



**Environmental  
Protection Agency**

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director



\*11D0000620100928\*

BUTLER

AK STEEL CORP - MIDDLETOWN WORKS

OSIKA, MARY

2010/09/28



**Environmental  
Protection Agency**

Ted Strickland, Governor  
Lee Fisher, Lt. Governor  
Chris Korleski, Director

September 28, 2010

James Kemp  
AK Steel Corporation  
1801 Crawford Street  
Middletown, Ohio 45043

RE: Compliance Evaluation Inspection  
NPDES Permit 11D00006\*AD, OH0141038  
Dicks Creek Remediation Project

Dear Mr. Kemp:

On September 17, 2010, I inspected the temporary wastewater treatment system located at the Dicks Creek Remediation Project. Mike Ploetz with Hamilton County Department of Environmental Services accompanied me on this inspection. A copy of my inspection report is attached for you to review. All areas evaluated were found to be satisfactory.

No response is required to the summary of inspection findings. If you have any questions about the inspection, please call me at (937) 285-6101.

Sincerely,

Mary Osika  
Environmental Specialist  
Division of Surface Water

Enclosure

cc: Tim Barber, Environ  
Mike Mikulka, USEPA  
Marilyn Wall, Sierra Club



## Summary of Findings/Comments

Tom Leigh with Environ showed us the Monroe Ditch sump area and extraction wells. We met with Larry Dickson at the temporary treatment system. The treatment system was still filling tanks during our inspection and the air stripper was not active during our inspection. The treatment system was not discharging during our visit due to the remediation activity occurring under the railroad bridge.

Photos were taken of the Monroe Ditch sump area, wastewater treatment plant sampling points and discharge location. Dicks Creek has been remediated and creek restored from outfall 002 to Monroe Ditch. A photo was taken in the restored area.

The temporary treatment system has been in operation for three months now, seeing the most flow during the month of July with an average of 210,000 gallons per day discharged during that month.

A compliance review of the discharge monitoring reports showed only one effluent limit violation noted for pH during the start-up of the temporary treatment system. A pH of 9.1 SU was reported on 6/22/2010.

No response is required for the inspection findings or compliance review.





State of Ohio Environmental Protection Agency  
Southwest District Office

NPDES Compliance Inspection Report

Section A: National Data System Coding					
Permit #	NPDES#	Month/Day/Year	Inspection Type	Inspector	Facility Type
1ID00006*AD	OH0141038	9/17/2010	C	S	1

Section B: Facility Data		
Name and Location of Facility Inspected	Entry Time	Permit Effective Date
AK Steel – Dicks Creek Remediation Project Oxford State Road Middletown, Ohio	9:00 am	November 1, 2009
	Exit Time	Permit Expiration Date
	10:30 am	October 31, 2014
Name(s) and Title(s) of On-Site Representatives	Phone Number(s)	
Tom Leigh – Environ Larry Dickson – Entact	(440) 645-9250 (630) 669-4811	
Name, Address and Title of Responsible Official	Phone Number	
Jim Kemp AK Steel Corporation 1801 Crawford Street Middletown, Ohio	(513) 425-6177	

Section C: Areas Evaluated During Inspection					
(S = Satisfactory, M = Marginal, U = Unsatisfactory, N = Not Evaluated)					
S	Permit	S	Flow Measurement	N	Pretreatment
S	Records/Reports	N	Laboratory	N	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 attached summary of findings.

Inspector	Reviewer
 Date: 9/28/2010	 Date: 9/28/2010
Mary Osika Environmental Specialist Division of Surface Water Southwest District Office	Martyn Burt Compliance & Enforcement Supervisor Division of Surface Water Southwest District Office



Sections E thru K: Complete on all inspections as appropriate  
Y – Yes, N – No, N/A – Not Applicable, N/E – Not Evaluated

**Section E: Permit Verification**

Inspection observations verify the permit

- (a) Correct name and mailing address of permittee ..... Y
- (b) Correct name and location of receiving waters..... Y
- (c) Do Categorical Standards apply?...If yes, list applicable standards.. N
- (d) Product(s) and production rates conform with permit application (Industries)..... N/A
- (e) Flows and loadings conform with NPDES permit..... Y
- (f) Treatment processes are as described in permit application... Y
- (g) All discharges are permitted..... Y
- (h) Number and location of discharge points are as described in permit..... Y
- (i) Storm water discharges properly permitted..... Y

Comments/Status:

**Section F: Compliance**

- (a) Any significant violations since the last inspection..... N
- (b) Appropriate Non-compliance notification of violations..... Y
- (c) Permittee is taking actions to resolve violations..... Y
- (d) Permittee has a compliance schedule..... N
- (e) Compliance schedule contained in...N/A
- (f) Permittee is in compliance with schedule..... N/A
- (g) Has biomonitoring shown toxicity in discharge since last inspection N/E

Comments/Status:

(a) One effluent violation noted at start-up of system – 6/22/2010 pH reported 9.1, limit 9.0.

**Section G: Operation & Maintenance**

**Treatment Works:**

Treatment facility properly operated and maintained

- (a) Standby power available.....generator  or dual feed  ..... Y
  - i. What does the back-up power source operate.....  

generator is primary power source, mobile treatment unit
  - ii. How often is the generator tested under load.....  

24/7



- (b) Which components have an alarm system available for power or equipment failures.....  
 No alarm system, personnel available 24/7 when operating
- (c) All treatment units in service other than backup units..... Y
- (d) What method is used for scheduling routine & preventative maintenance (calendar, software, etc.).....  
 visual daily inspection of treatment units, gauges, etc.
- (e) Any major equipment breakdown since last inspection..... N
- (f) Operation and maintenance manual provided and maintained..... Y
- (g) Any plant bypasses since last inspection..... N
- (h) Any plant upsets since last inspection..... N

**Comments/Status:**

100 gpm system was still filling at time of inspection due to low flows from extraction wells.

**Section H: Sludge Management**

- (a) Method of Sludge Disposal...  
 Land Application  
 Haul to Another NPDES Permittee  
 Haul to a Mixed Solid Waste Landfill  
 Not applicable

**Comments/Status:**

**Section I: Self-Monitoring Program**

**Flow Measurement:**

- (a) Primary/Secondary flow measuring devices operated and maintained..... Y  
Type of device (e.g. weir with ultrasonic level sensor):  
 flow pump meters between 100 gpm system and at discharge pump to 001.
- (b) Calibration frequency adequate ..... Y  
(Date of last calibration: system just started up 3 months ago)
- (c) 24-hour recording instruments operated and maintained..... Y
- (d) Flow measurement equipment adequate to handle full range of flows..... Y
- (e) Actual flow discharged is measured..... Y
- (f) Flow measuring equipment inspection frequency  
 Daily  Weekly  monthly  other

**Comments/Status:**

Treatment system has discharged 4 days during June, 29 days in July and 14 days in August, 2010. Average flow rate in July was 210,000 gpd with maximum flow rate discharge of 739,000 gallons on the 10<sup>th</sup> of July.



**Section I: Self-Monitoring Program (cont)**

**Sampling:**

- (a) Sampling location(s) are as specified by permit..... Y
- (b) Parameters and sampling frequency agree with permit..... Y
- (c) Permittee uses required sampling method..... N/E  
(see GLC page)
- (d) Monitoring records (i.e., flow, pH, DO) maintained for a minimum of three years including all original strip chart recordings (i.e., continuous monitoring instrumentation, calibration and maintenance records)..... Y

**Comments/Status:**

System has been operating for 3 months.

**Section I: Self-Monitoring Program (cont)**

**Laboratory:**

*General*

- (a) Does the Quality Assurance Manual contain written Standard Operating Procedures (SOP's) for all analysis performed onsite..... N/E
- (b) Do SOP's include the following if applicable..... N/E
  - Title
  - Scope and Application
  - Summary
  - Sample Handling and Preservation
  - Interferences
  - Apparatus and Materials
  - Reagents
  - Procedure
  - Calculations
  - Quality Control
  - Maintenance
  - Corrective Action
  - Reference (Parent Method)

*Note: 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. Standard operating procedures are to be used in the laboratory in sufficient detail that a competent analyst unfamiliar with the method can conduct a reliable review and/or obtain acceptable results." SOPs should be developed for each analytical procedure.*

- (c) EPA approved analytical testing procedures used (40 CFR 136.3).. N/E
- (d) If alternate analytical procedures are used, proper approval has been obtained..... N/E
- (e) Analyses being performed more frequently than required by permit. N/E
- (f) If (e) is yes, are results in permittee's self-monitoring report..... N/E



(g) Satisfactory calibration and maintenance of instruments/equipment. N/E  
(see score from GLC page)

(h) Commercial laboratory used..... Y

Parameters analyzed by commercial lab: all NPDES

Lab name: Belmont Labs, Test America

*Discharge Monitoring Report Quality Assurance (DMRQA)*

(a) Participation in latest USEPA quality assurance performance  
sampling..... N

Date:

(b) Were any parameters "Unsatisfactory"..... N/A

(c) Reasons for "Unsatisfactory" parameters.....

**Comments/Status:**

**Section J: Effluent/Receiving Water Observations**

Outfall # 001

Outfall Description: Discharge from pipe (shredded for flow dissipation)

Receiving Stream: Dicks Creek

Receiving Stream Description: low flow conditions

**Comments/Status:**

Wastewater treatment system was not discharging at the time of the inspection due to remediation activity at discharge area and treatment tanks being filled.

**Section K: Multimedia Observations**

- (a) Are there indications of sloppy housekeeping or poor maintenance in work and storage areas or laboratories..... N/E
- (b) Do you notice staining or discoloration of soils, pavement or floors.. N/E
- (c) Do you notice distressed (unhealthy, discolored, dead) vegetation.. N/E
- (d) Do you see unidentified dark smoke or dust clouds coming from sources other than smokestacks..... N/E
- (e) Do you notice any unusual odors or strong chemical smells..... N/E
- (f) Do you see any open or unmarked drums, unsecured liquids, or damaged containment facilities..... N/E

If any of the above are observed, ask the following questions:

- (1) What is the cause of the condition?
- (2) Is the observed condition or source a waste product?
- (3) Where is the suspected contaminant normally disposed?
- (4) Is this disposal permitted?
- (5) How long has the condition existed and when did it begin?

**Comments/Status:**

