



John R. Kasich, Governor
 Mary Taylor, Lt. Governor
 Scott J. Nally, Director

February 4, 2013

Hanson Aggregates Davon, LLC
 Attn: Ms. Mary Woodley
 1136 Morgantown Road
 Russellville, Kentucky 42276

**RE: Hanson Aggregates Davon, LLC-Eagle Quarry / CEI
 NPDES Permit No. OH0122785 / OEPA PERMIT NO. 11J00049*AD**

Dear Ms. Woodley:

On January 24, 2013, I conducted an NPDES Compliance Evaluation Inspection at the Hanson Aggregates Davon, LLC – Eagle Crushed Stone (Hanson) facility located at 13526 Overstake Road, Eagle Township, Brown County, Ohio. Bob Roades, who is the plant manager, represented Hanson during the inspection process. The purpose of the inspection was to evaluate compliance with the terms and conditions of the NPDES Permit.

EFFLUENT LIMIT VIOLATIONS
 (Period of Review: January 2011 – December 2012)

7D = Weekly 30D = Monthly 1D = Daily
 Conc. = Concentration (mg/l) Qty.= Quantity (Kg/Day)

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value
September 2011	001	Total Suspended Solids	30D Conc	30	96.
September 2011	001	Total Suspended Solids	1D Conc	45	96.
November 2011	001	Total Suspended Solids	30D Conc	30	101.
November 2011	001	Total Suspended Solids	1D Conc	45	101.
December 2011	001	Total Suspended Solids	30D Conc	30	258.7
December 2011	001	Total Suspended Solids	1D Conc	45	258.7

*The violations above were attributed to solids build-up around the effluent setting pond pump. Hanson has since cleaned the sump area and they have not reported any violations since that time.

Flow Monitoring

Currently, effluent flow is monitored by recording the amount of pump hours at the settling pond effluent pump station and converting this number into gallons per day pumped. Hanson assumes that 85% percent of this flow is recycled and 15% is discharged at monitoring station 1IJ00049001. This calculation does not accurately reflect dry periods in the summer where there is no discharge from the final settling basin (100% recycle) or wet periods when more than 15% of the pump volume is discharged.

Ohio EPA believes this flow estimate can be refined to more accurately reflect the conditions at the site. Hanson should prepare a Standard Operating Procedure (SOP) for monitoring and reporting discharge flow. The SOP should include visual observations and also account for precipitation. If, during a representative period of time, facility staff does not visually observe a discharge from the final settling basin, no flow should be reported for the day and the eDMR should be coded appropriately.

An acceptable SOP for effluent flow monitoring and reporting shall be submitted to Ohio EPA district office, either hard copy or electronically, no later than February 28, 2013. A copy of the SOP shall be kept at the facility.

Laboratory Standard Operating Procedures

- During the inspection, neither Mr. Roades nor Mr. Persch could produce an SOP for the pH meter (Ms. Woodley did email a copy of the SOP on February 1, 2013, but there was missing information).
- It did not appear that regular calibrations were performed on the meter prior to testing.
- Mr. Roades could not locate pH buffer solution that had not expired (2005).
- There was no instruction manual for the pH meter.
- Hanson has not calibrated the thermometer, used for effluent temperature reporting, with an NIST traceable thermometer. This calibration should be performed annually.

The foundation of the NPDES permitting program is the reliability of data “self-reported” by wastewater dischargers under permit. Part III, 3, of Hanson’s NPDES permit requires *“All wastewater treatment works shall be operated in a manner consistent with the following: At all times, the permittee shall maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee necessary to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures...”* Part III, 5, goes on to say, *“Test procedures for the analysis of pollutants shall conform to regulation 40 CFR 136... The permittee shall periodically calibrate and perform maintenance procedures on all*

monitoring and analytical instrumentation at intervals to insure accuracy of measurements.”

The federal regulatory benchmark for all water and wastewater sampling/laboratory procedures is 40 CFR 136. This rule lists acceptable sampling and laboratory procedures published in “Standard Methods for the Examination of Water and Wastewater” (Standard Methods) among other resources such as the American Society for Testing and Materials (ASTM). Standard Methods is a comprehensive reference widely used throughout the industry and is cooperatively published by the American Water Works Association, Water Environment Federation and the American Public Health Association.

