

State of Ohio Environmental Protection Agency

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P.O. Box 1049
Columbus, OH 43216-1049

June 23, 2009

The Honorable Lawrence Friesel
Mayor, Village of Utica
P.O. Box 524
39 Spring Street
Utica, OH 43080

Dear Mayor Friesel:

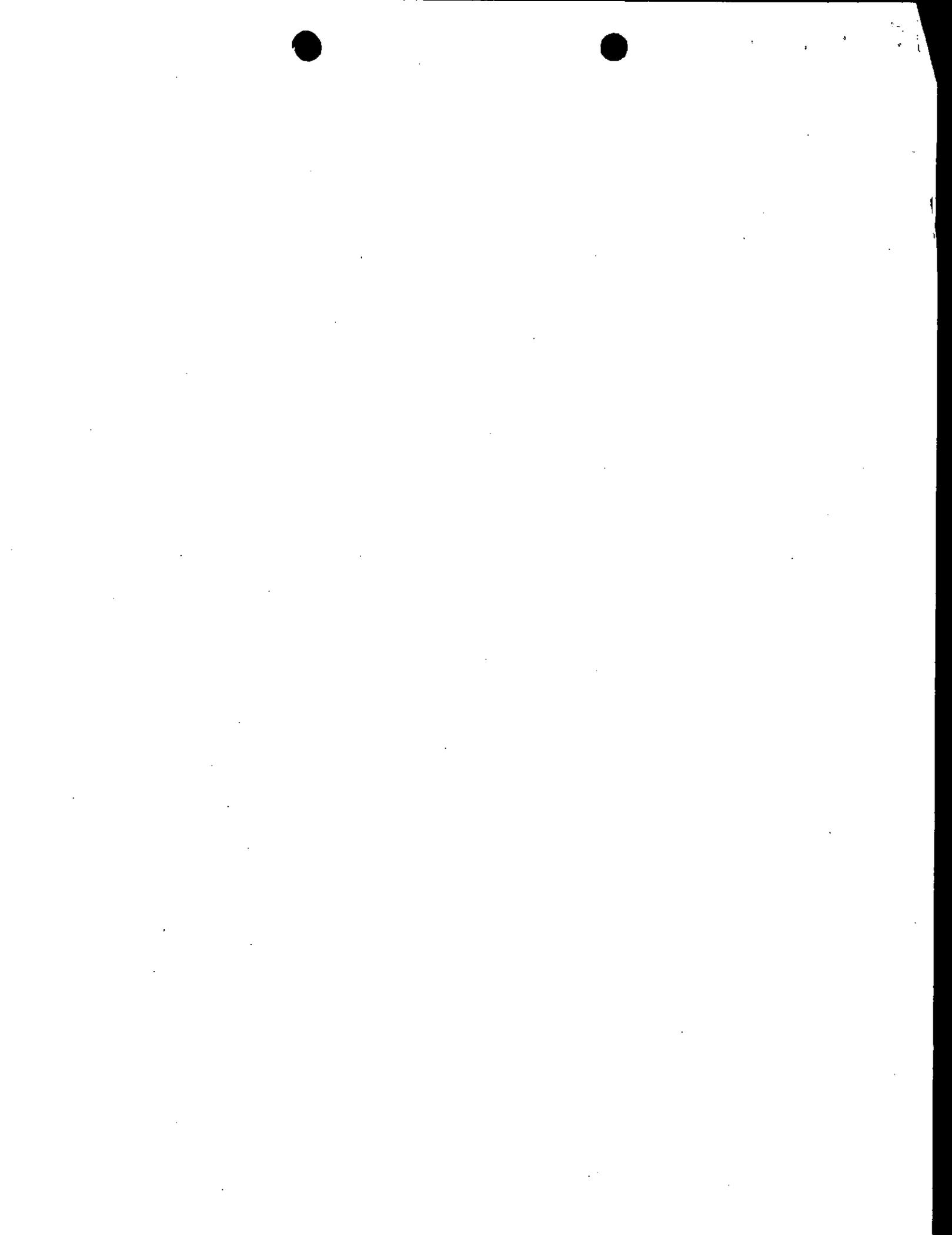
Enclosed is a report regarding a Compliance Evaluation Inspection that Jacob Howdysshell and I from this office performed at the Village of Utica wastewater treatment plant (WWTP) on June 1, 2009. Present during the inspection were Judd Brechler and BJ Yoder.

During the inspection it was good to hear that inspection and repair of the village's sanitary sewer collection system was continuing as is necessary to minimize sources of surface/ground water inflow/infiltration (I/I) into the system.

Please read the report carefully. Highlights of items requiring attention include the following:

- The village's current wastewater discharge permit contains a schedule of compliance requiring development and submittal to Ohio EPA by February 1, 2009 of a WWTP Bypass and Equalization Basin Overflow Elimination Plan. The plan must include a schedule for elimination of the bypass and the equalization basin overflow. The plan is overdue but Mr. Brechler indicated intent to formally request an extension of time for plan completion.
- During the inspection, several violations were discovered in regards to sewage sludge management and record keeping. These violations are noted in the report.

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



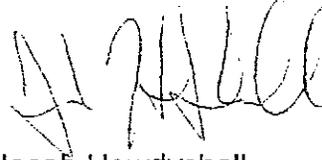
The Honorable Lawrence Friesel
Mayor, Village of Utica
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If there are questions regarding sludge management please contact Jacob Howdysshell by telephone at (614) 644-2018 or by e-mail at jacob.howdysshell@epa.state.oh.us. For other questions you may contact Jan Rice by telephone at 614-728-3850 or by e-mail at jan.rice@epa.state.oh.us.

Sincerely yours,



Jan A. Rice
Environmental Specialist
Field Operations Unit
Division of Surface Water
Central District Office



Jacob Howdysshell
Environmental Specialist
Biosolids Unit
Division of Surface Water
Central Office

Enclosure

c: Judd Brechler, Village Administrator
BJ Yoder, WWTP Superintendent

JAR/nsm Utica6-1-09 CEIcovtr

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
4PB00022*GD	OH0027898	6/1/09	C	S	1

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Village of Utica Wastewater Treatment Plant (WWTP) 418 Blacksnake Road Utica, Ohio 43080	9:00 A.M.	8/1/07
	Exit Time	Permit Expiration Date
	11:30 A.M.	7/31/12

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Brian J Yoder, Superintendent	740-892-3657
Name(s) Address and Title(s) of Operator of Record	Phone Number(s)
Brian J Yoder, Superintendent 418 Blacksnake Road, Utica, Ohio 43080	740-892-3657
Name, Address and Title of Responsible Official	Phone Number
Judd Brechler/Vill. Administrator P.O. Box 524, 39 Spring Street, Utica, Ohio 43080	740-892-2696

C. AREAS EVALUATED DURING INSPECTION (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

- S Permit
- N/S Records/Reports
- S Operations & Maintenance
- S Facility Site Review
- U Collection System – rated unsatisfactory due to wet weather plant bypasses and detention basin overflows.
- S Flow Measurement
- S Laboratory
- S Effluent/Receiving Waters
- M Sludge Storage/Disposal
- N Pretreatment – no pretreatment program
- U Compliance Schedules – permittee has not yet submitted information required in compliance schedule.
- S Self-Monitoring Program
- Other

D. SUMMARY OF FINDINGS/COMMENTS:

The permittee is continuing efforts to eliminate sanitary sewer overflows and bypasses from its separate sanitary sewer collection system and wastewater treatment plant. Such remedial work is required by the permit compliance schedule.

Jacob Howdysshell
Jacob Howdysshell, Ohio EPA, Central Office

Jan Rice
Jan Rice, Inspector, Ohio EPA, Central District Office

Erin Shaffer FOR ES
Erin Shaffer, Reviewer, Ohio EPA, Central District Office

6/22/09
Date

6/22/09
Date

6/22/09
Date

E. PERMIT VERIFICATION

Inspection Observations Verify the Permit	Yes	No	N/A	N/E
a. Correct name and mailing address of permittee	X			
b. Correct name and location of receiving waters	X			
c. Product(s) and production rates conform with permit application (industries)			X	
d. Flows and loadings conform with NPDES permit	X			
e. Treatment processes are as described in permit application/briefing memo	X			
f. New treatment process(es) added since last inspection		X		
g. Notification given to state of new, different, or increased discharges		X		
h. All discharges are permitted	X			
i. Number and location of discharge points are as described in permit	X			

F. COMPLIANCE SCHEDULES/VIOLATIONS

	Yes	No	N/A	N/E
a. Any significant violations since the last inspection		X		
b. Permittee is taking actions to resolve violations			X	
c. Permittee has compliance schedule	X			
d. Compliance schedule contained in permit	X			
e. Permittee is meeting compliance schedule		*X		

Comments: *e. – a WWTP Bypass and Equalization Basin Overflow Elimination Plan was to be submitted by February 1, 2009. This did not occur. The village administrator will be requesting in writing an extension of time for plan submittal.

