



State of Ohio Environmental Protection Agency

Southeast District Office

2195 Front Street
Logan, Ohio 43138

TELE: (740) 385-8501 FAX: (740) 385-6490
www.epa.state.oh.us

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

March 9, 2007

Re: Vinton County
Lake Hope State Park
WWTP Inspections
Correspondence (PWV)

Mr. Randy Zeisler, Manager
Lake Hope State Park
27331 State Route 278
McArthur, Ohio 45651

Dear Mr. Zeisler:

On January 8, 2007, Patrick Hudnall and I conducted an inspection of the four wastewater treatment plants (WWTP) serving Lake Hope State Park. Mike Reffet, Park Operator and Greg Masterson, Treatment Plant Operations Manager, ODNR Division of Engineering, represented the Park during the inspection. The purpose of the inspection was to determine the status of compliance with the National Pollutant Discharge Elimination System (NPDES) permit for each WWTP. From the inspection and review of the Monthly Operator Reports (MORs) submitted by the Park, it was determined that the Park is not in compliance with all of the terms, conditions, and discharge limits within the respective NPDES permits. The results of the inspection are listed below by each individual treatment plant.

Old Hill Cabins, NPDES No. OPP00067*BD:

At the time of the inspection, there were solids on the sand filter. Mr. Reffet reported that this is common occurrence. There were solids on the effluent weir of the clarifier. The chlorination unit appears to be falling apart and does not have a dechlorination unit. The previous permit OPP00067*AD had a compliance schedule requiring the Park to meet an effluent limit of 0.019 mg/l by October 1, 1997. We have never received a Permit-to-Install (PTI) for a dechlorination unit.

Since January 2004, the plant has had 83 violations of the NPDES permit effluent limits. Eight of these were Total Suspended Solids (TSS), thirty-four were Ammonia violations, four were fecal coliform violations, and thirty-five were chlorine violations.

The plant was originally designed to treat 10,000 gallons per day (gpd). There are a total 27 cabins available for year-around occupancy, including a year-round residence. Six of the cabins have three bathrooms and a kitchen. Twenty-one cabins have 2 bedrooms and a kitchen. Each cabin has six-person occupancy. Per Ohio Administrative Code (OAC) 3745-42-05, a vacation cottage design flow is 75 gpd per person with a kitchen, this would make the estimated flow approximately 12,150 gpd, without the residence. Reportedly, the cabins have more than six people at a time. This would mean that the 12,150 gpd may be an underestimate of the actual flow. For the past few years, on the MORs, the design flow has been reported for the daily flow. The Park must either install a flow meter or a pump timer to get an accurate reading of daily flow.

Lodge Hill Plant, NPDES 0PP00066*BD:

At the time of the inspection, there were solids on the sand filter, reportedly a common occurrence. There appeared to be an overflow at some time in the recent past. The chlorination unit appears to be falling apart and does not have a dechlorination unit. The previous permit 0PP000066*AD had a compliance schedule requiring the Park to meet an effluent limit of 0.019 mg/l by October 1, 1997. We have never received a PTI for a dechlorination unit. The effluent was also discolored.

Since January 2004 the plant has had 310 violations of the NPDES permit effluent limits. Twelve of these were CBOD violations, 48 of these were Total Suspended Solids (TSS), 70 were dissolved oxygen violations, 145 were Ammonia violations, ten were fecal coliform violations, and twenty-five were chlorine violations.

The plant was originally designed to treat 15,000 gallons per day (gpd). This design included the Laurel Lodge (group sleeping lodge), 36 cabins, and dining lodge (which has since burned down). The Laurel Lodge has a 24-person occupancy. The 36 cabins available for year-around occupancy have a six-person occupancy. The dining lodge had 150 seats. Per OAC 3745-42-05 the design flow a vacation cottage is 75 gpd per person with a kitchen and the design flow for the restaurant would be approximately 35 gpd per seat. The estimated flow should be 23,250 gpd. Reportedly, the cabins have more than six people at a time. This would mean that the 23,250 gpd may be an underestimate of the actual flow. For the past few years, the design flow has only been reported. You must either install a flow meter or pump timers to get an accurate reading of daily flow.

