



Environmental
Protection Agency

John R. Kasich, Governor

Mary Taylor, Lt. Governor

Scott J. Nally, Director

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October 31, 2011

RE: COUNTRY SQUIRE MHP
OEPA PERMIT # 3PV00130
COMPLIANCE EVALUATION INSPECTION
S.R. 62 AND KNOX SCHOOL ROAD
KNOX TOWNSHIP
COLUMBIANA COUNTY

NOTICE OF VIOLATION

Mr. Bob Greenwald
Country Squire MHP
32125 Solon Rd.
Solon, OH 44095

Dear Mr. Greenwald:

On October 25, 2011, this writer conducted a compliance evaluation inspection of the Country Squire MHP Wastewater Treatment Plant. This correspondence is being provided as an update of the park's current status since you are coordinating with the bankruptcy courts. Furthermore, this letter will serve as notice that this facility is being referred to our legal section for an enforcement action to resolve all non-compliance issues. The wastewater treatment plant is currently producing a marginal effluent and there are many noncompliance issues with the Ohio Revised Code. The Country Squire MHP is considered to be in significant noncompliance.

The following is a summary of our observations:

- 1) The trash trap was not inspected.
- 2) The aeration tank had a weak brown color. Some of the diffusers appear to need cleaned or replaced. The effluent had solids going over the weir, and the sludge blanket appeared high. The sludge return appeared to be operating at a high rate which will inhibit good settling of the floc. A settle ability test should be done regularly to adjust the return rates of the mixed liquor. This facility did not have any filters or chlorination/dechlorination facilities.
- 3) Our records indicate the facility was originally approved on June 29, 1967, for a maximum of 58-trailer spaces at a design flow of 150-gpd per mobile home. The current licenses issued by the Columbiana Health Department states that 66-park lots are occupied. At our current design flow of 300-gpd per mobile

- home the expected design flow would be 19,800-gpd. The existing facilities (a 10,000-gpd Topco WWTP) do not meet our current design criteria.
- 4) The treatment plant discharged to the creek on the south side of the property according to the original approval. The final effluent discharges to a small unnamed tributary of the Mahoning River. The creek had signs of solids from the clarifier in the wastewater treatment plant. There was also a great deal of algae from the nutrients being discharged from the wastewater treatment plant.
 - 5) The National Pollutant Discharge Elimination System (NPDES) permit for this treatment plant was effective on August 1, 2009.
 - 6) The monthly monitoring reports for this facility were reviewed for the period of January 2010, through September 2011. The violations are attached to this letter.

Non Compliance Issues

The mobile home park is considered to be in significant noncompliance for the following violations of its current NPDES permit:

- 1) Part I, A, Final Outfall: The facility is violating the final effluent limits at the final outfall of the wastewater treatment plant (WWTP). The violations are attached.
- 2) Part I, C, Schedule of Compliance: Detail Plans for improvements to comply with the final effluent limits were to have been submitted by February 1, 2010. To date, this office has not received a permit-to-install (PTI) for the necessary improvements. Construction of the new facilities was to have been completed by February 1, 2011. The improvements have not been installed.
- 3) Part I, F, Schedule of Compliance: The WWTP was to achieve compliance with final effluent limits by March 1, 2011. To date, the necessary improvements have not been installed and the facility is not in compliance with its final table effluent limits.
- 4) Parts II, J., No later than January 31, of each calendar year, Country Squire MHP must submit an annual sludge report. This office has not received the sludge report.

- 5) Part II, K, Failure to erect a stream marker on the stream bank at the regulated outfall.