G. OPERATION AND MAINTENANCE

Treatment Facility Properly Operated and Maintained	Yes	No	N/A	N/E
a. Standby power available: Generator <u>X</u> Dual Feed	X			
b. Adequate alarm system available for power or equipment failures (autodailer)	X			
c. All treatment units in service other than backup units	X			
d. Sufficient operating staff provided: # of shifts <u>1</u> Days/Week <u>5</u> with weekend checks	X			
e. Operator holds unexpired license of class required by permit Class: <u>II</u>	X			
f. Routine and preventive maintenance schedule/performed on time	X			
g. Any major equipment breakdown since last inspection		X		
h. Operation and maintenance manual provided and maintained	X			
i. Any plant bypasses since last inspection	*X			
j. Regulatory agency notified of bypasses <u>X</u> on MORS <u> </u> 800 Number	X			
k. Any hydraulic and/or organic overloads experienced since last inspection		X		

Comments: i. – overflows from monitoring stations 002 and 003 occurred in 2009 due wet weather. The permittee is developing a plan to resolve these problems.

Collection System	Yes	No	N/A	N/E
a. Percent combined system: 0 %				
b. Any collection system overflows since last inspection (CSO ___ SSO X ___)	X			
c. Regulatory agency notified of overflow (SSOs)	X			
d. CSO O and M plan provided and implemented			X	
e. CSOs monitored and reported in accordance with permit			X	
f. Portable pumps used to relieve system		X		
g. Lift station alarm systems provided and maintained	X			
h. Are lift stations equipped with permanent standby power or equivalent		X		
i. Is there an inflow/infiltration problem (separate sewer system), or were there any major repairs to collection system since last inspection	*X			
j. Any complaints received since last inspection of basement flooding		X		
k. Are any portions of the sewer system at or near capacity		X		

Comments: i. - the permittee is continuing inspection of its sanitary sewer collection system for I/I sources.

H. SLUDGE MANAGEMENT

- a. Sludge Management Plan
(SMP): N/A

	Yes	No	N/A	N/E
b. Sludge Management Plan current		*X		
c. Sludge adequately disposed (Method: land applicaton)		*X		
d. If sludge is incinerated, where is ash disposed of?			X	
e. Is sludge disposal contracted (Name: Burch Hydro Cleaning Specialists)	X			
f. Has amount of sludge generated changed significantly since last inspection		X		
g. Adequate sludge storage provided at plant		*X		
h. Land application sites monitored and inspected per SMP	X			
i. Records kept in accordance with state and federal law		*X		
j. Any complaints received in last year regarding sludge		X		
k. Is sludge adequately processed (digestion, dewatering, pathogen control)		*X		

Comments: *b. - sludge must be disposed in accordance with Part II, Item N of the permittee's wastewater discharge permit. The permittee intends sampling its sludge for Dioxin as required in Part II, Item R in the permittee's wastewater discharge permit.

*c,g,i,k - Pages 6 through 17 of this report provide an additional sewage sludge land application checklist used during this inspection. The current method of sludge treatment is to send waste activated sludge to two aerobic digesters with a capacity of 85,000 gallons between both tanks, operated in parallel. There are also two vacuum assist filters available for de-watering sludge, although these are not currently in use and have not been used for several years.

When land applying sludge, the current method for meeting pathogen reduction is to test the sewage sludge for fecal coliform concentration. For vector attraction reduction, the treatment plant relies on the results of a specific oxygen uptake rate (SOUR) test to show that the sludge is thoroughly digested.

During the inspection, the following violations were discovered in regards to sewage sludge management and record keeping:

- OAC 3745-40-05(M) states the following:

"One of the vector attraction reduction requirements in paragraphs (Q)(1) to (Q)(10) of this rule shall be met when sewage sludge is applied to the land."

At the time of our inspection the treatment plant did have records to show that a SOUR test had been completed, but the tests were incomplete. The requirements in Ohio EPA's sewage sludge rules are for the SOUR test to be completed at twenty degrees Celsius. If the sewage sludge is not at twenty degrees Celsius, a temperature correction must be applied to the result of the SOUR test. The temperature correction was not being performed at the time of our inspection.

- OAC 3745-40-06(E) states that "For authorized sites, the frequency of monitoring for soil pH and soil phosphorous level (Bray-Kurtz P1 extraction or Mehlich 3 extraction) shall be such that the most recent results are not more than two years old at the time of bulk sewage sludge land application."

At the time of our inspection, we were unable to determine if the treatment plant was meeting this requirement because there were no soil test results available to review.

- OAC 3745-40-06(I)(1) states the following:

"The permittee who provides treatment to bulk sewage sludge shall develop the following information, shall retain the information for five years, and shall make the information available to the division upon request:

(1) The concentration of each pollutant listed in paragraph (F) of rule 3745-40-05 of the Administrative Code;..."

At the time of our inspection, the treatment plant was unable to produce records for all pollutant analysis for the previous five years.

- OAC 3745-40-06(I) requires that the permittee who provides treatment to bulk sewage sludge develop and sign the following certification statements:

"I certify, under penalty of law, that the information that will be used to determine compliance with class (insert A or B) pathogen reduction alternative (insert one of the class A alternatives in paragraphs (N)(1) to (N)(6) of rule 3745-40-05 of the Administrative Code or one of the class B alternatives in paragraphs (O)(1) to (O)(3) of rule 3745-40-05 of the Administrative Code) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

and

"I certify, under penalty of law, that the information that will be used to determine compliance with vector attraction reduction requirement (insert one of the vector attraction reduction requirements in paragraphs (Q)(1) to (Q)(8) of rule 3745-40-05 of the Administrative Code) was prepared under my direction and supervision in accordance with the system designed to ensure that qualified personnel properly gather and evaluate this information. I am aware that there are significant penalties for false certification including the possibility of fine and imprisonment."

The WWTP shall develop these certification statements and sign them in accordance with paragraph 3745-31-04 of the Ohio Administrative Code (according to that paragraph the superintendent of the WWTP shall sign the statements). These statements shall be developed and signed at the end of each reporting period to verify the pathogen and vector attraction reduction for that reporting period. The statements must be kept for 5 years and copies of the Statements shall be submitted yearly with the annual sewage sludge use/disposal report.

- OAC 3745-40-06(I) requires that the permittee who provides treatment to bulk sewage sludge develop a description of how the pathogen reduction requirements of rule 3745-40-05 of the Administrative Code are met and a description of how the vector attraction reduction requirements of rule 3745-40-05 of the Administrative

Code are met, and keep these descriptions for a minimum of five years and make them available to the Ohio EPA upon request.

At the time of the inspection, these descriptions were not available. The WWTP shall develop these descriptions to keep on file at the treatment plant.

During our inspection, it was stated that the two aerobic digesters provide for approximately ninety days of sewage sludge storage. Chapter 3745-40 of the OAC states that a treatment facility shall provide for at least 120 days of storage for sewage sludge at the treatment facility, or a contracted alternative disposal method shall be in place. At the time of our inspection, there was no contracted alternative in place to land application of the sewage sludge. At this time, it is not clear how many days worth of storage the two vacuum assist filters provide because they have not been used for several years. Ohio EPA recommends that the Village of Utica immediately seek out an alternative to land application as a contingency measure in case land application is not available. Also, Ohio EPA recommends that the Village start to investigate ways to increase storage capacity at the treatment plant. This may include adding a belt press to the vacuum storage building or looking at adding additional digestion.



SEWAGE SLUDGE LAND APPLICATION INSPECTION

Date of Inspection: 6/1/09
Inspector Name: JACOB HOWOYSHEL, JAN RICE

Facility Name: UTICA
Facility Address: 418 BLACKNACE RD
City:
Zip:

Mailing Address:
City:
Zip:

Contacts Present

Name: BJ YADER
Title: SUPERINTENDENT
Phone: (740) 892-3657
Fax:

Name:
Title:
Phone:
Fax:

I. Facility Information

Facility Background

Table with 2 columns: Field (Average Daily Flow, Sewage Sludge Class, Storage Capacity, Contracted Alternative) and Value (0.368, EQ (B) Unknown, ~90?, NOT CURRENTLY)

(FILTERS)

Facility Sewage Sludge Treatment Process(es)

Table with 3 columns: Treatment Process, # Units, Notes. Rows include Aerobic Digesters (2 units, 85,000 gallons total) and Vacuum Assist Filter (2 units, 4,500 gallons each).