The previous permit 0PP000066*AD had a compliance schedule requiring the Park to meet an effluent limit of 0.019 mg/l by October 1, 1997. We have never received a Permit-to-Install for a dechlorination unit.

Spillway (Beach) Plant, NPDES 0PP00073*BD:

The plant is operated seasonally. At the time of the inspection, the plant was running lake water through the plant. The sewage from the beach facilities travels through old clay tile laid underneath the lake. It has significant inflow and infiltration problems. It is reportedly often underwater in the spring.

Since January 2004, the plant has had 28 violations of the NPDES permit effluent limits. Of the violations one was fecal coliform, two violations were of suspended solids, and 25 violations were of chlorine. The previous permit 0PP000066*AD had a compliance schedule requiring the Park to meet an effluent limit of 0.038 mg/l by October 1, 1997. We have never received a PTI for a dechlorination unit.

Considering the low daily flows at the plant, you may want to consider an onsite treatment unit for the beach area. This may be less costly than pumping the waste to another site. For example, at 500 gpd you may be able to install a septic tank, fixed media filter that discharges to a drip irrigation system. Prior to submitting any onsite system PTI application you must have a soil evaluation completed by a soil scientist, please see attached form. You would then submit that report to this office. We would then recommend an approvable system.

Office Plant, NPDES OPP00041*AX:

The NPDES permit application for this WWTP has not been acted on by Ohio EPA. The plant receives a very small amount of wastewater from the office and public restrooms. The clarifier/aeration unit leaks, therefore no water enters the sand filter or discharges to surface water. However, the wastewater from this facility must be adequately treated. At the time of this inspection Mr. Masterson and I discussed that the Park's consultants have determined that on-site treatment would be the only option for this facility, it is not technically feasible to tie into any other Park facility. You must first get a soil evaluation to determine what type of system would be acceptable for this area and submit that report to this office. We would then recommend an approvable system.

Summary:

Mr. Reffet is responsible for the operation and maintenance of the four WWTPs, the pump stations and sewers that deliver the sanitary wastewater to the WWTPs, and the drinking water distribution system, among other park maintenance operations. Under the current conditions, the WWTP operator should be operating and maintaining these plants full time when these areas are at or near their full occupancy. Seasonal help may be needed to allow Mr. Reffet to have more time to manage the WWTPs. Mr. Reffet appears to be doing a good job with the minimal resources allocated to him.

I encourage you to obtain a soil evaluation for the Beach and Office Plants for on-site treatment as soon as possible. I have attached a list of soil scientists that can provide this service for you. As discussed at the time of the inspection, our onsite rules are in the process of being updated. These rules will be more restrictive than past practice. You may want to consider applying for a permit to install for this system as soon as possible.

The NPDES permit for the Old Hill Cabins WWTP (OPP00067), Lodge Hill WWTP (OPP00067), and the Beach Spillway WWTP (OPP00073) permits expired on July 31, 2006. Ohio EPA received the renewal applications on May 30, 2006. We are in the process of renewing your permit. The Park should continue to sample in accordance with the expired permit until a renewal permit is issued.

Upon reviewing the permit application, it became evident that the Park is only using land application station to dispose of solids from the sand filters. This is not the appropriate disposal method for solids from the sand filters. The Park must dispose of this waste in a dumpster and haul the waste to a landfill. Upon file review I noticed the Park is intermittently reporting sludge removed from the plant. Note per the current NPDES permits the Park must report either monthly or yearly depending on the plant, the total estimate of sludge removed from the plant.