Standard Methods 1020A establishes that *“Quality assurance (QA) is the definitive program for laboratory operation that specifies the measure required to produce defensible data of known precision and accuracy”*. Without a QA program, the county is without defensible data showing compliance with the NPDES permit. Standard Methods goes on to require the inclusion of Standard Operating Procedures (SOP) for each analytical method within the QA manual. The SOP should include the following applicable categories:

- Title
- Scope and Application
- Summary
- Sample Handling and Preservation
- Interferences
- Apparatus and Materials
- Reagents
- Procedure
- Calculations
- Quality Control (calibration)
- Maintenance
- Corrective Action
- Reference (Parent Method)

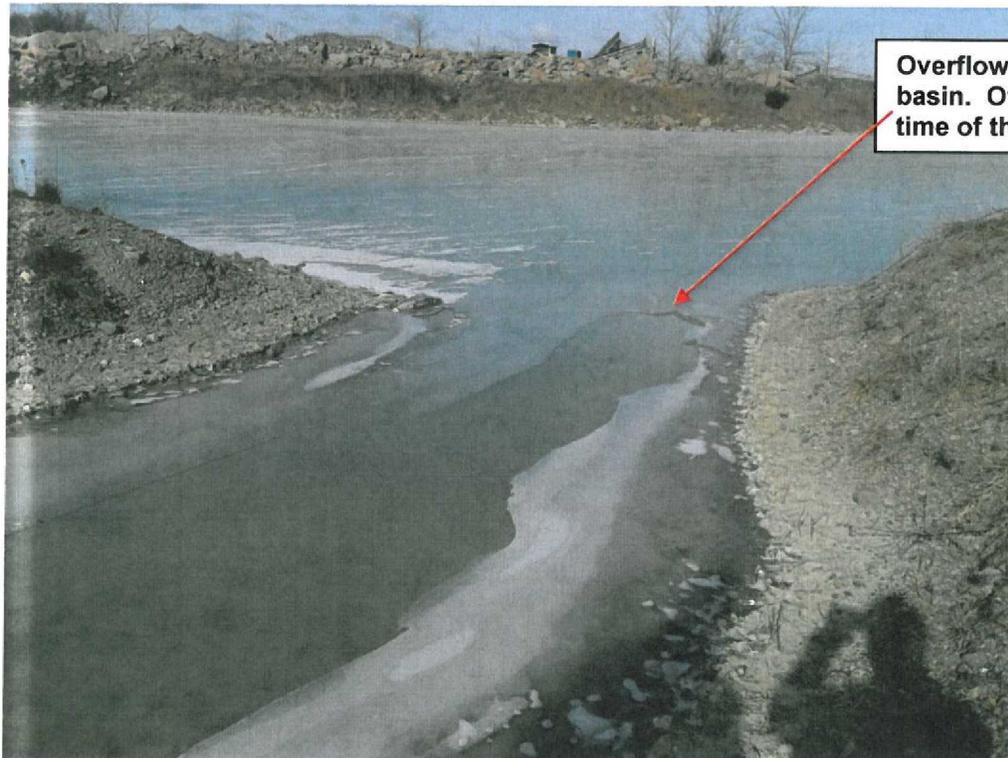
Hanson shall prepare acceptable SOPs for every sampling/testing procedure conducted onsite no later than March 28, 2013. Copies of the SOPs shall be kept on the facility grounds.

