



State of Ohio Environmental Protection Agency

Northeast District Office

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

September 27, 2007

**RE: ISG CLEVELAND INC.
CUYAHOGA COUNTY
COMPLIANCE EVALUATION INSPECTION
NPDES PERMIT 3ID00003 (OH0000957)**

Mr. Richard Zavoda, Manager, Environmental
ISG Cleveland Inc.
3060 Eggers Avenue
Cleveland, OH 44105

Dear Mr. Zavoda:

On September 12, 2007, this office met with you and Mr. Stan Rihtar to conduct an inspection of the above referenced facility. The purpose of the inspection was to obtain and review information in anticipation of renewal of the National Pollutant Discharge Elimination System (NPDES) permit. The NPDES permit for this facility expired October 31, 2006. Receipt of the renewal application by Ohio EPA authorizes the permittee to discharge beyond the expiration date.

ISG Cleveland Inc. is a steel manufacturing facility consisting of iron making (blast furnace), steel making (basic oxygen furnaces) and finishing operations. The NPDES permit authorizes the discharge of process wastewater, noncontact cooling water and storm water to the Cuyahoga River.

At the time of the inspection all wastewater treatment equipment appeared to be functioning properly. No operational problems were observed. A contract laboratory collects all samples required by the NPDES permit. All automatic samplers are locked and are accessible only by contract laboratory personnel. Sludge, generated as a result of the treatment of wastewater, is dewatered by either a plate and frame filter press or vacuum filters and disposed of on site at the captive landfill.

Review of monthly operating reports (MOR), received by Ohio EPA for the period May 2004 through July 2007, indicates monitoring frequency violations have occurred. The frequency violations cited in the enclosed attachment occurred in 2004 as a result of a failure to collect the appropriate number of samples within a given week. As discussed during the inspection, a week starts with the first day of the month and ends seven days later. Sampling procedures were changed accordingly to avoid recurring frequency violations. No additional information is required at this time.

The findings of this inspection are noted as follows:

Outfall 001

All flow from this outfall, which includes storm water, ground water and the overflow of noncontact cooling water from the 84-inch cold mill, is treated prior to discharge. Treatment is necessary to reduce the high pH discharges that have occurred during wet and dry weather. Neutralization is achieved by the addition of sulfuric acid.

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Outfall 002 (601/602)

Final outfall (002) is the combined discharge from the Strip Mill Water Treatment Plant that consists of the metals removal (601) and oily waste (602) systems. As noted in a previous correspondence from this office, an oily sheen periodically occurred at this outfall. In 2005 a permit-to-install was issued for the installation of treatment equipment to enhance oil removal of the hot mill sand filter blowdown. At the time of this inspection no oil sheen was observed in the Cuyahoga River. An oil absorbent boom continues to be maintained at the outfall.

It is our understanding that the electrogalvanizing line remains idle. The final effluent loading limits, applied at the calculated station 603, are based upon the production values associated with the electrogalvanizing line. The NPDES permit will consider an alternate calculated outfall based upon production values when the electrogalvanizing line is not operating.

Outfalls 003 and 019

These outfalls are limited to the discharge of storm water, ground water and steam condensate. The reference to noncontact cooling water will be removed from outfall 019. At the time of this inspection no discharge was observed at outfall 019.

Outfall 004

This outfall is limited to noncontact cooling water, steam condensate, storm water and ground water. A discharge of noncontact cooling water (nccw) and steam condensate may not occur simultaneously. The nccw is recycled limiting the discharge to maintenance periods only. Historically, during wet and dry weather, there have been high pH discharges from this outfall. In 2003 a permit-to-install was issued for the installation of neutralization equipment to control a high pH discharge. Neutralization is achieved by the addition of sulfuric acid.

Outfall 005 (604)

The C5 and C6 blast furnace recycle blowdown water is treated in one of two clarifiers (604) prior to discharging to the Cuyahoga River. Rehabilitation of one clarifier is nearing completion. The clarifier has been completely rebuilt.

Outfall 008

This outfall is limited to steam condensate, storm water and ground water. The volume of steam condensate appears to be minimal. The discharge is directly onto the ground and several feet from the storm drain. The outfall can become inundated with river water preventing the collection of samples required by the NPDES permit. As noted in previous correspondence from this office, an alternate point for sample collection was required. The alternate sample location was identified as the first manhole, approximately 75 feet east of the current outfall.

Outfall 009

This outfall is limited to storm water and ground water and shall be free from process wastewater. A very large steel slag pile is now located in the drainage area for this outfall. It was explained that the slag has been processed by independent companies and is stockpiled by ISG at this location. The processed slag is currently being used as a fill material.

Outfalls 010 and 011

These outfalls are limited to storm water and ground water and shall be free from process wastewater. Discharges of process wastewater, associated with the steel plant operations (outfall 017), may occur at each of these outfalls. In accordance with the requirements of the NPDES permit, such an event must be reported as an unauthorized discharge.

Should an overflow of process wastewater occur, outfall 010 would contain nccw and outfall 011 would discharge partially treated (unfiltered) process wastewater. Based upon the information provided on the monthly operating reports, covering the time line noted above, two unauthorized discharges occurred at outfall 010 (June 2006 and August 2007) and one event occurred at outfall 011 (August 2007). Each event was reported as required.

Outfalls 012 and 013

The discharges from these outfalls have been connected to the sanitary sewer system and are regulated in accordance with requirements of the Northeast Ohio Regional Sewer District's pretreatment program. Reference to these outfalls will be removed from the NPDES permit.

Outfall 014

This outfall is limited to noncontact cooling water, steam condensate, storm water and ground water. Maintenance on the sewer line was occurring at the time of the inspection to remove a blockage. A temporary hose and pump were used to transfer the wastewater to the outfall. The area around this outfall has been sold to an independent company which uses the site for the storage of salt and blast furnace slag.

Outfall 015

The discharge from this outfall is limited to storm water and ground water and shall be free from process wastewater. The property associated with the majority of the drainage area has been sold by ISG. The outfall is no longer located on ISG property.

Outfall 016

This outfall is limited to the discharge of steam condensate. At the time of the inspection no discharge was observed at the outfall. As discussed, a change will be made to Part II, A., of the NPDES permit to reflect the correct pipe size as a 48-inch pipe.

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Outfall 017

Outfall 017 is the discharge from the Steel Plant Wastewater Treatment facility. The process wastewater is treated in one of three clarifiers and collected in a wet well prior to sand filtration. Two clarifiers were in service; the third clarifier serves as a backup.

Outfall 021 (642/632)

The discharge from this outfall is limited to storm water and ground water and shall be free from process wastewater. Minimal flow was observed at the outfall. Due to a flow reduction, as a result of the decommissioning of the hot mill and finishing mill operations, internal stations 642 and 632 are no longer necessary and will be removed from the NPDES permit.

Outfall 022 (622)

Final outfall (022) is the discharge from the Central Water Treatment Plant (622) and includes storm water and ground water. Wastewater from the basic oxygen furnace and continuous caster is treated at the Central Water Treatment Plant. Due to the decommissioning of the hot mill and finishing mill operations only one of the three clarifiers are necessary for treatment.

Outfall 023 (613/633/643/653)

Final outfall (023) is the combined discharge from the captive landfill's four sedimentation ponds along with storm water and ground water. The discharge from each sedimentation pond is monitored separately as internal stations 613 (pond 1), 633 (pond 3), 643 (pond 4) and 653 (pond 5). Storm drainage from the closed area of the landfill drains to ponds 1 and 3 while the active area drains to ponds 4 and 5.

Outfall 024

The discharge from this outfall is limited to storm water and ground water and shall be free from process wastewater. During wet and dry weather there have been high pH discharges from this outfall. In 2003 a permit-to-install was issued to ISG for the installation of neutralization equipment to control the high pH discharge. Neutralization is achieved by the addition of sulfuric acid.

Outfall 027 (621)

Outfall 027 is now a storm water and ground water discharge. Minimal flow was observed at the outfall. Internal station 621 and the reference to nccw and the blast furnace operation will be removed from the permit.

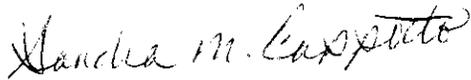
Outfalls 028 – 044

These outfalls are storm water and ground water, only, and shall be free from process wastewater. No changes are proposed.

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A draft copy of the renewal permit will be sent under separate cover. Any comments regarding the draft permit must be submitted in writing during the public notice period. If you should have any questions, please contact this office at (330) 963-1124.

Sincerely,

A handwritten signature in cursive script that reads "Sandra M. Cappotto".

Sandra M. Cappotto
Environmental Scientist
Division of Surface Water

SMC/mt

enclosure

cc: Stan Rihtar, ISG Cleveland Inc.

ISG Cleveland Inc. - Frequency Violations

Violation Date	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported
5/1/2004	002	11123	Manganese, Total Recoverable	1/Month	1	0
7/1/2004	002	00719	Cyanide, Free	1/Week	1	0
7/1/2004	002	00550	Oil and Grease, Total	1/Week	1	0
7/1/2004	002	00400	pH	1/Week	1	0
7/1/2004	002	00515	Residue, Total Dissolved	1/Week	1	0
7/1/2004	002	00530	Total Suspended Solids	1/Week	1	0
7/1/2004	002	01094	Zinc, Total Recoverable	2/Week	2	1
7/22/2004	002	01094	Zinc, Total Recoverable	2/Week	2	1
7/1/2004	005	50060	Chlorine, Total Residual	1/Week	1	0
7/1/2004	005	00719	Cyanide, Free	1/Week	1	0
7/1/2004	005	00013	High Water Temperature	1/Week	1	0
7/1/2004	005	00610	Nitrogen, Ammonia (NH3)	1/Week	1	0
7/1/2004	005	00400	pH	1/Week	1	0
7/1/2004	005	00515	Residue, Total Dissolved	1/Week	1	0
7/1/2004	005	01094	Zinc, Total Recoverable	1/Week	1	0
7/1/2004	012	50060	Chlorine, Total Residual	1/Week	1	0
7/1/2004	012	50050	Flow Rate	1/Week	1	0
7/1/2004	014	50060	Chlorine, Total Residual	1/Week	1	0
7/1/2004	014	00013	High Water Temperature	1/Week	1	0
7/1/2004	014	00610	Nitrogen, Ammonia (NH3)	1/Week	1	0
7/1/2004	014	00550	Oil and Grease, Total	1/Week	1	0
7/1/2004	014	00400	pH	1/Week	1	0
7/1/2004	014	00515	Residue, Total Dissolved	1/Week	1	0
7/1/2004	014	00530	Total Suspended Solids	1/Week	1	0
7/1/2004	017	50060	Chlorine, Total Residual	1/Week	1	0
7/1/2004	017	01114	Lead, Total Recoverable	2/Week	2	1
7/1/2004	017	01062	Molybdenum (Mo)	1/Week	1	0
7/1/2004	017	00550	Oil and Grease, Total	1/Week	1	0
7/1/2004	017	00515	Residue, Total Dissolved	1/Week	1	0
7/1/2004	017	00530	Total Suspended Solids	1/Week	1	0
7/1/2004	017	00011	Water Temperature	1/Week	1	0
7/1/2004	017	01094	Zinc, Total Recoverable	2/Week	2	1
7/1/2004	022	50060	Chlorine, Total Residual	1/Week	1	0
7/1/2004	022	50060	Chlorine, Total Residual	1/Week	1	0
7/1/2004	022	50060	Chlorine, Total Residual	1/Week	1	0
7/1/2004	022	00719	Cyanide, Free	2/Week	2	1
7/1/2004	022	01114	Lead, Total Recoverable	2/Week	2	1
7/1/2004	022	00550	Oil and Grease, Total	2/Week	2	1
7/1/2004	022	00550	Oil and Grease, Total	2/Week	2	1
7/1/2004	022	00400	pH	2/Week	2	1
7/1/2004	022	00400	pH	2/Week	2	1
7/1/2004	022	00515	Residue, Total Dissolved	2/Week	2	1
7/1/2004	022	00011	Water Temperature	1/Week	1	0
7/1/2004	022	01094	Zinc, Total Recoverable	2/Week	2	1
7/1/2004	023	00550	Oil and Grease, Total	1/Week	1	0

Violation Date	Station	Reporting Code	Parameter	Sample Frequency	Expected	Reported
7/22/2004	023	00550	Oil and Grease, Total	1/Week	1	0
7/1/2004	024	50050	Flow Rate	1/Week	1	0
7/1/2004	024	00550	Oil and Grease, Total	1/Week	1	0
7/1/2004	024	00400	pH	1/Week	1	0
7/1/2004	024	01094	Zinc, Total Recoverable	1/Week	1	0
7/1/2004	027	50050	Flow Rate	1/Week	1	0
7/1/2004	601	00719	Cyanide, Free	2/Week	2	1
7/1/2004	601	01114	Lead, Total Recoverable	2/Week	2	1
7/1/2004	601	00550	Oil and Grease, Total	2/Week	2	1
7/1/2004	601	00400	pH	2/Week	2	1
7/1/2004	601	00515	Residue, Total Dissolved	2/Week	2	1
7/1/2004	601	00530	Total Suspended Solids	2/Week	2	1
7/1/2004	601	01094	Zinc, Total Recoverable	2/Week	2	1
7/22/2004	601	00719	Cyanide, Free	2/Week	2	1
7/22/2004	601	01114	Lead, Total Recoverable	2/Week	2	1
7/22/2004	601	00550	Oil and Grease, Total	2/Week	2	1
7/22/2004	601	00400	pH	2/Week	2	1
7/22/2004	601	00515	Residue, Total Dissolved	2/Week	2	1
7/22/2004	601	00530	Total Suspended Solids	2/Week	2	1
7/22/2004	601	01094	Zinc, Total Recoverable	2/Week	2	1
7/1/2004	602	00719	Cyanide, Free	2/Week	2	1
7/1/2004	602	01114	Lead, Total Recoverable	2/Week	2	1
7/1/2004	602	00550	Oil and Grease, Total	2/Week	2	1
7/1/2004	602	00400	pH	2/Week	2	1
7/1/2004	602	00515	Residue, Total Dissolved	2/Week	2	1
7/1/2004	602	00530	Total Suspended Solids	2/Week	2	1
7/1/2004	602	01094	Zinc, Total Recoverable	2/Week	2	1
7/22/2004	602	00719	Cyanide, Free	2/Week	2	1
7/22/2004	602	01114	Lead, Total Recoverable	2/Week	2	1
7/22/2004	602	00550	Oil and Grease, Total	2/Week	2	1
7/22/2004	602	00400	pH	2/Week	2	1
7/22/2004	602	00515	Residue, Total Dissolved	2/Week	2	1
7/22/2004	602	00530	Total Suspended Solids	2/Week	2	1
7/22/2004	602	01094	Zinc, Total Recoverable	2/Week	2	1
8/1/2004	602	34696	Naphthalene	1/Quarter	1	0
7/1/2004	604	01114	Lead, Total Recoverable	1/Week	1	0
7/1/2004	604	00610	Nitrogen, Ammonia (NH3)	1/Week	1	0
7/1/2004	604	01094	Zinc, Total Recoverable	1/Week	1	0
7/1/2004	622	01051	Lead, Total (Pb)	2/Week	2	1
7/1/2004	622	00550	Oil and Grease, Total	2/Week	2	1
7/1/2004	622	00515	Residue, Total Dissolved	2/Week	2	1
7/1/2004	622	00530	Total Suspended Solids	2/Week	2	1
7/1/2004	622	01092	Zinc, Total (Zn)	2/Week	2	1
7/1/2004	653	00550	Oil and Grease, Total	1/Week	1	0
7/22/2004	653	00550	Oil and Grease, Total	1/Week	1	0