II. Management Practices

General Facility Sewage Sludge Treatment

<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	1. Are the sewage sludge treatment units being operated/maintained in accordance with the manufacturer's specifications?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	2. Does the facility have adequate equipment redundancy (ie. back-up sewage sludge treatment units)?
Yes <input checked="" type="radio"/> No <input type="radio"/> N/A	3. Does the facility have any plans for upgrades to any of the sewage sludge treatment units? If so, explain:
Yes <input checked="" type="radio"/> No <input type="radio"/> N/A	4. Does the facility have a contingency plan for sewage sludge disposal?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	5. Is the sewage sludge handling operation adequate to manage the volume of sewage sludge generated?
Comments:	

Drying Beds, Gravity Thickener, Centrifuge, and Dissolved Air Floatation

N/A

Average percent (%) solids before thickening:		Average percent (%) solids before thickening:	
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Yes <input type="radio"/> No <input type="radio"/> N/A <input type="radio"/>	1. Is primary unstabilized sewage sludge fed to the drying beds, gravity thickener, or centrifuge?
Yes <input type="radio"/> No <input type="radio"/> N/A <input type="radio"/>	2. Is the sewage sludge mixed with other materials, including coagulants, before or after thickening?

Average percent (%) solids before mixing sewage sludge with other materials:	
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Comments:	
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Aerobic Digestion

N/A

	1. Sewage sludge fed to the aerobic digester includes: <input type="checkbox"/> Primary <input checked="" type="checkbox"/> Secondary <input type="checkbox"/> Combined
Yes No <input type="checkbox"/> N/A	2. Aerobic digester is operated at proper temperature? <input type="checkbox"/> Cryophilic (<10° C = <50° F) <input type="checkbox"/> Mesophilic (10° to 42° C = 50° to 108° F) <input type="checkbox"/> Thermophilic (>42° C =>108° F)
Comments:	

Anaerobic Digestion

N/A

	1. Sewage sludge fed to the aerobic digester includes: <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Combined
	2. Anaerobic digester operating mode: <input type="checkbox"/> High Rate* <input type="checkbox"/> Low Rate <small>*Utilize a combination of active mixing and elevated temperatures.</small>
Yes No N/A	3. Aerobic digester is operated at proper temperature? <input type="checkbox"/> Cryophilic (35° C = 95° F) <input type="checkbox"/> Thermophilic (55° C = 131° F)
Comments:	

Composting

N/A

	1. Type of sewage sludge composting performed: <input type="checkbox"/> In Vessel <input type="checkbox"/> Static Piles <input type="checkbox"/> Windrows
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	2. Type of sewage sludge composted includes: <input type="checkbox"/> Primary <input type="checkbox"/> Secondary <input type="checkbox"/> Combined
Yes No N/A	3. Is the moisture content of the composting operation monitored?
Yes No N/A	4. Is the compost mixed? If so, number of turnings: <input type="text"/>
Yes No N/A	5. Is the oxygen content of the compost monitored?
Yes No N/A	6. Is the temperature of the compost monitored?
Yes No N/A	7. Are total and total volatile solids of the compost monitored?
Yes No N/A	8. Active Phase (days): <input type="text"/> Curing Phase (days): <input type="text"/>
Comments:	

Land Application

N/A

	1. Sewage sludge is applied to: <input checked="" type="checkbox"/> Authorized Sewage Sludge Site <input type="checkbox"/> Unauthorized Sewage Sludge Site <input type="checkbox"/> Forest <input type="checkbox"/> Reclamation Site <input type="checkbox"/> Lawn or Garden <input type="checkbox"/> Public Contact Site (ie. park, etc.)
--	--

Yes No N/A

2. Are Class A pathogen reduction requirements met (indicate method being performed)?

- Alt. 1 - Fecal Coliform <1,000 MPN/g total solids, or Salmonella <3 MPN/4 g total solids, and time/temperature:
 - >7% solids at >50° C (>122°F) for >20 minutes (no warmed gases or immiscible liquid).
 - >7% solids at >50° C (>122°F) for >15 seconds (warmed gases or immiscible liquid).
 - <7% solids at X° C for >15 seconds to <30 minutes.
 - <7% solids at >50° C (>122°F) for >30 minutes.

- Alt. 2 - Fecal Coliform <1,000 MPN/g total solids, or Salmonella <3 MPN/4 g total solids, and pH > 12 for 72 hours.

- Alt. 3 - Fecal Coliform <1,000 MPN/g total solids, or Salmonella <3 MPN/4 g total solids, and other processes:
 - Enteric virus is <1 plaque forming unit (PFU) per 4 grams of total solids (TS) **PRIOR** to pathogen treatment (PT).
 - Enteric virus is >1 PFU per 4 grams of TS prior to PT but is <1 per 4 grams of TS **AFTER** PT.
 - Helminth ova is <1 per 4 grams of TS **PRIOR** to PT.
 - Enteric virus >1 PFU per 4 grams of TS prior to PT, but is <1 per 4 grams of TS **AFTER** PT.

- Alt. 4 - Fecal Coliform <1,000 MPN/g total solids, or Salmonella <3 MPN/4 g total solids, and unknown processes:
 - Enteric virus is <1 PFU per 4 grams of TS at disposal.
 - Helminth ova is <1 per 4 grams of TS at disposal.

- Alt. 5 - Fecal Coliform <1,000 MPN/g total solids, or Salmonella <3 MPN/4 g total solids, and PFRP:
 - 1. Composting.
 - 2. Heat drying.
 - 3. Heat treatment.
 - 4. Thermophilic aerobic digestion.
 - 5. Beta ray irradiation.
 - 6. Gamma ray irradiation.
 - 7. Pasteurization.

- Alt. 6 - Equivalent process.

<p>Yes No N/A</p>	<p>3. Are Class B pathogen reduction requirements met (indicate method being performed)?</p> <p><input checked="" type="checkbox"/> Alt. 1 -Geometric mean of seven Fecal Coliform samples with <2,000,000 MPN/g total dry solids or <2,000,000 Colony Forming Units/g total dry solids.</p> <p><input type="checkbox"/> Alt. 2 - PSRP 1 aerobic digestion. Mean cell residence time and temperature shall be between 40 days at 20°C (68°F) and 60 days at 15°C (59°F) .</p> <p>Average mean cell residence time (days): <input type="text"/></p> <p>Average temperature (°C) : <input type="text"/></p> <p><input type="checkbox"/> PSRP 2 air drying. Sewage sludge dried on sand beds or basins for 3 months at an ambient average daily temperature >0°C (>32°F)</p> <p><input type="checkbox"/> PSRP 3 anaerobic digestion. Mean cell residence time and temperature shall be between 15 days at 35°-55°C (95°-131°F) and 60 days at 20°C (68°F).</p> <p>Average mean cell residence time (days): <input type="text"/></p> <p>Average temperature (°C) : <input type="text"/></p> <p><input type="checkbox"/> PSRP 4 composting. Sewage sludge temperature is raised to >40°C (>104°F) for 5 days. Temperature must exceed 55°C (>131°F) for 4 hours during the 5 day period.</p> <p><input type="checkbox"/> PSRP 5 lime treatment. Lime is added to sewage sludge to raise the pH to 12 after 2 hours of contact.</p>
<p>Yes No N/A</p>	<p>4. Are the Class B signage requirements being satisfied?</p>

Yes	No	N/A	5. Are Class B site restrictions being practiced (indicate restrictions being performed)?
			<input type="checkbox"/> Food crops (above ground) are harvested >14 months after sewage sludge application. <input type="checkbox"/> Food crops (below ground) are harvested >20 months after sewage sludge application when sewage sludge remains on ground >4 months before soil incorporation. <input type="checkbox"/> Food crops (below ground) are harvested >38 months after sewage sludge application when sewage sludge remains on ground <4 months before soil incorporation. <input checked="" type="checkbox"/> Food crops, feed crops, and fiber crops are harvested >30 days after sewage sludge application. <input type="checkbox"/> Animal grazing allowed on land only >30 days after sewage sludge application. <input type="checkbox"/> Turf grown on land where sewage sludge was applied not harvested for >1 year if placed on land with high potential for public exposure or lawn. <input type="checkbox"/> Public access restricted to land with a high potential for public exposure for 1 year. <input checked="" type="checkbox"/> Public access restricted to land with a low potential for public exposure for 30 days.