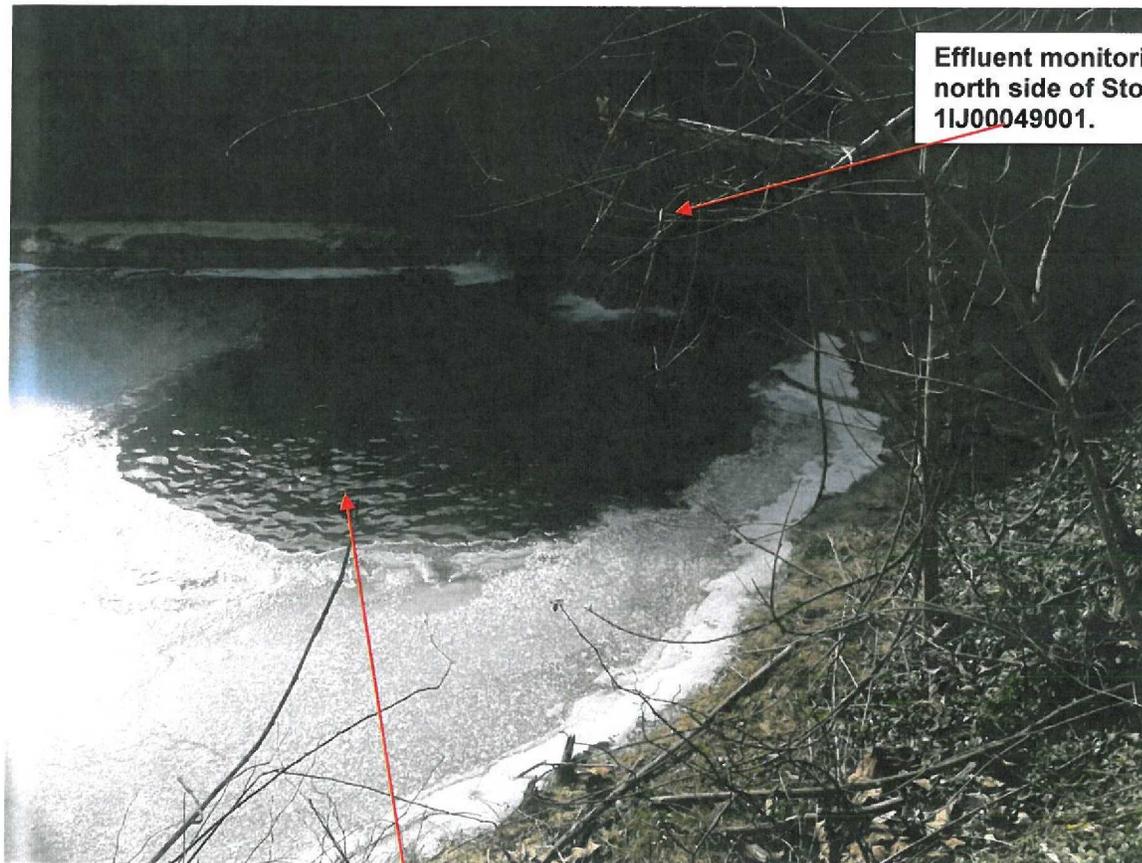
Items Observed During the Inspection

Settling Pond Effluent Pump



Overflow from final settling basin. Overflowing at the time of the inspection.





Effluent monitoring station on the north side of Stout Road.
11J00049001.

Unnamed tributary of Little West Fork Ohio Brush Creek.

If you have any questions, feel free to contact me by telephone at (937) 285-6029 or by electronic mail at joshua.jackson@epa.ohio.gov.

Respectfully,

Joshua Jackson
Environmental Specialist 2
Division of Drinking and Ground Waters - Surface Water

JJ/tb

Enclosure

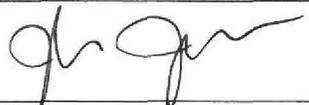
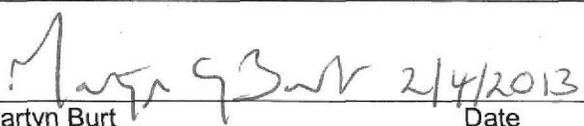
Division of Surface Water-Southwest District Office