It is our experience that the existing facilities will not meet the above discharge criteria. The following treatment structures must be added to the existing WWTP in order to discharge adequately treated wastewater and to upgrade the treatment system to current standards:

- a) Tertiary sand filters to filter any solids prior to discharge must be added to the system. The sand filters will enable the system to meet the solids limit that is established in the NPDES permit. A dosing chamber with dual alternating submersible pumps must be installed before the filters to properly dose them.
- b) A chlorination/dechlorination system to disinfect the wastewater prior to discharge must be added to the treatment system.
- c) A second, redundant air blower must be added to the treatment system. The existing blower and the new blower must be periodically alternated to ensure their operation.
- d) A flow meter must be added in order to report actual flow from the treatment system and the flow meter must be properly sized. As an alternative, dosing pumps used to dose the sand filters may be fitted with hour meters to measure flow through the treatment system.
- e) A sludge holding tank will be necessary to store sludge removed from the clarifier until it can be hauled away for proper disposal. It is necessary to maintain a proper solids balance within the aeration tank and clarifier for proper treatment of the wastewater.
- f) A flow equalization tank will be necessary to minimize peak flows at the WWTP due to leaking sewers and storm events. Flow equalization will help reduce peak flows that can cause plant upsets.
- g) An engineering evaluation of the existing trash trap and extended aeration WWTP will be necessary to insure they are adequate to handle the park's existing capacity for mobile homes. The plant must be evaluated for compliance with "Sewage: Collection, Treatment & Disposal", the Agency design document for small wastewater treatment systems. If these units are

COUNTRY SQUIRE MHP
OEPA PERMIT # 3PV00130
COLUMBIANA COUNTY
OCTOBER 31, 2011
PAGE 4 OF 6

not adequate for the Agency's current design standards, then they must be replaced.

Schedule

Any future owner will need to request a permit modification to revise the schedule of compliance to upgrade the wastewater treatment facilities.

Should you have any comments or questions, feel free to contact me at (330) 963-1193.

Respectfully,



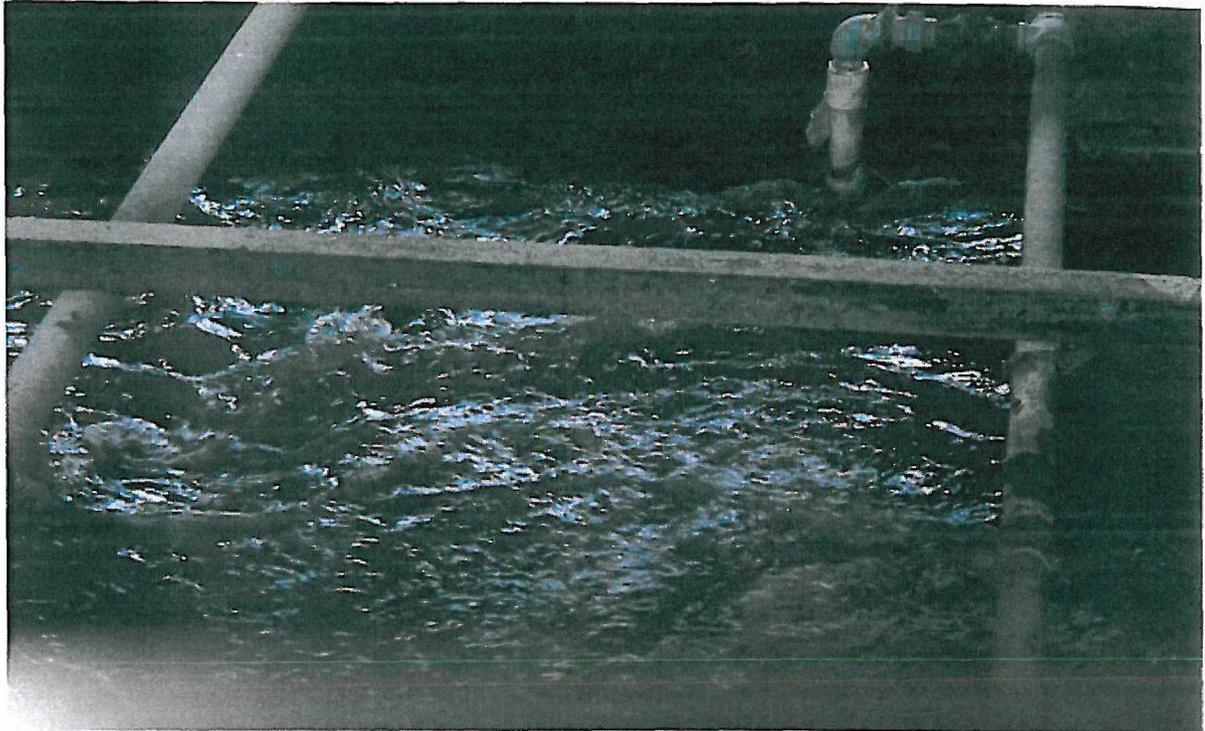
Joseph E. Trocchio, P.E.
Environmental Engineer
Division of Surface Water