<p><input checked="" type="radio"/> Yes No N/A</p>	<p>6. Are bulk sewage sludge site restrictions being practiced (indicate restrictions being performed)?</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> No threatened or endangered species present or critical habitat affected at the site where sewage sludge is applied. <input checked="" type="checkbox"/> Bulk sewage sludge is not applied to frozen or snow covered ground unless applied >100 feet from waters of the state and appropriate ground cover maintained. <input checked="" type="checkbox"/> Bulk sewage sludge is not applied <33 feet from waters of the state. <input checked="" type="checkbox"/> Bulk sewage sludge is applied at a rate equal or less than the agronomic rate. <input checked="" type="checkbox"/> Label affixed no bag or information sheet provided to user of sold and given away sludge indicating name of sludge preparer, application instruction, and maximum annual whole sludge application rate.
<p><input checked="" type="radio"/> Yes No N/A</p>	<p>7. Are bulk sewage sludge general requirements being practiced (indicate restrictions being performed)?</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Sewage sludge is not applied to a site where the cumulative pollutant loading or annual application rate has been reached.. <input checked="" type="checkbox"/> Notification given to the sludge applier regarding total nitrogen content of the sludge. <input checked="" type="checkbox"/> Sufficient information required to comply with OAC 3745-40. <input checked="" type="checkbox"/> Sewage sludge site authorization packet submitted to Ohio EPA regarding the location of land application sites, appropriate NPDES permit numbers.

Yes No N/A	
	<p>7. Is a vector attraction reduction method being met (indicate method being performed)?</p> <p><input type="checkbox"/> 38% Volatile Solids Reduction.</p> <p>VS Red. = (VS In - VS Out) / ((VS In) - (VS, In x VS, Out)) x 100%</p> <p><input type="checkbox"/> 40-day bench scale test. Volatile Solids reduced <17% (anaerobic digestion only)</p> <p><input type="checkbox"/> 30-day test bench scale . Volatile Solids reduced <15% (aerobic digestion only)</p> <p><input checked="" type="checkbox"/> Specific Oxygen Uptake Rate <1.5 mg/hr/gm Total Solids at 20°C (68°F).</p> <p><input type="checkbox"/> Aerobic process for >14 days at >40°C (104°F) with average sewage sludge temperatures at 45°C (113°F).</p> <p><input type="checkbox"/> pH >12 for 2 hours and pH >11.5 for 22 hours.</p> <p><input type="checkbox"/> Sewage sludge with no unstabilized solids contains >75% Total Solids prior to mixing with other materials.</p> <p><input type="checkbox"/> Sewage sludge with unstabilized solids contains >90% Total Solids prior to mixing with other materials.</p> <p><input type="checkbox"/> Subsurface injection.</p> <p><input type="checkbox"/> Soil incorporation within 6 hours for Class B or within 8 hours for EQ.</p>
Comments:	NO TEMPERATURE CORRECTION

Other Management Practices

N/A

	<p>1. The facility performs another sewage sludge treatment process (indicate which other management practice is being performed)</p> <p><input type="checkbox"/> Surface Disposal.</p> <p><input type="checkbox"/> Landfilling.</p> <p><input type="checkbox"/> PPG Lime Lakes.</p>
<p>Comments:</p>	

III. NPDES Permit Verification

<p><input checked="" type="radio"/> Yes No N/A</p>	<p>1. Are OAC 3745-40 sewage sludge frequency and monitoring parameters contained in the facility's current NPDES permit?</p>
	<p>2. Sewage sludge disposal practice(s):</p> <p>A. Land Application <input checked="" type="checkbox"/></p> <p> Bulk Sewage Sludge <input type="checkbox"/></p> <p> Bulk Material Derived from <input type="checkbox"/></p> <p> Sewage Sludge Sold or Given <input type="checkbox"/></p> <p> Away in Bag or Other Container</p> <p>B. Surface Disposal <input type="checkbox"/></p> <p>C. Sewage Sludge Incineration <input type="checkbox"/></p> <p>D. Onsite or Offsite Disposal <input type="checkbox"/></p> <p>E. Other:</p>
<p><input checked="" type="radio"/> Yes No N/A</p>	<p>3. Is the sewage sludge disposal practice authorized by current NPDES permit?</p>
<p><input checked="" type="radio"/> Yes No N/A</p>	<p>4. If the authorized sewage sludge disposal practice changes, will notification be given to Ohio EPA prior to the change?</p>
<p><input checked="" type="radio"/> Yes No N/A</p>	<p>5. The facility is utilizing sewage sludge land application sites that have been previously authorized by Ohio EPA.</p>
<p>Comments:</p>	

Monitoring and Reporting

<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	1. Is facility self-monitoring occurring at the frequencies specified for the parameters located in the facility's NPDES permit or OAC 3745-40?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	2. Is the facility reporting parameters using Ohio EPA form 4500?
Yes <input checked="" type="radio"/> No <input type="radio"/> N/A	3. Is facility self-monitoring data available for all regulated pollutants for the previous five years?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	4. Do monthly operating reports show pollutant concentrations below ceiling concentrations shown in OAC 3745-40-05(F)(1)?
Yes <input checked="" type="radio"/> No <input type="radio"/> N/A	5. Do monthly operating reports show pollutant concentrations below monthly average concentrations shown in OAC 3745-40-05(F)(3)?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	6. Are general requirements and management practices applied for sewage sludge not meeting monthly average concentrations shown in OAC 3745-40-05(F)(3)?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	7. Are sewage sludge records adequate to assess compliance with annual and/or cumulative pollutant loading rates?
Yes <input checked="" type="radio"/> No <input type="radio"/> N/A	8. Are pathogen and vector attraction reduction method descriptions and certification statements available for the previous five years?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	9. Are records available for all sewage sludge use or disposal practices available for the previous five years?
Yes <input type="radio"/> No <input type="radio"/> N/A	10. Have the facility's sewage sludge sites been tested for pH and Phosphorus within two years of land application?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	11. Are accurate records of sewage sludge volume or mass maintained for the previous five years?
Yes <input checked="" type="radio"/> No <input type="radio"/> N/A	12. Are monitoring and analysis being performed more frequently than required by the facility's NPDES permit? If so, are the results being reported to Ohio EPA?
Yes <input checked="" type="radio"/> No <input type="radio"/> N/A	13. Do sewage sludge treatment unit operation records verify compliance with pathogen reduction and vector attraction reduction requirements, when appropriate?
<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	14. Are sewage sludge samples taken at the locations specified in the facility's NPDES permit?

EWICH?

<input checked="" type="radio"/> Yes	No	N/A	15. Are sewage sludge sample locations and methods appropriate for obtaining representative samples?
<input checked="" type="radio"/> Yes	No	N/A	16. Sample collection procedures:
Yes	No	N/A	A. Adequate sample volumes obtained?
Yes	No	N/A	B. Proper preservation techniques utilized?
Yes	No	N/A	C. Containers conform to appropriate analytical methods specified in OAC 3745-40?
Yes	No	N/A	D. Samples analyzed within the appropriate time frames specified in OAC 3745-40?
<input checked="" type="radio"/> Yes	No	N/A	17. Are analytic results reported on a dry weight basis (mg/kg)?
<input checked="" type="radio"/> Yes	No	N/A	18. Are samples refrigerated subsequent to compositing?
<input checked="" type="radio"/> Yes	No	N/A	19. Are chain-of-custody procedures employed?
<input checked="" type="radio"/> Yes	No	N/A	20. Are the analytic methods used approved in OAC 3745-40?
Comments:			

- CONTINGENCY
- PH + P MONITORING RESULTS
- PATH. + VAR SDPS + CORCT. STATEMENTS
- ADD TEMP. CORRECTION FOR SOUR

I. SELF-MONITORING PROGRAM

Part 1 - Flow Measurement	Yes	No	N/A	N/E
a. Primary flow measuring device properly operated & maintained. Type of device: ___ ultrasonic & parshall flume calculated from influent ___ weir Other <u>X</u> ultrasonic & weir Specify: _____	X			
b. Calibration frequency adequate (date of last calibration March, 2007)		*X		
c. Secondary instruments (totalizers, recorders etc.) properly operated and maintained	X			
d. Flow measurement equipment adequate to handle expected ranges of flows	X			
e. Actual flow discharged is measured	X			
f. Flow measuring equipment inspection frequency: X Daily ___ Weekly ___ Monthly ___ Other				

Comments: b. – flow meter calibration must occur at least annually.