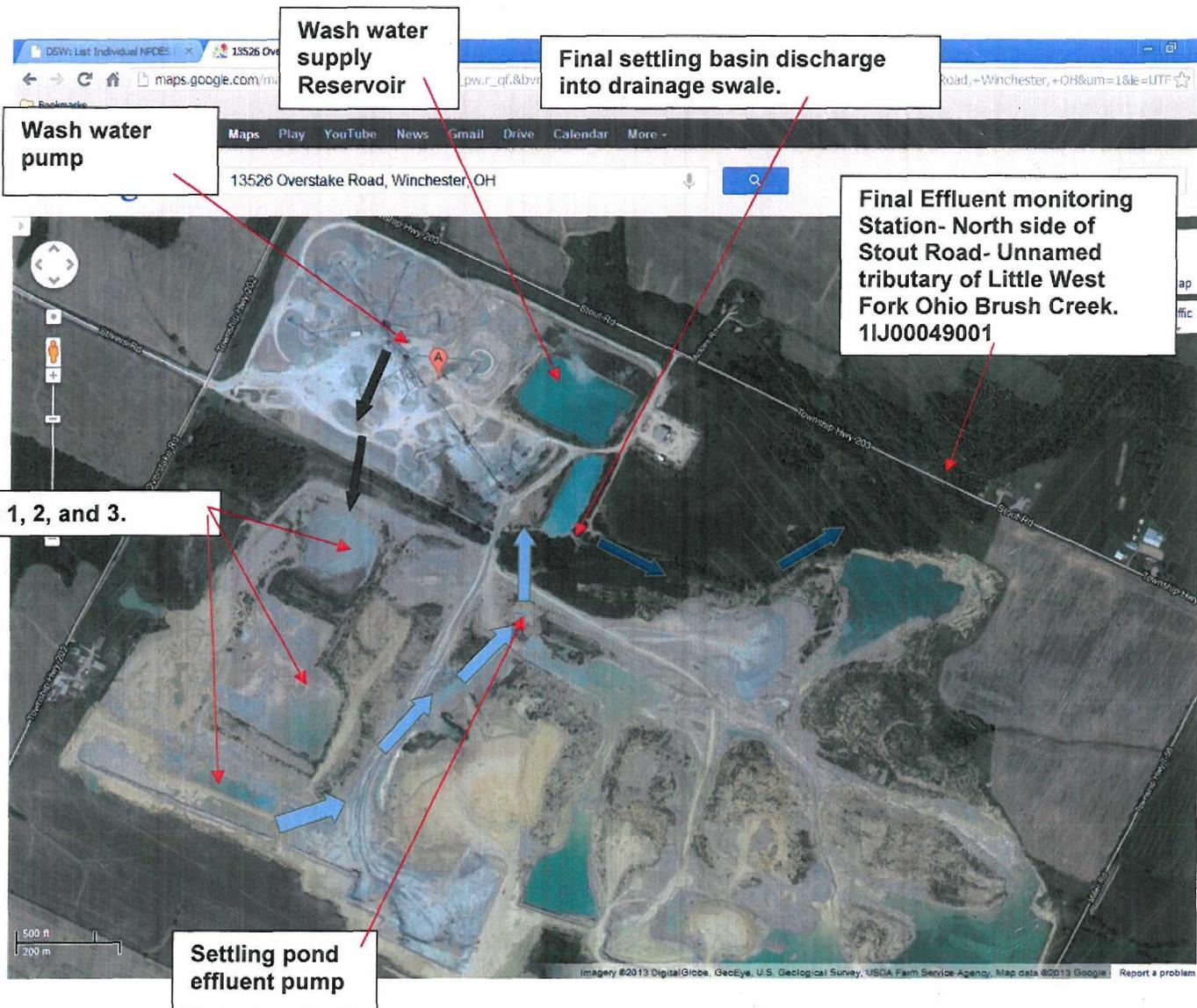
NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
11J00049*AD	OH0122785	1/24/2013	C	S	2

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Hanson Aggregates Davon, LL Eagle-Quarry 13526 Overstake Road Eagle Township, Brown County	9:30 a.m.	5/1/2008
	Exit Time	Permit Expiration Date
	11:40 a.m.	4/30/2013
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Bob Roades, Plant Manager Scott Persch, Customer Loader/Env. Tech	937-402-0145 (cell phone)	
Name, Address and Title of Responsible Official	Phone Number	
Mary Woodley, Environmental Coordinator 1136 Morgantown Road Russellville, KY 42276	270-726-4936	

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

Section D: Summary of Findings (Attach additional sheets if necessary)	
See Cover Letter.	
Inspector	Reviewer
 Joshua Jackson Division of Surface Water Southwest District Office	 Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office
Date	Date
2-4-2013	2/4/2013



Process description – Wash water is pumped from the wash water supply reservoir to the aggregate washing area. Process water is then pumped to Settling pond one. Effluent, from settling pond one, flows via gravity to settling ponds two and three. Effluent, from settling pond three, flows via gravity to the settling pond effluent pump station where it is conveyed to a rock channel tributary to the final settling basin. The final settling basin is connected to the wash water supply reservoir so that water in the basin is either reused for wash water or discharged to a drainage swale that is tributary to Little West Fork Ohio Brush Creek.

As more quarrying continues on the south side of the site, more settling ponds will be developed in addition to settling ponds 1, 2 and 3. However, the effluent from the last settling pond will continue to drain to the existing settling pond effluent pump.