JET/cs

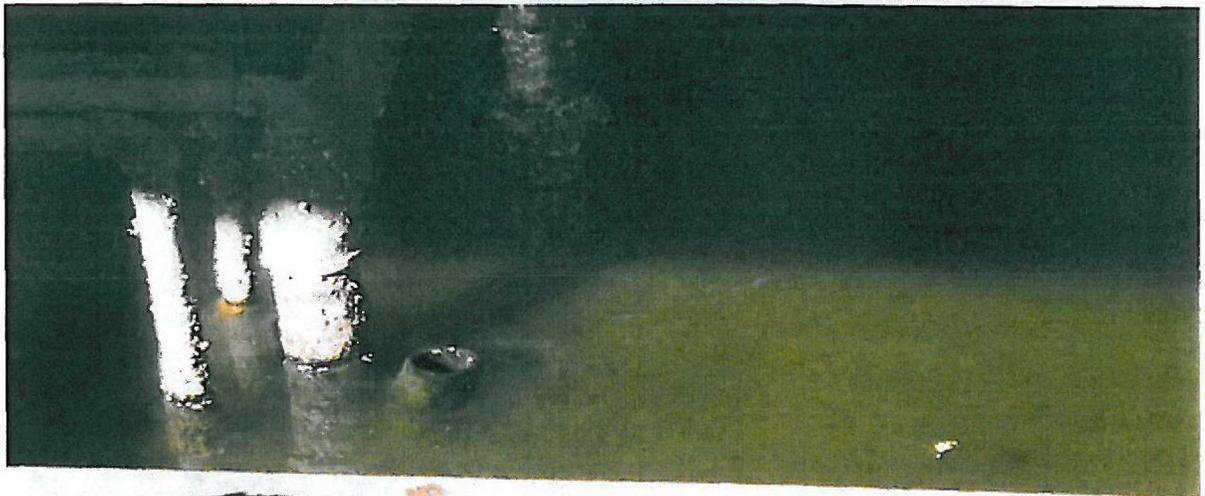
cc: Lori J. Barnes, R.S., Columbiana County Health Department

File: Semipublic/Columbiana County/Knox Township/Country Squire MHP

JANUARY 27, 2010, INSPECTION PHOTOS



SOME OF THE DIFFUSERS NEED CLEANED OR REPLACED.



SLUDGE BLANKET IS NEAR THE TOP OF THE CLAIRIFIER



THE STREAM SHOWS SIGNS OF SOLIDS DEPOSITION.



ALGAE IN THE STREAM ARE A SIGN OF NUTRIENT ENRICHMENT.

COUNTRY SQUIRE WWTP EFFLUENT VIOLATIONS: JAN 2010 - SEPT 2011

Permit No	Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PV00130*AD	April 2010	Total Suspended Solids	7D Conc	45	468.	4/15/2010
3PV00130*AD	April 2010	CBOD 5 day	30D Conc	30	236.	4/1/2010
3PV00130*AD	April 2010	CBOD 5 day	7D Conc	45	236.	4/15/2010
3PV00130*AD	April 2010	pH	1D Conc	6.5	5.	4/5/2010
3PV00130*AD	February 2010	Total Suspended Solids	30D Conc	30	48.	2/1/2010
3PV00130*AD	February 2010	Total Suspended Solids	7D Conc	45	48.	2/22/2010
3PV00130*AD	February 2010	CBOD 5 day	30D Conc	30	108.	2/1/2010
3PV00130*AD	February 2010	CBOD 5 day	7D Conc	45	108.	2/22/2010
3PV00130*AD	July 2010	Total Suspended Solids	30D Conc	30	48.	7/1/2010
3PV00130*AD	July 2010	Total Suspended Solids	7D Conc	45	48.	7/15/2010
3PV00130*AD	March 2010	Total Suspended Solids	30D Conc	30	86.	3/1/2010
3PV00130*AD	March 2010	Total Suspended Solids	7D Conc	45	86.	3/15/2010
3PV00130*AD	March 2010	CBOD 5 day	30D Conc	30	92.2	3/1/2010
3PV00130*AD	March 2010	CBOD 5 day	7D Conc	45	92.2	3/15/2010
3PV00130*AD	January 2010	Total Suspended Solids	7D Conc	45	67.5	1/22/2010
3PV00130*AD	January 2010	CBOD 5 day	7D Conc	45	52.2	1/15/2010
3PV00130*AD	September 2011	Total Suspended Solids	30D Conc	12	14.	9/1/2011
3PV00130*AD	September 2011	Chlorine, Total Residu	1D Conc	0.019	.16	9/15/2011
3PV00130*AD	September 2011	Chlorine, Total Residu	1D Conc	0.019	.08	9/28/2011
3PV00130*AD	May 2011	Total Suspended Solids	30D Conc	12	116.	5/1/2011
3PV00130*AD	May 2011	Total Suspended Solids	7D Conc	18	116.	5/8/2011
3PV00130*AD	May 2011	Total Suspended Solids	30D Qty	0.9	4.3906	5/1/2011
3PV00130*AD	May 2011	Total Suspended Solids	7D Qty	1.35	4.3906	5/8/2011
3PV00130*AD	May 2011	Nitrogen, Ammonia (NH3	30D Conc	1	26.2	5/1/2011
3PV00130*AD	May 2011	Nitrogen, Ammonia (NH3	7D Conc	1.5	26.2	5/8/2011
3PV00130*AD	May 2011	Nitrogen, Ammonia (NH3	7D Qty	0.11	.99167	5/8/2011
3PV00130*AD	May 2011	CBOD 5 day	30D Conc	10	45.5	5/1/2011
3PV00130*AD	May 2011	CBOD 5 day	7D Conc	15	45.5	5/8/2011
3PV00130*AD	May 2011	CBOD 5 day	30D Qty	0.8	1.72218	5/1/2011
3PV00130*AD	May 2011	CBOD 5 day	7D Qty	1.13	1.72218	5/8/2011
3PV00130*AD	August 2011	Total Suspended Solids	30D Conc	12	14.5	8/1/2011
3PV00130*AD	August 2011	Nitrogen, Ammonia (NH3	30D Conc	1	12.5	8/1/2011
3PV00130*AD	August 2011	Nitrogen, Ammonia (NH3	7D Conc	1.5	12.5	8/15/2011
3PV00130*AD	August 2011	Nitrogen, Ammonia (NH3	30D Qty	0.08	.47313	8/1/2011
3PV00130*AD	August 2011	Chlorine, Total Residu	1D Conc	0.019	.13	8/16/2011
3PV00130*AD	April 2011	Total Suspended Solids	30D Conc	12	32.5	4/1/2011
3PV00130*AD	April 2011	Total Suspended Solids	7D Conc	18	32.5	4/8/2011
3PV00130*AD	April 2011	Nitrogen, Ammonia (NH3	30D Conc	3	3.65	4/1/2011
3PV00130*AD	April 2011	CBOD 5 day	30D Qty	0.8	.9841	4/1/2011
3PV00130*AD	June 2011	Total Suspended Solids	30D Conc	12	39.	6/1/2011
3PV00130*AD	June 2011	Total Suspended Solids	7D Conc	18	39.	6/15/2011
3PV00130*AD	June 2011	Total Suspended Solids	30D Qty	0.9	1.47615	6/1/2011
3PV00130*AD	June 2011	Nitrogen, Ammonia (NH3	30D Conc	1	15.6	6/1/2011