Part 2 - Sampling	Yes	No	N/A	N/E
a. Sampling location(s) are as specified by permit	X			
b. Parameters and sampling frequency agree with permit	X			
c. Permittee uses required sampling method	*X			
d. Sample collection procedures are adequate	X			
i. Samples refrigerated during compositing	X			
ii. Proper preservation techniques used	X			
iii. Containers and sample holding times prior to analyses conform with 40 CFR 136.3	X			
e. Monitoring records (e.g., flow, pH, D.O., etc.) maintained for a minimum of three years including all original strip chart recordings (e.g., continuous monitoring instrumentation, calibration, and maintenance records)	X			
f. Adequate records maintained of sampling date, time, exact location, etc.	X			

Comments: c. – effluent sampler collects flow proportionate composite samples. The influent sampler collects composite samples but is not flow proportional. Part II, Item H in the wastewater discharge permit indicates that composite samples collected must be proportionate in volume. It is not necessary that the influent sampler be flow proportionate.

Part 3, Laboratory - General	Yes	No	N/A	N/E
a. EPA approved analytical testing procedures used (40 CFR 136.3)	X			
b. If alternate analytical procedures are used, proper approval has been obtained			X	
c. Analyses being performed more frequently than required by permit		X		
d. If (c) is yes, are results reported in permittee's self-monitoring report			X	
e. Commercial laboratory used				
1. Parameters analyzed by commercial lab: oil&grease, nitrate/nitrite, metals, fecal coliform, mercury, phosphorus, hardness, TKN, ammonia				
2. Lab name: MASI	X			





FILE COPY

State of Ohio Environmental Protection Agency

STREET ADDRESS: **Central District Office** MAILING ADDRESS:

Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 728-3778 FAX: (614) 728-3898
www.epa.state.oh.us

P.O. Box 1049
Columbus, OH 43216-1049

May 6, 2009

The Honorable Terry Ashcraft
Mayor
Village of Kirkersville
P.O. Box 211
135 North 4th Street
Kirkersville, OH 43033

Dear Mayor Ashcraft:

Attached is a report for a Reconnaissance Inspection that Suzanne Matz and I performed April 6, 2009 at the wastewater treatment plant (WWTP) serving the Village of Kirkersville. We met with Eric Britenstine who was recently hired by the village as the Operator in Responsible Charge of this WWTP.

As the inspection progressed we agreed with Mr. Britenstine that work was necessary in the WWTP to prevent possible wastewater discharge permit violations from occurring. Several pumps needed repair and sludge needed to be removed from several plant components. Mr. Britenstine was interacting with a private contractor for sludge removal and disposal in an approved manner.

Even though the WWTP is in need of attention the village is fortunate in that it has a plant that generally remains in fairly good condition. The village should continue setting aside monies necessary for maintenance and proper operation of its plant and sanitary sewer collection system.

During this inspection a question arose regarding who has responsibility for the Kellers Road wastewater pump station serving the Flying J Travel Center and Phantom Fireworks located south of Kirkersville. Please advise me in writing regarding a contact person responsible for oversight of this pump station.

If you have questions regarding this report I can be reached by telephone at 614-728-3850 or by e-mail at jan.rice@epa.state.oh.us.

Sincerely,

Jan A. Rice
Environmental Specialist
Field Operations Unit
Division of Surface Water
Ohio EPA/Central District Office

c: Eric Britenstine

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

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No. 4PB00104*CD	NPDES No. OH0114049	Date 4/6/09	Inspection Type R	Inspector S	Facility Type 1
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B. FACILITY DATA

Name and Location of Facility Inspected Village of Kirkersville Wastewater Treatment Plant (WWTP) North side of US Rt. 40 approx. one half mile east of Outville Road	Entry Time 9:30 A.M.	Permit Effective Date 7/1/07
	Exit Time 10:20 A.M.	Permit Expiration Date 6/30/12

Name(s) and Title(s) of On-Site Representative(s) Eric Britenstine, Operator in Responsible Charge	Phone Number(s) (c) 614-207-9030
Name, Address and Title of Responsible Official Terry Ashcraft, Mayor, P.O. Box 211, 135 North 4 th Street, Kirkersville, Ohio 43033	Phone Number 740-927-9052

C. AREAS EVALUATED DURING INSPECTION (S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)

- S Permit
- N/S Records/Reports
- N/U Operations & Maintenance – flow equalization tank and fixed media clarifier mud well pumps need repair.
- M Facility Site Review – repair of several pumps is necessary along with solids removal from slow sand filters.
- N Collection System
- N Flow Measurement
- N Laboratory
- S/N Effluent/Receiving Waters
- S/M Sludge Storage/Disposal – sand/solids removed from the effluent sand filter needs proper disposal.
- N Pretreatment
- N Compliance Schedules
- S Self-Monitoring Program

D. SUMMARY OF FINDINGS/COMMENTS: Design flow for this plant is 0.100 million gallons per day (MGD). Discharge monitoring report data indicates flows for 2008 averaged 0.06 MGD. The 2008 annual sludge report indicates that 4.75 dry tons of sludge was removed from the WWTP. Inspection of the flow equalization tank showed that the tank was operating in a flow-through rather flow-equalization mode since pumps in the tank were out of service. The flow equalization tank needs to be returned to service as soon as possible to limit the detrimental impact that hydraulic surges may have on effluent quality. Inspection of the effluent sand filter showed ponded wastewater in a filter cell. That filter, and others, needs cleaning to prevent wastewater ponding. Sand/sludge removed during effluent sand filter cleaning must be properly disposed of, not spread alongside the filter. The sludge drying beds were not in use at the time of this inspection. At the time of this inspection Mr. Britenstine indicated that he was working with Carl Wheeler for removal of liquid sludge from this plant.

Jan Rice
Jan Rice, Inspector, Ohio EPA, Central District Office

5/6/09
Date

Erin Sherer
Erin Sherer, Reviewer, Ohio EPA, Central District Office

5/6/09
Date

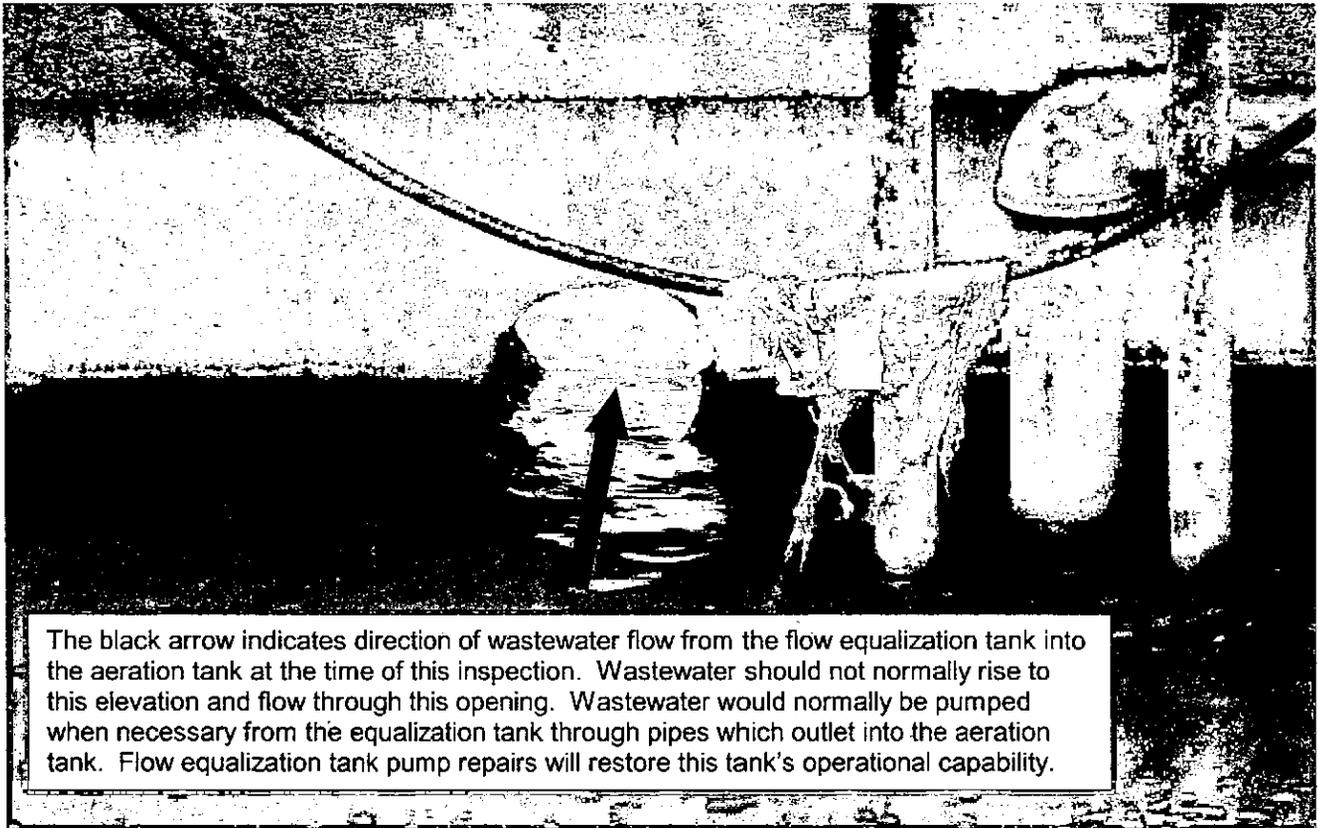


Figure 1.

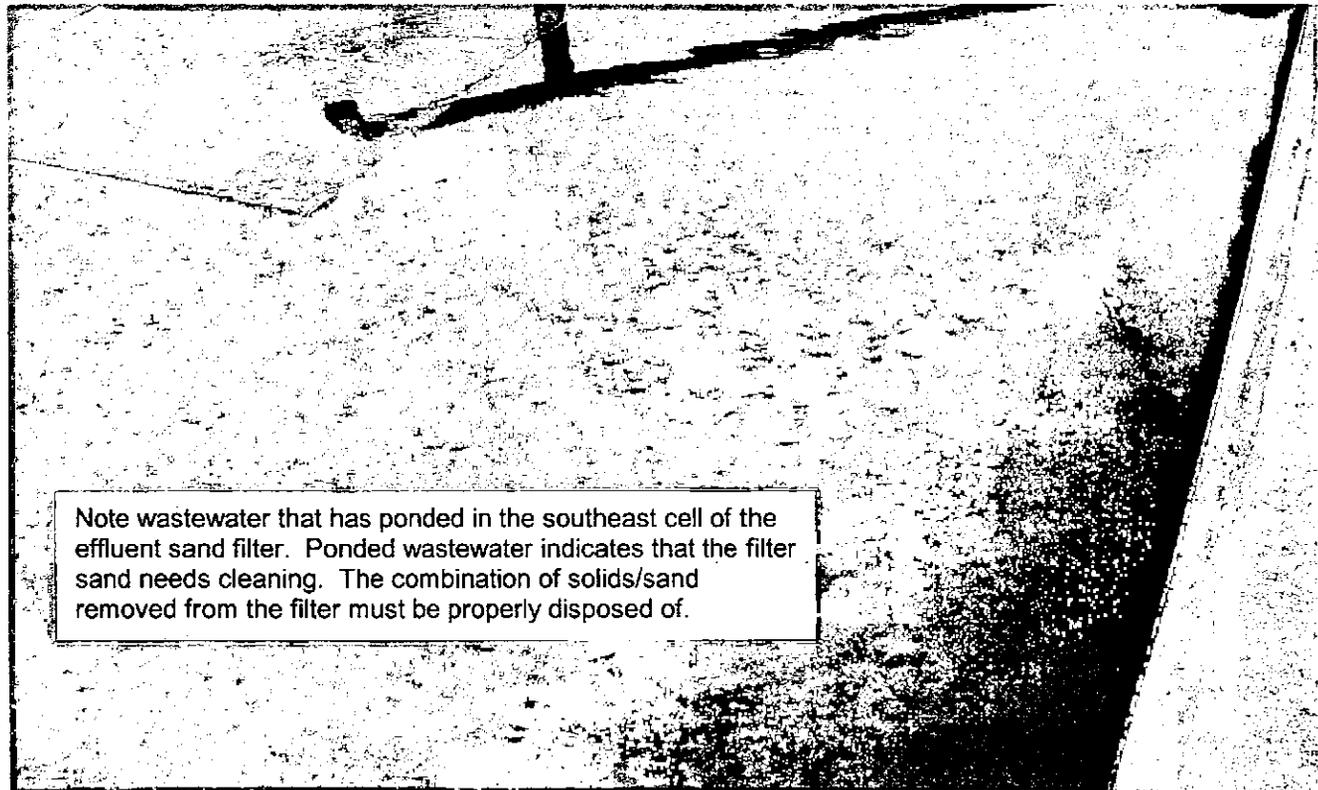
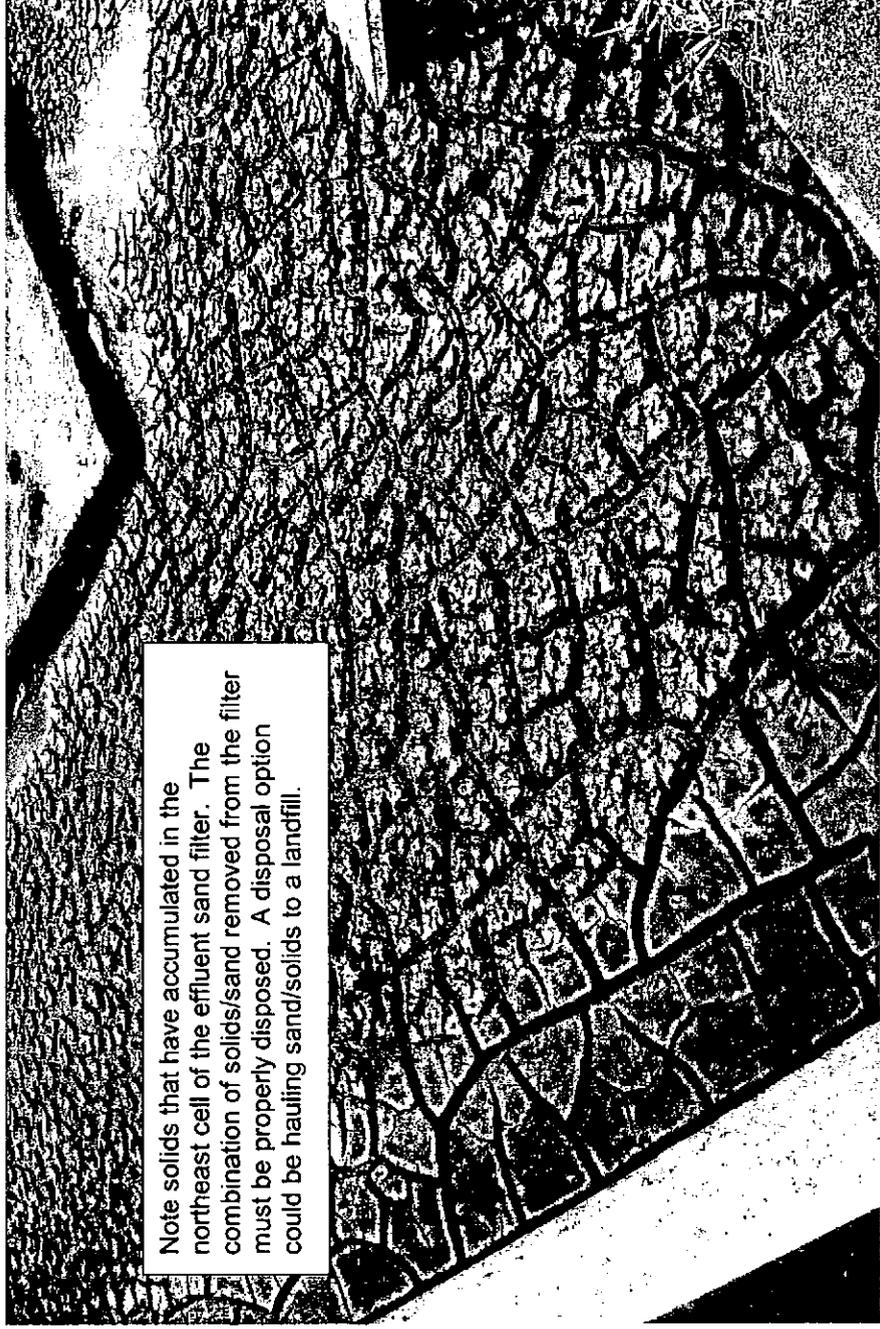
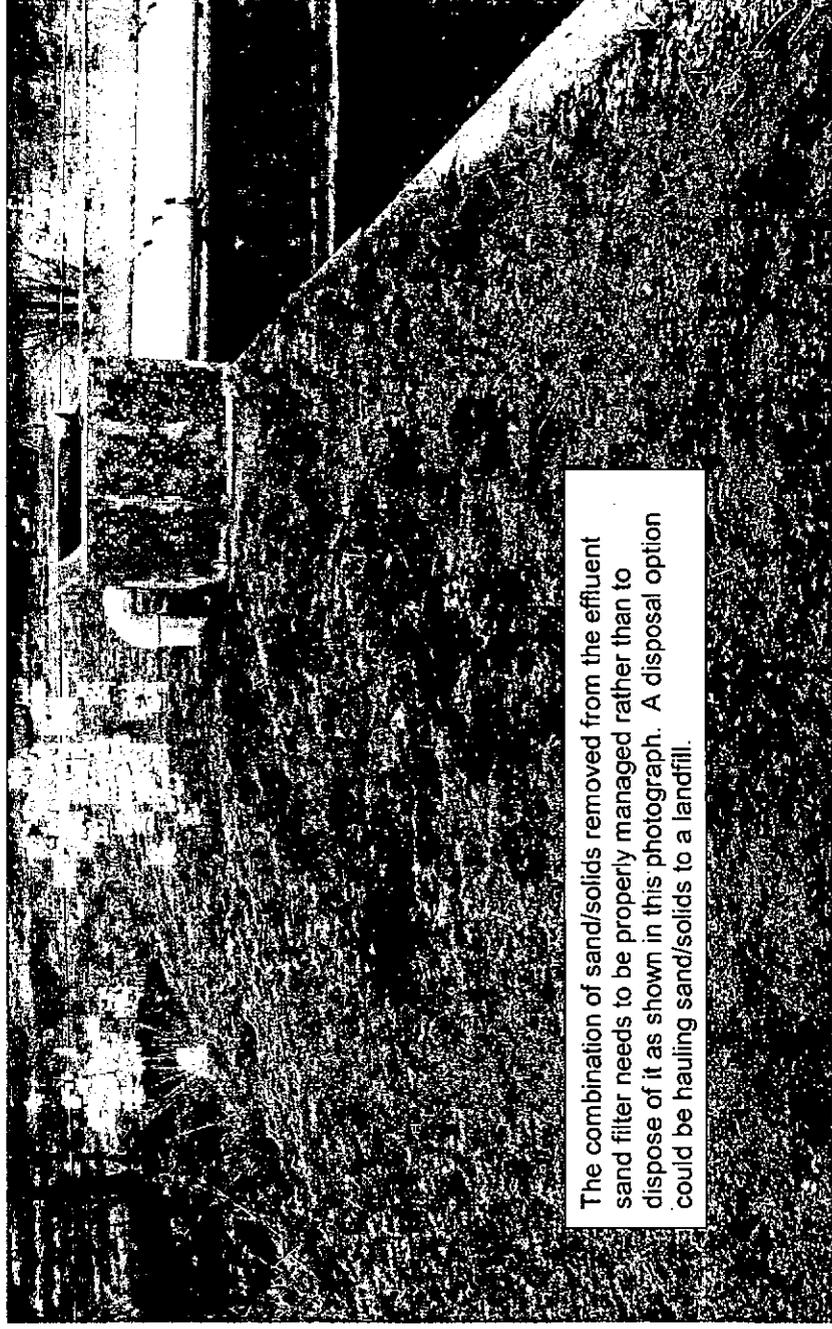


