform with NPDES permit..... Y
- (e) Treatment processes are as described in permit application... Y
- (f) New treatment process(es) added since last inspection..... N
- (g) Notification given to State of new, different or increased discharges..... N/A
- (h) All discharges are permitted..... Y
- (i) Number and location of discharge points are as described in permit..... Y

Comments/Status:

Facility design capacity is 0.024 MGD, average flow rate last year was 0.015 MGD.

Section F: Compliance

- (a) Any significant violations since the last inspection..... N
- (b) Permittee is taking actions to resolve violations..... N/A
- (c) Permittee has a compliance schedule..... N
- (d) Compliance schedule contained in
- (e) Permittee is meeting compliance schedule..... N/A

Comments/Status:

Review period 1/1/2006 – 1/1/2009.
 17 limit violations reported (7 TSS, 9 pH and 1 fecal coliform).
 Facility uses barley in the summer to control algae.

Section G: Operation & Maintenance

Treatment Works:

Treatment facility properly operated and maintained

- (a) Standby power available.....generator X or dual feed Y
- (b) Adequate alarm system available for power or equipment failures.. Y
- (c) All treatment units in service other than backup units..... Y
- (d) Wastewater Treatment Works classification (OAC 3745-7)..... A
- (e) Operator of Record holds unexpired license of class required by permit..... Y
Class: II
- (f) Copy of certificate of Operator of Record displayed on-site..... N
- (g) Minimum operator staffing requirements fulfilled (OAC 3745-7)... N
- (h) Routine and preventative maintenance scheduled/performed... Y
- (i) Any major equipment breakdown since last inspection..... N
- (j) Operation and maintenance manual provided and maintained..... N
- (k) Any plant bypasses since last inspection..... N/A
- (l) Regulatory agency notified of bypasses..... N/A
On MORs and/or Spill Hotline (1-800-282-9378)
- (m) Any hydraulic and/or organic overloads since last inspection..... N

Record Keeping:

- (a) Log book provided..... Y
- (b) Format of log book (i.e. computer log, hard bound book)

Hard bound book of site visits is kept by maintenance supervisor in truck. The log book does not identify who has made the entries. Contract operator keeps invoices of dates visited.
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- (c)

Log book(s) kept onsite (in an area protected from weather)..... N

- (d) Log book contains the following:
 - I. Identification of treatment works..... Y
 - II. Date/times of arrival/departure for Operator of Record and any other operator required by OAC 3745-7..... N
 - III. Daily record of operation and maintenance activities (including preventative maintenance, repairs and request for repairs)..... Y
 - IV. Laboratory results (unless documented on bench sheets)... N
 - V. Identification of person making log entries..... N
- (d) Has the operator of record submitted written notification to the permittee, Ohio EPA and (if applicable) any local environmental agencies when a collection system overflow, treatment plant

bypass or effluent limit violation has occurred..... N

Section G: Operation & Maintenance (con't)

Collection System:

- (a) Percent combined system: 0%
- (b) Any collection system overflows since last inspection..... N/A
(CSO and/or SSO)
- (c) Regulatory agency notified of overflows (SSOs)..... N/A
- (d) CSO O&M plan provided and implemented..... N/A
- (e) CSOs monitored and reported in accordance with permit..... N/A
- (f) Portable pumps used to relieve system..... N/A
- (g) Lift station alarms provided and maintained..... N/A
- (h) Are lift stations equipped with permanent standby power
or equivalent..... N/A
- (i) Is there an inflow/infiltration problem (separate sewer system),
or were there any major repairs to collection system since
last inspection..... N/A
- (j) Any complaints received since last inspection of basement flooding N/A
- (k) Are any portions of the sewer system at or near capacity..... N/A

Comments/Status:

Section H: Sludge Management

- (a) Sludge management plan (SMP)
 Submitted date: Approval #: Not submitted N/A
- (b) Sludge management plan current.....N/A
- (c) Sludge adequately disposed..... N/A
 (Method:)
- (d) If sludge is incinerated, where is ash disposed of
- (e) Is sludge disposal contracted..... N/A
 (Name:)
- (f) Has amount of sludge generated changed significantly since
 last inspection..... N/A
- (g) Adequate sludge storage provided at plant.....N/A
- (h) Land application sites monitored and inspected per SMP..... N/A
- (i) Records kept in accordance with State and Federal law..... N/A
- (j) Any complaints received in last year regarding sludge..... N/A
- (k) Is sludge adequately processed (digestion, pathogen control)..... N/A

Comments/Status:

Lagoons have never been cleaned out. Landfill would be the disposal option if lagoons needed cleaning.

Section I: Self-Monitoring Program

Flow Measurement:

- (a) Primary flow measuring device operated and maintained..... Y
 Type of device: Ultrasonic & Parshall flume Ultrasonic & open pipe
 Weir X Calculated from influent Other (in-line mag meters).
- (b) Calibration frequency adequate N
 (Date of last calibration: Approximately 1 ½ years ago)
- (c) Secondary instruments operated and maintained..... N/A
- (d) Flow measurement equipment adequate to handle full range
 of flows..... Y
- (e) Actual flow discharged is measured..... Y
- (f) Flow measuring equipment inspection frequency
Daily Weekly monthly other

Comments/Status:

The flow meter is calibrated every few years. Pump studies are done as a secondary measure of flow.

Section I: Self-Monitoring Program (con't)

Sampling:

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... Y
- (d) Sample collection procedures are adequate..... N/E
 - (i) Samples refrigerated during compositing..... N/E
 - (ii) Proper preservation techniques used..... N/E
 - (iii) Containers and sample holding times prior to analysis conform with 40 CFR 136.3..... N/E
- (e) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e. continuous monitoring instrumentation, calibration and maintenance records)..... N/E
- (f) Adequate records maintained of sampling date, time, location, etc.. N/E

Laboratory:

General

- (a) EPA approved analytical testing procedures used (40 CFR 136.3).. Y
- (b) If alternate analytical procedures are used, proper approval has been obtained..... N/A
- (c) Analyses being performed more frequently than required by permit. N
- (d) If (c) is yes, are results in permittee's self-monitoring report..... N/A
- (e) Commercial laboratory used..... Y

Lab name: Beckman Environmental

Quality Control/Quality Assurance

- (f) Quality assurance manual provided and maintained.....N/E
- (g) Satisfactory calibration and maintenance of instruments/equipment. N/E
- (h) Adequate records maintained..... N/E
- (i) Results of latest USEPA quality assurance performance sampling program: Satisfactory Marginal Unsatisfactory

Date:

Comments/Status:

All sampling is handled by Beckman Environmental.

Section J: Effluent/Receiving Water Observations

Outfall Number	Outfall sign in place?	Oil sheen	Grease	Turbidity	Foam	Solids	Color	Other
001	No	None	None	None	None	None	Green	

Comments/Status:

The outfall from 001 appeared slightly green in color. Some algae was observed in the last lagoon.

Section K: Multimedia Observations

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N
- (e) Do you notice any unusual odors or strong chemical smells..... N
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

Comments/Status: