OhioEPA
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Northeast District Office

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Ted Strickland, Governor
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November 17, 2009

RE: TRUMBULL COUNTY
WARREN
OHIO STAR FORGE COMPANY
COMPLIANCE EVALUATION INSPECTION
(NPDES PERMIT NO. 3IN00336)

Mr. Pat Billups
Safety & Environmental Manager
Technical Services Manager
PO Box 430
4000 Mahoning Avenue
Warren, OH 44482

Dear Mr. Billups:

On October 1, 2009, a Compliance Evaluation Inspection (CEI) was conducted at the Ohio Star Forge (OSF) Company, 4000 Mahoning Avenue, Warren, Ohio. Present at the inspection were you, representing Ohio Star Forge; Mr. Bob Oates, of the consulting firm URS; and this writer, of the Ohio EPA. Mr. Erm Gomes, of the Ohio EPA, was also telephone conferenced in during a portion of the meeting.

The purpose of the inspection was to gather information necessary to renew the above referenced NPDES permit, and to become familiar with the plant processes and outfall locations. The NPDES permit contains the following permitted stations:

3IN00336001: Combined discharge water from: non-contact cooling water blowdown (Station 601); contact cooling water discharge after the oil- water separator (Station 602); final effluent from the sanitary sewage wastewater treatment plant (Station 603); Ohio Star Forge stormwater runoff. Parameters tested for include flow rate, water temperature, pH, total suspended solids, oil & grease, manganese, zinc, and copper. Total flow is approximated at 3600 gpd plus site variable stormwater flow rates.

3IN00336601: Non-contact cooling water blowdown prior to combining into Station 001. The non-contact cooling water is discharged without treatment to the permitted outfall. Only total flow is monitored from Station 601. Flow is approximated at 1100 gpd.

3IN00336602: Discharge of cooling tower treated contact water blow down, after oil / water separator, prior to combining into Station 001. Parameters tested for include flow rate, total suspended solids, and oil & grease. Flow is approximated at 800 gpd.

3IN00336603: Final effluent discharge from the sanitary wastewater treatment system, prior to combining into Station 001. Parameters tested for include flow rate, color, odor, turbidity, dissolved oxygen, pH, total suspended solids, ammonia nitrogen, CBOD, fecal coliform, and chlorine residual.

The wastewater treatment plant (WWTP) consists of a trash trap, extended aeration treatment, sand filter dosing station, surface sand filters, and chlorine disinfection. Treated flow from the sanitary WWTP is approximated at 1700 gpd.

3IN00336588: Sanitary wastewater treatment system sludge prior to disposal at a POTW.

The meeting consisted of an introductory discussion; discussion of the facility's NPDES Permit modification and renewal status; discussion of the current NPDES Permit limits and requirements; presentation and discussion of effluent numeric violations covering the period of April 1, 2003 through September 1, 2009; and a tour of the outdoor area including the wastewater treatment plant, and Outfalls 001, and 601 through 603.

A review of your compliance with the limitations contained in your NPDES permit, as identified by our computer tracking system, indicates the following effluent numeric violations for the time period of April 1, 2003 through September 1, 2009:

OHIO STAR FORGE
NUMERIC EFFLUENT VIOLATIONS
NPDES PERMIT NO. 3IN00336
(APR. 1, 2003 – SEPT. 1, 2009)

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
June 2003	602	Total Suspended Solids	1D Conc	10	26.4	6/4/2003
March 2004	602	Total Suspended Solids	1D Conc	10	33.	3/18/2004
March 2004	602	Oil and Grease, Total	1D Conc	10	72.1	3/18/2004
April 2004	001	pH	1D Conc	9.0	9.6	4/27/2004
May 2004	001	pH	1D Conc	9.0	9.1	5/14/2004
June 2004	603	Total Suspended Solids	30D Conc	12	14.	6/1/2004
June 2004	603	Nitrogen, Ammonia (NH3-N)	30D Conc	1.0	4.29	6/1/2004
June 2004	603	Nitrogen, Ammonia (NH3-N)	1D Conc	1.5	4.29	6/3/2004
June 2004	001	pH	1D Conc	9.0	9.4	6/10/2004
June 2004	001	pH	1D Conc	9.0	9.3	6/17/2004
June 2004	602	Oil and Grease, Total	1D Conc	10	12.	6/24/2004
August 2004	603	Nitrogen, Ammonia (NH3-N)	30D Conc	1.0	13.05	8/1/2004
August 2004	603	Nitrogen, Ammonia (NH3-N)	30D Qty	0.01	.03892	8/1/2004
August 2004	602	Oil and Grease, Total	1D Conc	10	13.	8/12/2004
August 2004	603	Nitrogen, Ammonia (NH3-N)	1D Conc	1.5	12.4	8/17/2004
August 2004	603	Nitrogen, Ammonia (NH3-N)	1D Qty	0.016	.04881	8/17/2004
August 2004	603	Nitrogen, Ammonia (NH3-N)	1D Conc	1.5	13.7	8/31/2004
August 2004	603	Nitrogen, Ammonia (NH3-N)	1D Qty	0.016	.02904	8/31/2004
December 2004	603	Total Suspended Solids	30D Conc	12	13.	12/1/2004
December 2004	603	Nitrogen, Ammonia (NH3-N)	1D Conc	4.5	5.33	12/1/2004
December 2004	603	Nitrogen, Ammonia (NH3-N)	30D Conc	3.0	8.615	12/1/2004
December 2004	603	Nitrogen, Ammonia (NH3-N)	30D Qty	0.03	.04292	12/1/2004
December 2004	603	Nitrogen, Ammonia (NH3-N)	1D Conc	4.5	11.9	12/22/2004

Reporting Period	Station	Parameter	Limit Type	Limit	Reported Value	Violation Date
December 2004	603	Nitrogen, Ammonia (NH3-N)	1D Qty	0.05	.06486	12/22/2004
June 2005	603	Total Suspended Solids	30D Conc	12	15.	6/1/2005
September 2005	001	Oil and Grease, Total	1D Conc	10	11.9	9/7/2005
March 2006	001	Oil and Grease, Total	1D Conc	10	16.8	3/1/2006
March 2006	001	Oil and Grease, Total	1D Conc	10	12.3	3/22/2006
August 2006	603	CBOD 5 day	30D Conc	10	13.	8/1/2006
December 2006	602	Total Suspended Solids	1D Conc	10	11.6	12/28/2006
October 2007	001	pH	1D Conc	6.5	6.	10/11/2007
March 2008	603	Total Suspended Solids	30D Conc	12	25.	3/1/2008
March 2008	603	Total Suspended Solids	1D Conc	18	25.	3/20/2008
April 2008	001	pH	1D Conc	6.5	6.	4/4/2008
April 2008	001	pH	1D Conc	6.5	6.	4/11/2008
April 2008	001	pH	1D Conc	6.5	6.	4/25/2008
December 2008	602	Total Suspended Solids	1D Conc	10	19.5	12/18/2008
December 2008	602	Oil and Grease, Total	1D Conc	10	11.1	12/18/2008
August 2009	603	Nitrogen, Ammonia (NH3-N)	30D Conc	1.0	1.07	8/1/2009

001=Combined Wastes Discharge; 601=Non-Contact Blowdown; 602=Contact Cooling Water; 603=Sanitary Wastewater

The following items were also discussed with you during the October 1st inspection:

1) An NPDES Permit Modification application for the facility was submitted in May 2006. The Permit Modification request was for the installation of a fourth forge press (Amp 50), which would increase forging production at OSF, resulting in increased cooling system evaporative losses, and therefore increase cooling system blowdown rates. A separate cooling water recirculation system would be installed for the Amp 50 machine.