Figure 2.



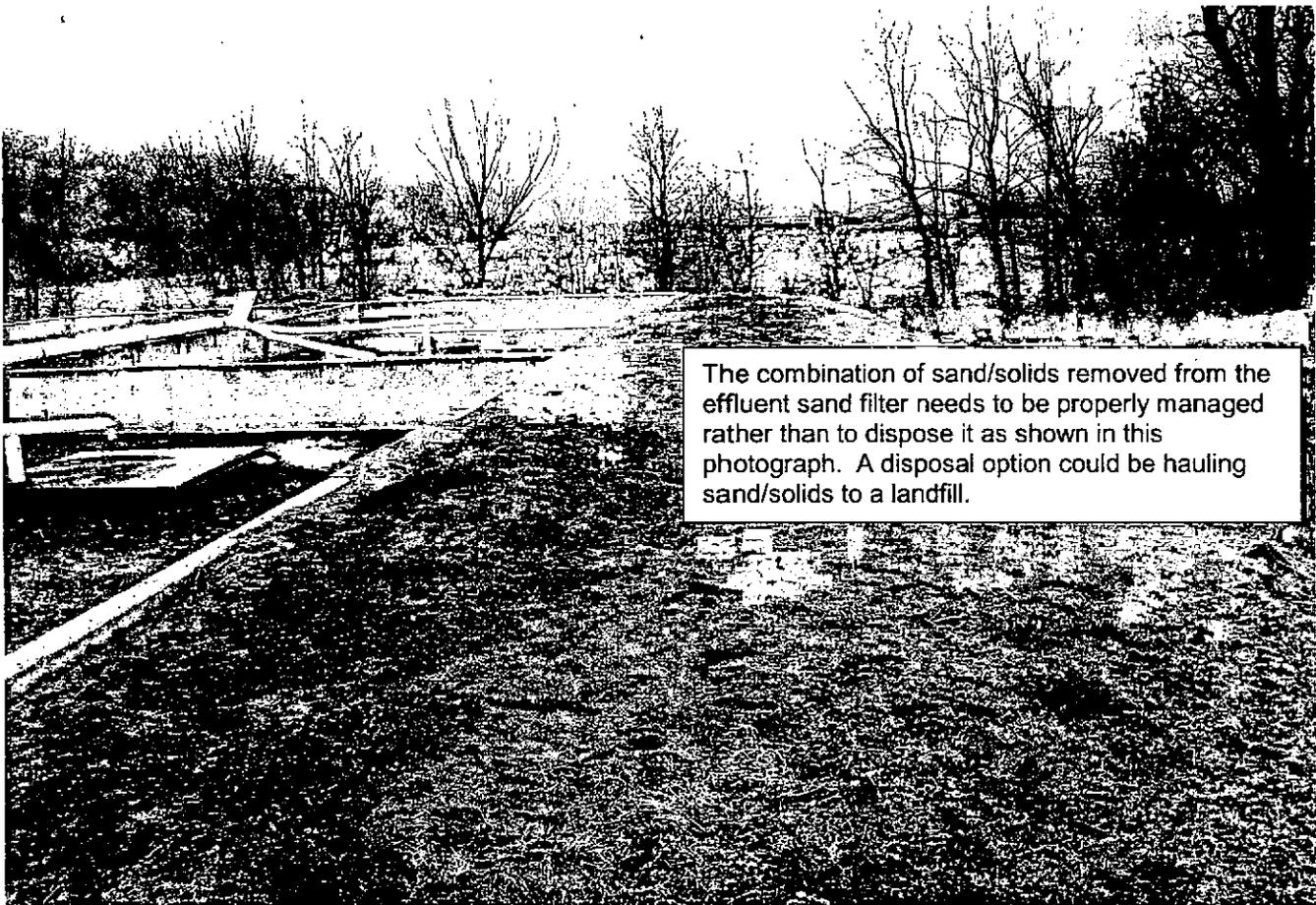
Note solids that have accumulated in the northeast cell of the effluent sand filter. The combination of solids/sand removed from the filter must be properly disposed. A disposal option could be hauling sand/solids to a landfill.

Figure 3.