COUNTRY SQUIRE WWTP EFFLUENT VIOLATIONS: JAN 2010 - SEPT 2011

Permit No	Reporting Period	Parameter	Limit Type	Limit	Reported Value	Violation Date
3PV00130*AD	June 2011	Nitrogen, Ammonia (NH3	30D Qty	0.08	.59046	6/1/2011
3PV00130*AD	June 2011	Nitrogen, Ammonia (NH3	7D Qty	0.11	.59046	6/15/2011
3PV00130*AD	June 2011	CBOD 5 day	30D Conc	10	25.9	6/1/2011
3PV00130*AD	June 2011	CBOD 5 day	7D Conc	15	25.9	6/15/2011
3PV00130*AD	June 2011	CBOD 5 day	30D Qty	0.8	.98032	6/1/2011
3PV00130*AD	June 2011	Chlorine, Total Residu	1D Conc	0.019	.09	6/15/2011
3PV00130*AD	June 2011	Dissolved Oxygen	1D Conc	6.0	5.15	6/15/2011
3PV00130*AD	July 2011	Total Suspended Solids	30D Conc	12	18.5	7/1/2011
3PV00130*AD	July 2011	Total Suspended Solids	7D Conc	18	18.5	7/15/2011
3PV00130*AD	July 2011	Nitrogen, Ammonia (NH3	30D Conc	1	2.07	7/1/2011
3PV00130*AD	July 2011	Nitrogen, Ammonia (NH3	7D Conc	1.5	2.07	7/8/2011
3PV00130*AD	July 2011	Chlorine, Total Residu	1D Conc	0.019	.15	7/14/2011
3PV00130*AD	July 2011	Dissolved Oxygen	1D Conc	6.0	5.03	7/14/2011
3PV00130*AD	March 2011	Total Suspended Solids	30D Conc	12	60.	3/1/2011
3PV00130*AD	March 2011	Total Suspended Solids	7D Conc	18	60.	3/15/2011
3PV00130*AD	March 2011	Total Suspended Solids	30D Qty	0.9	2.271	3/1/2011
3PV00130*AD	March 2011	Total Suspended Solids	7D Qty	1.35	2.271	3/15/2011
3PV00130*AD	March 2011	CBOD 5 day	30D Conc	10	14.3	3/1/2011
3PV00130*AD	January 2010	CBOD 5 day	30D Conc	30	52.2	1/1/2010
3PV00130*AD	April 2010	Total Suspended Solids	30D Conc	30	468.	4/1/2010
3PV00130*AD	November 2010	Total Suspended Solids	30D Conc	30	31.5	11/1/2010
3PV00130*AD	April 2011	Total Suspended Solids	30D Qty	0.9	1.23013	4/1/2011
3PV00130*AD	April 2011	CBOD 5 day	7D Conc	15	26.	4/8/2011
3PV00130*AD	June 2011	Total Suspended Solids	7D Qty	1.35	1.47615	6/15/2011
3PV00130*AD	June 2011	Nitrogen, Ammonia (NH3	7D Conc	1.5	15.6	6/15/2011
3PV00130*AD	August 2011	Nitrogen, Ammonia (NH3	7D Qty	0.11	.47313	8/15/2011
3PV00130*AD	September 2011	Chlorine, Total Residu	1D Conc	0.019	.13	9/14/2011
3PV00130*AD	September 2011	Dissolved Oxygen	1D Conc	6.0	1.86	9/16/2011
3PV00130*AD	January 2010	Total Suspended Solids	30D Conc	30	67.5	1/1/2010
3PV00130*AD	April 2011	CBOD 5 day	30D Conc	10	26.	4/1/2011
3PV00130*AD	May 2011	Nitrogen, Ammonia (NH3	30D Qty	0.08	.99167	5/1/2011
3PV00130*AD	May 2011	Chlorine, Total Residu	1D Conc	0.019	.1	5/12/2011
3PV00130*AD	May 2011	Dissolved Oxygen	1D Conc	6.0	5.3	5/12/2011
3PV00130*AD	June 2011	Fecal Coliform	30D Conc	1000	2000.	6/1/2011
3PV00130*AD	June 2011	Fecal Coliform	7D Conc	2000	2000.	6/15/2011
3PV00130*AD	June 2011	pH	1D Conc	6.5	5.15	6/15/2011
3PV00130*AD	August 2011	Dissolved Oxygen	1D Conc	6.0	1.22	8/16/2011