   Cooling water discharges were estimated to increase from 640 gpd to 800 gpd; non-contact cooling water blowdown was estimated to increase from 900 gpd to 1100 gpd; and no changes to the sanitary system and stormwater runoff quantity or quality would be seen as a result of the installation of the new forge press.

   The Amp 50 forge press was installed in July 2006. It is noted that the minimal increase in flow rates seen by the addition of the Amp 50 forge press are still less than the average daily projections included in the original NPDES Permit application submitted in May 2002.

2) Included in the May 2006 NPDES Permit Modification application was an Anti-Degradation Alternatives Analysis. Results of the Anti-Deg analysis found the Preferred Alternative to be the continued use of the existing contact cooling water gravity separation / filtration system currently used for the existing forge presses at the facility. Although the proposed modification would minimally increase the water rates, it would not increase the quality of the cooling water blowdowns.

3) A General Stormwater Permit was applied for, and issued by the Ohio EPA in July 2006 (3GR00887*DG). However, it was later determined that it was not needed, as the stormwater monitoring was covered under Station 001 of the Individual NPDES Permit (3IN00336*AD) for the OSF facility.

   In May 2007 a Notice of Termination (NOT) request was submitted to the Ohio EPA, requesting termination of the General Permit. The Stormwater General Permit was terminated in June 2007.

4) It is also understood that OSF was issued a General Permit for non-contact cooling water, and that permit expired in 2004. As we discussed, the non-contact cooling water is also permitted under the current Individual NPDES Permit (3IN00336*AD). It is recommended that a NOT be submitted to the Ohio EPA for proper termination of that General Permit as well.

5) The Individual NPDES Permit currently issued to OSF (3IN00336*AD) expired on March 31, 2008. However, the terms and conditions of that permit remain effective until the permit is renewed. As we discussed, OSF is presently in the process of preparing the renewal application for the Individual NPDES Permit.

   Forms which will be completed and submitted for the permit renewal include:

   a. NPDES Permit Form 1-General Information
   b. NPDES Permit Form 2C-Permit to Discharge Wastewater From Existing Manufacturing Operations
   c. NPDES Permit Form 2F-Storm Water Discharges Associated with Industrial Activity
   d. NPDES Permit Form 2S-Sewage Sludge Use or disposal (for sanitary sewage sludge to be reported from Station 588).
   e. Antidegradation Addendum Form

6) There were 39 numeric effluent violations reported for the period April 1, 2003 through September 1, 2009. Approximately 11 violations were reported for Station 001 (Combined Wastes Discharge); 0 effluent violations for Station 601 (Non-Contact Blowdown); 8 violations for Station 602 (Contact Cooling Water); and 20 violations for Station 603 (Wastewater Treatment Plant).

7) There are approximately 62 persons currently employed at the Ohio Star Forge facility. Approximately 82 persons were employed at the facility last year (2008), and 51 persons in June 2009.

8) OSF will possibly begin adding polymer to wastewater from Station 602 (Contact Cooling Water). If and when this does happen, please submit MSDS information sheets for the material being used.

9) When submitting the NPDES Permit renewal information, please indicate whether or not your SWP3 plan is up to date, and indicate the person responsible for making sure the plan is updated.

10) The $200 NPDES renewal application fee will not be required to be submitted with the application, as the $200 fee paid for the previous modification request will be applied since it never got processed.

11) OSF is utilizing Cardinal Labs and Bio Solutions for their sample analysis,

12) In response to your question regarding staffing requirements, a sewage plant requiring a Class A Wastewater Operator must have the operator present two days per week, for a total of one hour or more per week.

    A sewage plant requiring a Class I Operator must have the operator present 3 days per week, for a total of 1.5 hours or more.

If you have questions or comments regarding this letter, please contact this office.

Respectfully,

Charles E. Allen

Charles E. Allen
Environmental Engineer
Division of Surface Water

CEA/mt