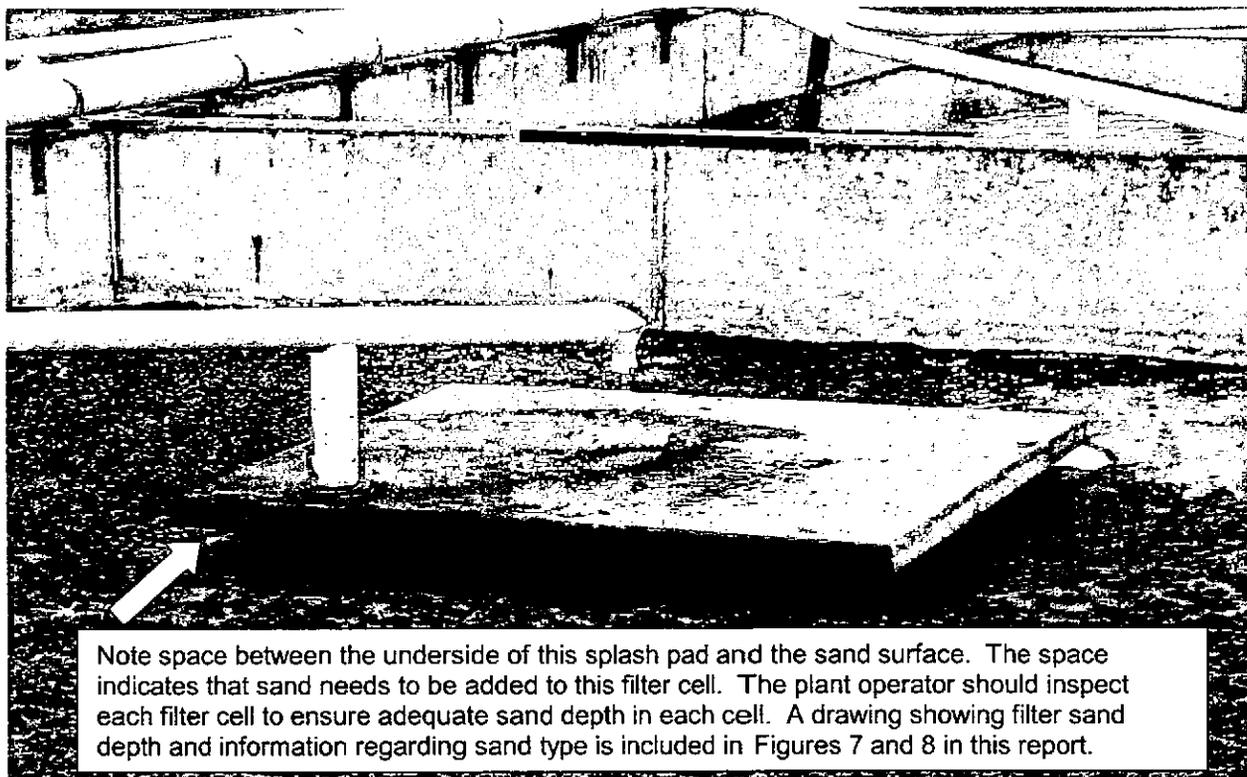
The combination of sand/solids removed from the effluent sand filter needs to be properly managed rather than to dispose of it as shown in this photograph. A disposal option could be hauling sand/solids to a landfill.

Figure 4.



The combination of sand/solids removed from the effluent sand filter needs to be properly managed rather than to dispose it as shown in this photograph. A disposal option could be hauling sand/solids to a landfill.

Figure 5.



Note space between the underside of this splash pad and the sand surface. The space indicates that sand needs to be added to this filter cell. The plant operator should inspect each filter cell to ensure adequate sand depth in each cell. A drawing showing filter sand depth and information regarding sand type is included in Figures 7 and 8 in this report.

Figure 6.

Sand Filter Cross Section showing gravel/sand layers thickness

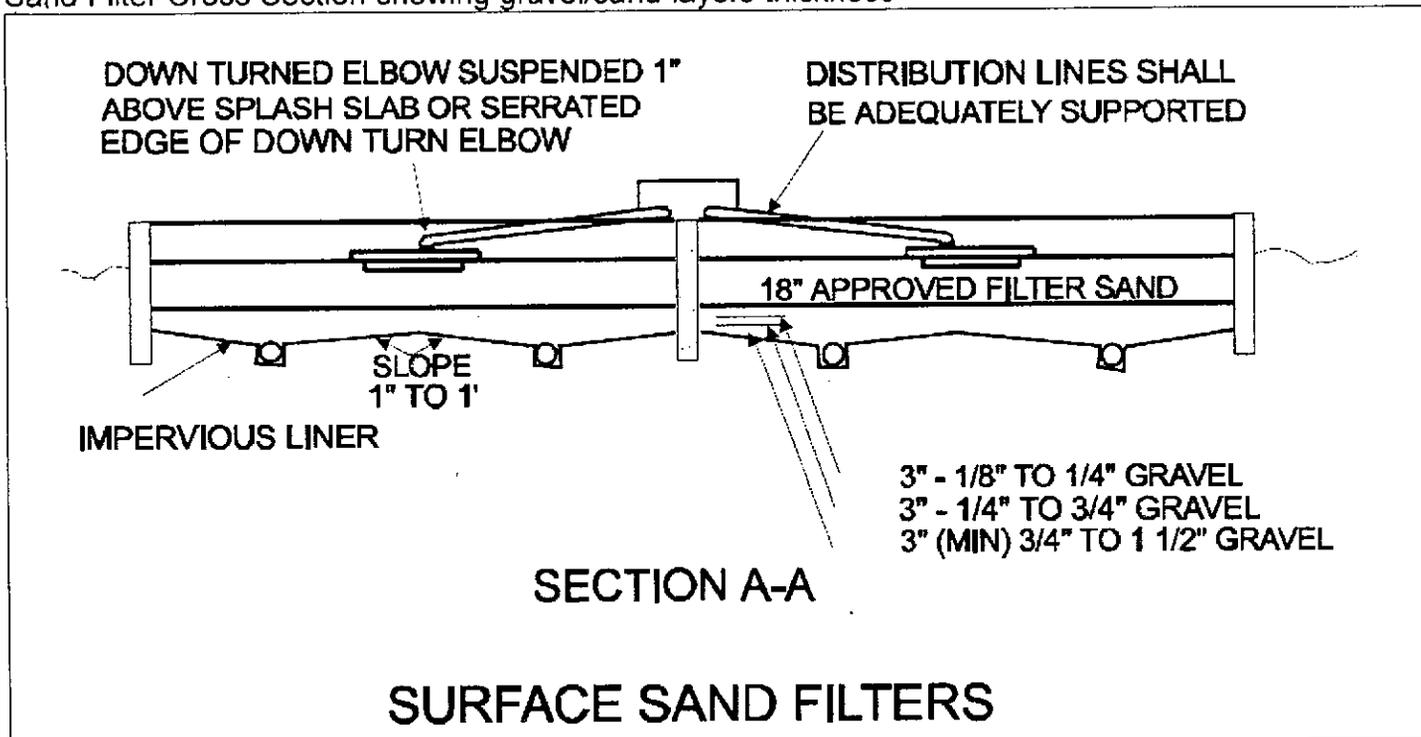


Figure 7.

Ohio Administrative Code Filter Sand Requirements

3745-42-09 Requirements for filter sand.

(A) Applicability.

- (1) No person shall install or replace sand-filter sand without first providing the director with written certification that the standards identified in this rule are met. The certification statement shall be obtained from the sand manufacturer or any professional engineer and shall be supported by laboratory analysis.
- (2) This rule shall apply to owners and operators of the following treatment works:
 - (a) Conventional subsurface sand filters:
 - (b) Conventional surface sand filters:
 - (c) Recirculating sand filters: and
 - (d) Other similar sand filter technologies.

(B) Owners and operators of facilities described in paragraph (A)(2) of this rule shall use only sand that has:

(1) Undergone a sieve analysis and met the criteria of one of the following standards:

(a) ASTM C136. "Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates;" or

(b) ASTM D451. "Standard Method for Sieve Analysis of Granular Mineral Surfacing For Asphalt Roofing Products;"

(2) An effective size and uniformity coefficient, in conformance with table B-1 of this rule:

Table B-1

Sand filter technology	Effective size (millimeters)	Uniformity coefficient
Conventional subsurface sand filters *	0.4 to 1.0	less than 3.0
Conventional surface sand filter *	0.4 to 1.0	less than 3.0
Recirculating Sand Filter *	1.2 to 2.5	less than 2.0

*Sand shall be washed and free of clay and silt to minimize the amount of fines in the sand.

(3) Been quantified using ASTM C117. "Standard Test Method for Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing." The percentage of the material passing the seventy-five-micrometer sieve shall not exceed 1.5 per cent of the total sample weight.

(4) Been analyzed using ASTM D4318. "Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils." and classified as nonplastic.

Effective: 12/1/2005

R.C. 119.032 review date: 10/17/2008

Promulgated Under: R.C. 119.03

Statutory Authority: R.C. 6111.03

Rule Amplifies: R.C. 6111.03, 6111.44

Prior Effective Dates: None

Figure 8.