The dechlorination units on the Lodge Hill WWTP, Old Hill Cabins WWTP, and the Spillway Beach WWTP should have been installed over nine years ago, the Park has been out of compliance with their permit for over nine years. In addition, the chlorination units are in need of repair or replacement. The Park must submit a permit to install application for a replacement or repair of the chlorination unit and a new dechlorination unit for the Hill WWTP, Old Hill Cabins WWTP, and the Spillway Beach WWTP to us by May 1, 2007, to avoid formal enforcement action which may include significant monetary penalties.

You have close to 400 permit violations within the past two years at the Old Hill and Lodge WWTP. This is unacceptable and you must stop violating the terms and conditions of your NPDES permits. By April 1, 2007, you must notify me in writing of a time frame for correcting the problems at the Lodge Hill and Old Hill Cabins WWTPs.

I have attached copies of the inspection reports. Some of the areas were given marginal or unsatisfactory ratings due to the issues mentioned above. Please call me if you have any questions at (740) 380-5266.

Sincerely,



Cynthia Yandrich
District Representative
Division of Surface Water

CY/dh

Enclosures

- c: Mike Reffet, Operator, Lake Hope State Park
- c: Richard Sanderson, ME Companies
- c: Greg Masterson, ODNR

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
OPP00066*BD	OH0090972	January 8, 2007	C	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
ODNR Lake Hope State Lodge WWTP Lake Hope State Park South of the New Cabin Area Brown Township, Vinton County, Ohio	10:05 a.m.	August 1, 2001
	Exit Time	Permit Expiration Date
	10:25 a.m.	July 31, 2006

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Mike Reffet, Operator Greg Masterson, Treatment Plant Operations Manager	(740) 596-4938 (740) 394-2630
Name, Address and Title of Responsible Official	Phone Number
Mr. Randy Zeisler, Lake Hope State Park Manager 27331 State Route 278 McArthur, Ohio 45651	(740) 596-4938

C. AREAS EVALUATED DURING INSPECTION

<u>S</u> Permit	<u>U</u> Flow Measurement	<u>N</u> Pretreatment
<u>S</u> Records/Reports	<u>N</u> Laboratory	<u>U</u> Compliance Schedules
<u>M</u> Operations & Maintenance	<u>U</u> Effluent/Receiving Waters	<u>S</u> Self-Monitoring Program
<u>S</u> Facility Site Review	<u>S</u> Sludge Storage/Disposal	<u> </u> Other
<u>S</u> Collection System		

(S = Satisfactory; M = Marginal; U = Unsatisfactory; N = Not Evaluated)

D. SUMMARY OF FINDINGS/COMMENTS



Cynthia Yandrich, Inspector, Ohio EPA, Southeast District Office

3/15/07

Date



Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office

3/15/07

Date

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
OPP00067*BD	OH0090981	January 8, 2007	C	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
ODNR Lake Hope State Park Old Hill Cabins WWTP Lake Hope State Park just South of the Cabin Area Brown Township, Vinton County, Ohio	9:45 a.m.	August 1, 2001
	Exit Time	Permit Expiration Date
	10:00 a.m.	July 31, 2006

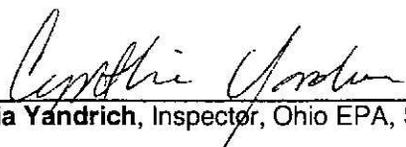
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Date

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
OPP00073*BD	OH0091367	January 8, 2007	C	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
ODNR Lake Hope State Park Spillway Beach WWTP Lake Hope State Park Dam by 27331 State Route 278 McArthur, Vinton County, Ohio	10:30 a.m.	August 1, 2001
	Exit Time	Permit Expiration Date
	11:00 a.m.	July 31, 2006

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Mike Reffet, Operator Greg Masterson, Treatment Plant Operations Manager	(740) 596-4938 (740) 394-2630
Name, Address and Title of Responsible Official	Phone Number
Mr. Randy Zeisler, Lake Hope State Park Manager 27331 State Route 278 McArthur, Ohio 45651	(740) 596-4938

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