OhioEPA
State of Ohio Environmental Protection Agency

Southeast District Office

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

November 6, 2008

Re: Jefferson County
Sterling Mining Corporation
0IL00135*DD and 0IL00136*DD
Correspondence (IWW)

Mr. Gary Schaefer
Sterling Mining Corporation
P.O. Box 217
North Lima, Ohio 44452

Dear Mr. Schaefer:

On October 29, 2008, Ohio EPA conducted a Compliance Evaluation Inspection at the Sterling Mining Corporation's North, South, Davidson, and Shean Hill Mine Facilities. The purpose of the inspection was to determine compliance with terms and conditions of National Pollutant Discharge Elimination System (NPDES) permit numbers 0IL00135*DD and 0IL00136*DD. These facilities do have some compliance issues as described below, but at the same time the neutralization/sedimentation implemented at these sites were some of the best facilities I have had a chance to inspect.

During the inspection, I was informed about the current status of the aforementioned mines. The North Mine has been reclaimed. The South Mine is no longer in production and is preparing to be reclaimed. The Davidson Mine is in production and the Shean Hill Mine has just recently started up. The Coal preparation plant and associated refuse disposal site is still in use at the South Mine location. The following table describes the activities connected to each of the permitted outfalls.

Permit	Outfall	Source description
0IL00135*DD	001	North Mine Site which has been reclaimed
0IL00135*DD	002	Davidson/Shean Hill entrance. Pond no longer exists.
0IL00135*DD	003	Dewatering of Davidson Mine which is recycled.
0IL00135*DD	004	Dewatering of Shean Hill Mine, stormwater from haul road and coal storage pads.
0IL00136*DD	001	Contact Stormwater from Coal Prep Plant
0IL00136*DD	002	Contact Stormwater from refuse area
0IL00136*DD	003	Contact Stormwater from refuse area treated as batch and stormwater from refuse area haul road.
0IL00136*DD	601	Sanitary discharge which is being eliminated

We have received your self-monitoring reports. Our review indicates the following violations of the conditions of your NPDES permit since April 1, 2006 for the 0IL00135 permit and May 1, 2007 of the 0IL00136 permit respectively:

Permit No.	Reporting Period	Station	Reporting Code	Parameter	Limit Type	Limit	Reported Value	Violation Date
0IL00135*CD	June 2006	001	01045	Iron, Total (Fe)	30D Conc	3000	4082.5	6/1/2006
0IL00135*CD	June 2006	001	01045	Iron, Total (Fe)	30D Qty	2.7	4.31565	6/1/2006
0IL00135*CD	June 2006	001	01045	Iron, Total (Fe)	1D Conc	6000	7970.	6/23/2006
0IL00135*CD	June 2006	001	01045	Iron, Total (Fe)	1D Qty	5.4	8.46561	6/23/2006
0IL00135*CD	March 2008	001	00530	Total Suspended Solids	30D Qty	31.5	42.8265	3/1/2008
0IL00135*CD	March 2008	001	00530	Total Suspended Solids	1D Qty	63	81.5743	3/24/2008
0IL00135*CD	July 2007	004	00530	Total Suspended Solids	30D Conc	35	36.	7/1/2007
0IL00135*CD	April 2008	004	00530	Total Suspended Solids	30D Conc	35	36.	4/1/2008
0IL00135*DD	August 2008	004	00530	Total Suspended Solids	30D Conc	35	68.	8/1/2008
0IL00135*DD	Sept 2008	004	00530	Total Suspended Solids	30D Conc	35	54.5	9/1/2008
0IL00135*DD	Sept 2008	004	00530	Total Suspended Solids	1D Conc	70	83.	9/23/2008
0IL00136*DD	May 2007	001	00400	pH	1D Conc	9	9.01	5/22/2007
0IL00136*DD	July 2007	001	00400	pH	1D Conc	9	9.19	7/26/2007
0IL00136*DD	Oct 2007	001	00400	pH	1D Conc	9	.43	10/11/2007
0IL00136*DD	Nov 2007	001	00400	pH	1D Conc	9	9.13	11/5/2007
0IL00136*DD	Jan 2008	001	00400	pH	1D Conc	9	9.22	1/25/2008
0IL00136*DD	March 2008	001	00530	Total Suspended Solids	30D Conc	30	35.	3/1/2008
0IL00136*DD	Dec 2007	002	01055	Manganese, Total (Mn)	30D Conc	2000	4512.5	12/1/2007
0IL00136*DD	Dec 2007	002	01055	Manganese, Total (Mn)	1D Conc	4000	6500.	12/6/2007
0IL00136*DD	Dec 2007	002	01055	Manganese, Total (Mn)	1D Conc	4000	7570.	12/27/2007
0IL00136*DD	March 2008	002	00530	Total Suspended Solids	30D Conc	30	57.	3/1/2008
0IL00136*DD	March 2008	002	01045	Iron, Total (Fe)	30D Conc	3000	3560.	3/1/2008
0IL00136*DD	August 2007	003	00400	pH	1D Conc	9	9.13	8/21/2007
0IL00136*DD	June 2008	003	00530	Total Suspended Solids	30D Conc	35	45.25	6/1/2008
0IL00136*DD	June 2008	003	00530	Total Suspended Solids	1D Conc	70	125.	6/5/2008

Each permit requires the Owner to report noncompliance as directed by Part III.12.E which shall contain information listed in Part III.12.B and Part III.12.C. In review of the correspondence file, I have identified a few of the violations above were reported as directed by the permit. However, consistency in follow up documentation can be improved upon. The issues of the above violations were described to me during the inspection and the following approaches were discussed:

Permit	Outfall	Description
0IL00135	001	This outfall serves a reclaimed site which no longer is required to be monitored. I contacted ODNR contact Tom Butch via phone on November 4, 2008 to verify that monitoring is no longer required pursuant to bond release procedures.
0IL00135	002	This outfall had no reported violations and no longer exists. Thus, 002 can be removed from the permit.

Permit	Outfall	Description
0IL00135	004	This outfall is subject to the dewatering of the new Shean Hill Mine which is experiencing suspended clays during the startup. A gel log is being used to slow release flocculent to aid in lowering TSS. A MSDS sheet was provided during the inspection. Additionally various flocculents are being lab reviewed to determine effectiveness. Coordinate with Ohio EPA before use of any dosing equipment, flocculents, etc. We review the ecological data provided in the MSDS sheet and design dosage rates to determine potential effects on water quality.
0IL00136	001	Outfall 001 is the outfall from the South Mine Preparation Plant. Below 9.0 pH is a treatment balancing act with treating for Manganese precipitation. I explained that Sterling Mining could request a higher pH limit as typically done under the guidance of 40 CFR 434.62 Alternative effluent limitation for pH. This can similarly be requested for 002 and 003 for 0IL00136. Our agency often grants a pH limit of 9.5 upon receiving this request.
0IL00136	002	This outfall treats refuse runoff and has the potential to be granted 40 CFR 434.62 Alternative effluent limitation for pH
0IL00136	003	This outfall treats refuse runoff and has the potential to be granted 40 CFR 434.62 Alternative effluent limitation for pH
0IL00136	601	This outfall had no reported violations, but was reported to be unnecessary do to the expected demolition of the sanitary facility. Once this demolition is completed, you may request removal of the 601 outfall from the permit and also the chlorine and fecal coliform monitoring from outfall 001.

In closing, I recommend that Sterling Mining submit an NPDES modification to the Agency requesting that 40 CFR 434.62 Alternative effluent limitation for pH be applied to outfalls 001, 002, 003 with respect to 0IL00136 (form attached). Additionally, provide a timeline on when the sanitary facility is being removed at the South Mine. We can remove the Fecal and chlorine monitoring from 001 at that time.

Copies of our compliance evaluation inspection reports are enclosed. Thank you for the assistance during the visit. You may call me at (740) 380-5272 if you have any questions regarding this letter or any other concerns with Ohio EPA regulations.

Sincerely,

Aaron Rennington

Aaron Rennington
District Representative
Division of Surface Water

AP/dh

Enclosure

NPDES
Compliance Inspection Report

A. NATIONAL DATA SYSTEM CODING

Permit No.	NPDES No.	Date	Inspection Type	Inspector	Facility Type
0IL00135*DD	OH0120391	October 29, 2008	C	S	2

B. FACILITY DATA

Name and Location of Facility Inspected	Entry Time	Permit Effective Date
Sterling Mining Corporation	~ 1:00 p.m.	July 1, 2008
North, Davidson and Shean Hill Mines	**Exit Time**	**Permit Expiration Date**
Brush Creek Township Road 54 Salineville, Ohio 43952	~ 3:30 p.m.	June 30, 2013

Name(s) and Title(s) of On-Site Representative(s)	Phone Number(s)
Gary Schaefer, Geologist/Permitting	(740) 768-9504
Name, Address and Title of Responsible Official	**Phone Number**
W. Thomas Mackall, President Sterling Mining Corporation P.O. Box 217 North Lima, Ohio 44452	

C. AREAS EVALUATED DURING INSPECTION

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

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

D. SUMMARY OF FINDINGS/COMMENTS (attach additional sheets if necessary)

See attached cover letter.

Aaron Pennington, Inspector, Ohio EPA, Southeast District Office — Date: 11-5-08

Timothy M. Campbell, Reviewer, Ohio EPA, Southeast District Office — Date: 11/10/08

Sections E through K: Complete on all inspections as appropriate (N/A = Not Applicable N/E = Not Evaluated)

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			

Comments: Shean Hill Mine is starting up (004), North Mine has been reclaimed (001), Davidson Mine is in production (003), 002 no longer exists.

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: _____			X	
e. Permittee is meeting compliance schedule			X	

Comments: Pond 4 is having difficulty with suspended solids. Permittee has implemented a floc block which appears to be helping settle the solids. The start up of the Shean Hill Mine introduces clay particulates that should reduce over time. Permittee is also having a consultant evaluate potential flocculants.

G. 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 _____ weir _____ ultrasonic & weir _____ calculated from influent X other specify: Estimate	X			
b. Calibration frequency adequate (date of last calibration: _____)			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: _____ Daily _____ Weekly _____ Monthly X Other				

Comments:

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
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:

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: Fe, Mn, TSS, etc. 2. Lab name: Ream and Haager Laboratory				

Comments:

Part 3 – Laboratory, Quality Control/Quality Assurance	Yes	No	N/A	N/E
f. Quality assurance manual provided and maintained			X	
g. Satisfactory calibration and maintenance of instruments and equipment				X
h. Adequate records maintained				X
i. Results of latest U.S. EPA quality assurance performance sampling program:				
Date: NA _____ Satisfactory _____ Marginal _____ Unsatisfactory				

Comments:

J. EFFLUENT/RECEIVING WATER OBSERVATIONS

Outfall #	Oil Sheen	Grease	Turbidity	Visible Foam	Visible Float Solids	Color
001			Site has been reclaimed			
002			No longer existing			
003			No discharge			
004	None	None	Murky	None	Small amount of coal/refuse fines	Grayish

Comments: