CLEAN WATER ACT COMPLIANCE EVALUATION INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

Purpose: NPDES Permit No. IL0000612 Compliance Evaluation Inspection

Facility: Alton Steel Inc.
5 Cut Street
Alton, Illinois 62002

Date of Inspection: November 12-15, 2013

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Report Date: August 28, 2015

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1.0 Introduction

On November 12-15, 2013, representatives from the U.S. Environmental Protection Agency, Region 5 Water Division performed a Clean Water Act National Pollutant Discharge Elimination System (NPDES) permit Compliance Evaluation Inspection (CEI) at Alton Steel, Inc. (ASI) in Alton, Illinois. The purpose of the inspection was to evaluate the facility's compliance with its current NPDES permit and to follow up on citizen concerns that there was ongoing pollution in an unnamed creek (referred to as Miami Creek by ASI employees), tributary to one of ASI's NPDES storm water outfalls that flowed through ASI's property. This CWA CEI was part of a larger multimedia inspection of the facility that is scheduled to take place later in 2014 (took place on August 25-28, 2014). The inspection included an opening conference, site tour, facility process overview, a discussion of storm water discharges from the facility, a site visit around the facility perimeter and the areas within the facility that can come into contact with storm water, a site visit to ASI's wastewater treatment plant (WWTP), compliance sampling at ASI's three NPDES outfall locations, and a closing conference. The object of this report is to summarize the inspection and document the level of compliance with the Clean Water Act by Alton Steel, Inc. Appendix A of this inspection report also documents any additional findings and observations made during EPA inspection of the ASI facility on August 25-28, 2014. The findings of both inspections is included within Section 5.0

2.0 Background

ASI began operation in 2003 on the former Laclede Steel site. Laclede Steel operated at this same site beginning in 1911 until ceasing production in 1998. Laclede Steel processed scrap steel either using open-hearth furnaces, prior to 1962, and then electric arc furnaces (EAF). In 2001, Laclede Steel entered bankruptcy and was re-incorporated as ASI. Laclede Steel's bankruptcy agreement included addressing any prior environmental issues associated with approximately 90 years of steel production through a Resource Conservation and Recovery Act (RCRA) corrective action agreement. This agreement allowed for the continued operation of the

site while the open-pond process water transfer system to the waste treatment plant was addressed. Currently, ASI produces 250,000 tons of steel annually, specializing in special quality bar (SBQ) production. ASI employs 300 workers at its Alton, IL location. At the time of the inspection in November 2013, ASI was doing about 9 "melts" or steel production runs a day, depending on demand. ASI wastewater processing includes a NPDES permitted wastewater treatment plant (Outfall 001) for process water that is not able to be recycled. This NPDES permit also requires ASI to monitor, sample at two storm water outfalls (Outfall 200 and 400), and develop a Storm Water Pollution Prevention Plan (SWPPP) for the areas tributary to the storm water outfalls. ASI's site is approximately 400 acres in total. Residential areas located to the northwest of the ASI facility are considered to have potential Environmental Justice (EJ) concerns.

2.1 Opening Conference

On Monday, November 12th, 2013 at 2:30 pm, EPA and IEPA inspectors made entry on to the site for this unannounced inspection. Toni Paulus and Steve Meyer represented ASI during the opening conference. All participants from EPA presented their inspector credentials to the ASI representatives at the beginning of the inspection. EPA inspectors explained the preliminary inspection plan and the anticipated activities for the inspection. A copy of ASI's process diagram of the steel operations and of the wastewater treatment plant was obtained. After the opening conference was concluded, a preliminary walk-through of ASI steel production operation and the wastewater treatment plant was conducted. EPA inspectors also looked at both NPDES permitted storm water outfalls and took pictures during the walkthrough.

2.2 Inspection Activities

Each day of inspection began at approximately 8:30 am with a daily opening meeting in a conference room within ASI administrative building with either Toni Paulus or J. Kelly. On the first full inspection day, Wednesday, November 13th, a thorough inspection of ASI's wastewater treatment plant was performed and water samples at each of ASI's NPDES permitted outfalls were obtained. On the second full inspection day, Thursday November 14th, EPA inspectors did a walk-through of the unnamed creek that flows through the northeast portion of the site to Outfall 200. EPA performed a walk-through of ASI storm sewers the near area that is delineated as tributary to Outfall 400 and conducted a file review of relevant documentation, including the SWPPP. On the final day of the inspection, Friday November 15th, EPA investigated the southern border of the ASI facility and the open air steel bloom storage area outside of the Electric Melt Shop. ASI representatives were present with EPA and IEPA inspectors on every portion of the inspection.

3.0 Facility Description

ASI is a non-integrated steel mill (mini-mill or secondary steel producer) that melts down strap steel to produced steel products. Attachment 2, "ASI Process Flow Diagram", illustrates the steel producing processes of this facility.

All of the processes at the facility either use non-contact cooling water or treat the water that comes into direct contact with the process at its WWTP (see Attachment 3). All estimated flow rates for water discharges are included on the Water Flow Diagram.

Water used at the facility is obtained either from the American Water Works Company or is re-used process water. Some water is occasionally supplied by withdrawals from an operating groundwater well on the facility property.

3.1 Facility Process Description

Figure 1 – ASI Facility Layout

Below is a detailed description of each major facility water-related process within ASI's operation:

- **Electric Melt Shop (EMS)**
  The Electric Melt Shop includes an electric arc furnace (EAF) that uses direct current (DC) to heat and melt a combination of scrap steel in a ceramic ladle (each individual combination is called a "melt") depending on the type being produced. The EAF uses non-contact cooling water and has two cooling towers associated with the process. Water is captured throughout the process and used as much as possible. A baghouse is used to catch any dust, particularly K061 flute dust, which is considered a hazardous waste.

- **Ladle Furnace**
  Depending on the type of steel being produced, ASI may need to re-heat the melt or add additional chemicals to the melt. The ladle furnace is used in these circumstances to achieve the desired correct internal temperature and chemistry. The ladle furnace

uses non-contact cooling water and has one cooling tower associated with the process. A baghouse is used to catch any dust, particularly K061 flute dust which is considered a hazardous waste.

- **Continuous Casters**
  After the initial heat provided by the EAF and/or the ladle furnace, the melt then moved to the continuous casters. The continuous casters automatically form the molten steel into the appropriate shape and size and then send the steel down a set of rollers. A spray water system is operated in the continuous caster to cool the newly formed steel blooms. This is considered contact water; it is collected in a pit below the continuous caster and reused. Pieces of the steel, or scale, fall off during the cooling spray process and are collected in the pit. Oil from the rollers also is collected within the pit. This pit is emptied of scale on an as-needed basis.

- **14-Inch Mill**
  The 14-inch mill takes finished steel blooms from the continuous casters and produces either steel billets or bars. This is accomplished by re-heating the blooms and rolling them out into 14-inch steel bars. Cooling water is used in the rolling process and this water is gathered in a pit below. Scale and oil from this process can also be deposited in the pit. The pit is vacuumed out every four years and the sludge gathered is processed by Stein Mill Services. ASI uses a cooling tower, an oil collection baffle, and a scale drag to recycle the water from the pit to be re-used within the 14-inch Mill process. In some circumstances, the water from the cooling tower and the pits can be pumped directly to the water lagoon system.

- **Lagoon Water System**
  Steel process wastewater that is unable to be recycled back into operations, from both continuous caster and the 14-inch Mill, is pumped to a series of open air lagoons and ponds on the south boundary of ASI property. ASI representatives described that the lagoon water system is covered within ASI's Resource Conservation and Recovery Act (RCRA) corrective action agreement, named Solid Waste Management Unit (SWMU) #5. During EPA's inspection, the recovery of hazardous wastes was on-going. A chemical drum, labeled as containing PCBs, was left out near the lagoons with no secondary containment or required records (Photo PB120042). All of the steel process water and any storm water that enters the lagoon water system receives treatment at ASI's wastewater treatment plant.

3.2 Water Treatment Plant

ASI employs two certified Class K industrial wastewater operators, Bob Brundy and Dallas Moore, to run ASI's wastewater treatment plant. EPA inspectors conducted a quick walk-through of the wastewater treatment plant on the first day of the inspection and a more detailed examination on the second day of the inspection. Dallas Moore and Jennane Kelly represented ASI during the second inspection of the wastewater treatment plant. EPA inspectors observed the storage of NPDES compliance water samples and saw each process of the wastewater treatment plant during the second day of the inspection.

The treatment process wastewater is stored in the lagoon water system before being pumped to a pond outside of the wastewater treatment plant. This pond acts as a holding pond and allows ASI the flexibility in filling up this pond when the wastewater treatment plant is not discharging or for storm water storage. From the pond, the wastewater influent, consisting of process water and storm water, is pumped through screens, allowing for grit removal. During this step, there is also a baffle that allows for oil to be skimmed off. Oil is stored near the influent pump station and is disposed of as-needed. The next step in the treatment process is first stage reactor tanks. Lime is added here in order to raise the pH of the wastewater. The raised pH causes metals within the wastewater to precipitate out. The wastewater then flows into the aeration tank. The wastewater is well mixed and aerated in this step of the treatment process. ASI operators also add KlarAid IC1188, a coagulant which consolidates solids and metal particles so that they will continue to settle out of the wastewater. After the aeration tank, the wastewater flows into a second stage tank and then into a final mix tank. A polymer, Polyfloc AE1123, is added in the final mix tank to promote flocculation. ASI wastewater treatment operators mix and control the amount of lime slurry added to first stage reactor tanks. The other two chemicals' feed rate is fixed by the chemical vendor. The next step in the process, after the final mix tank, is that the wastewater is routed into two clarifiers. The clarifiers, each having 1 million gallons of volume, is where most of the solids and metal particles settle out of the wastewater. Sludge forms on the bottom of the clarifiers during the settling process and is pumped without any treatment to a dry pond northeast of the wastewater treatment plant. After the wastewater receives treatment at the clarifiers, the treatment plant effluent is discharged directly to the Mississippi river. ASI's sampling point is contained within a parshall flume right before discharge; photo PB130088 shows this sampling point. Attachment 4, "Alton Steel Inc. Outfall 001 WWTP Flow Diagram," illustrates the interaction of each process of the WWTP.

ASI WWTP staff takes NPDES compliance samples and performs the pH and chlorine testing within its on-site lab. The rest of the effluent parameters testing is performed by Tek Lab, located in Collinsville, Illinois. Tek Lab provides the sampling bottles needed by ASI to take the necessary samples. During the inspection, EPA observed that ASI used the following testing equipment within their laboratory:

- EX Stik Chlorine Meter CL200 – Chlorine tests
- Melter Toledo pH transmitter 210DeFI – pH tests

It should be noted that ASI also operated an automated pH meter located near the parshall flume that displayed real-time pH readings. EPA inspectors observed that this pH read-out was off from the sampled results (approximately 0.4-0.5 lower). It did not appear that ASI used the results from this pH meter for compliance reporting.

3.3 NPDES Permit

ASI operates under a NPDES permit (permit number IL0000612), issued by the IEPA. The facility's permit became effective on September 1, 2013 and will expire on August 31, 2018. It regulates Outfall 001 (treated process water to Mississippi River), Outfall 400 (storm water runoff from northwest property), and Outfall 200 (storm water runoff from Scrap Yard). ASI's NPDES permit contains 17 special conditions; a number of these special conditions are relevant to this inspection. Special Condition 2 contains a requirement that the treated wastewater effluent cannot exceed a pH level of 10. Special Condition 3 describes the mixing criteria for

thermal discharges. Special Condition 4 allows ASI to be exempt from including storm water tributary areas that flows to its wastewater treatment plant within its Storm Water Pollution Prevention Plan (SWPPP). Special Condition 8 requires that the wastewater treatment plant be under the supervision of a Class K industrial wastewater operators. Special Condition 9 requires that any discharge from Outfalls 200 and 400 be free from process or other wastewater discharges. Special Condition 13 outlines how ASI can apply a storm water credit for additional mass loading for Outfall 001 during wet weather events. Special Condition 15 includes additional details on the sampling procedure for the two NPDES storm water Outfalls 200 and 400. Special Condition 17 requires ASI to develop a SWPPP for areas with storm water not tributary to its wastewater treatment plant.

3.4 Storm Water Site Visit

On the third and last day of EPA's inspection of ASI, EPA personnel conducted three separate storm water site walk-throughs to document ASI's compliance with its SWPPP. The first walk-through occurred along Miami Creek northwest of ASI's EAF. EPA inspectors began near the EAF baghouse and observed what appeared to be K061 dust potentially flowing into Miami Creek (photo PB140134). There also appeared to be a cooling tower pump that was spraying water on the east side of the EAF baghouse (photo PB140124). EPA and ASI representatives then began walking Miami Creek from the portion of the creek north of the ASI property to Outfall 200. EPA inspectors noted a large amount of refuse, in and along the creek with steel slag and scrap steel being stored near Miami Creek. At Outfall 200, EPA inspectors noticed an opaque, cloudy appearance of the creek. This cloudy appearance started approximately 200 feet upstream of Outfall 200 and remained for several hundred feet past Outfall 200. EPA took pH measurements in the creek where the cloudiness appeared in Miami Creek, just downstream of a culvert on ASI property. The water in Miami Creek in this area had a pH of 12.4 (photo PB140156). It also appeared that a white solid substance had precipitated out of the creek as it flowed to and through Outfall 200. The pH at Outfall 200 was sampled and determined to be 9.9.

The second storm water site walk-through was conducted within the area upstream of Outfall 400 by EPA inspectors Jeremy Deyoe and Jonathan Moody along with an ASI official. EPA inspectors here focused on where the storm sewer collection system in this area was and whether it drained to the wastewater treatment plant or to the unnamed creek that flows to Outfall 400. After this inspection, EPA received additional information from ASI concerning the storm sewer collection system in this area and followed up on this during the next inspection at ASI conducted on August 25-28, 2014 (Attachment A).

The final storm water site walk-through focused on the area along ASI's south property border. This area included finished steel product storage and a gravel road used for transporting the finished steel product. EPA and ASI representatives walked along a roadside ditch that appeared to flow to Outfall 200, but in fact did not join with Miami Creek. EPA inspectors looked for evidence of potential storm water runoff from ASI property to this roadside ditch and identified some signs of minor erosion. (Photos PB150210 & PB150216).

3.5 Site Contractors

ASI uses several contractors for various activities performed throughout the facility.

- Stein Mill Services – process sludge gathered within the EMS and 14-inch mill and stag steel sorting
- Tex Lab – performs water sampling needed for NPDES permit
- Eagle Tubular Products Inc.

4.0 Sampling Description

During this inspection, water samples were collected at NPDES Outfall 001, Outfall 200, and Outfall 400 on Wednesday, November 13th. The samples taken at each of these locations were grab samples from ASI's typical compliance sampling point. An additional grab sample was taken on Friday, November 15th near the storage of finished steel blooms. EPA inspectors observed a cloudy, opaque discharge from a pipe that appeared to be pumped from ASI's continuous caster/steel bloom storage pit, southeast of the EMS. At the time of sampling, only a drip was present from the pipe (Photo PB150232), however there was notable ponding downstream of the pipe (Photo PB150234).

Laboratory analysis for the sampling was performed by the USEPA, Region 5 Central Regional Laboratory (CRL) in Chicago, Illinois

Figures 2, 3, and 4 identify the locations where all four samples were taken. Each sample's holding time, preservations, and container requirements were done in accordance with CRL requirements. Sampling field blanks using deionized water and all sampling equipment was properly calibrated to ensure quality control. Spilt samples were provided to ASI for all samples taken expect for those taken at Outfall 200. These samples were obtained on public right-of-way (Chessen Lane). Table 1 describes in more detail the specifics on each sample taken and Table 2 describes the procedure and testing method used to sample for each parameter.

Figure 2 – ASI Wastewater Discharge - Outfall 001 & ASI Storm Water Discharge – Outfall 400

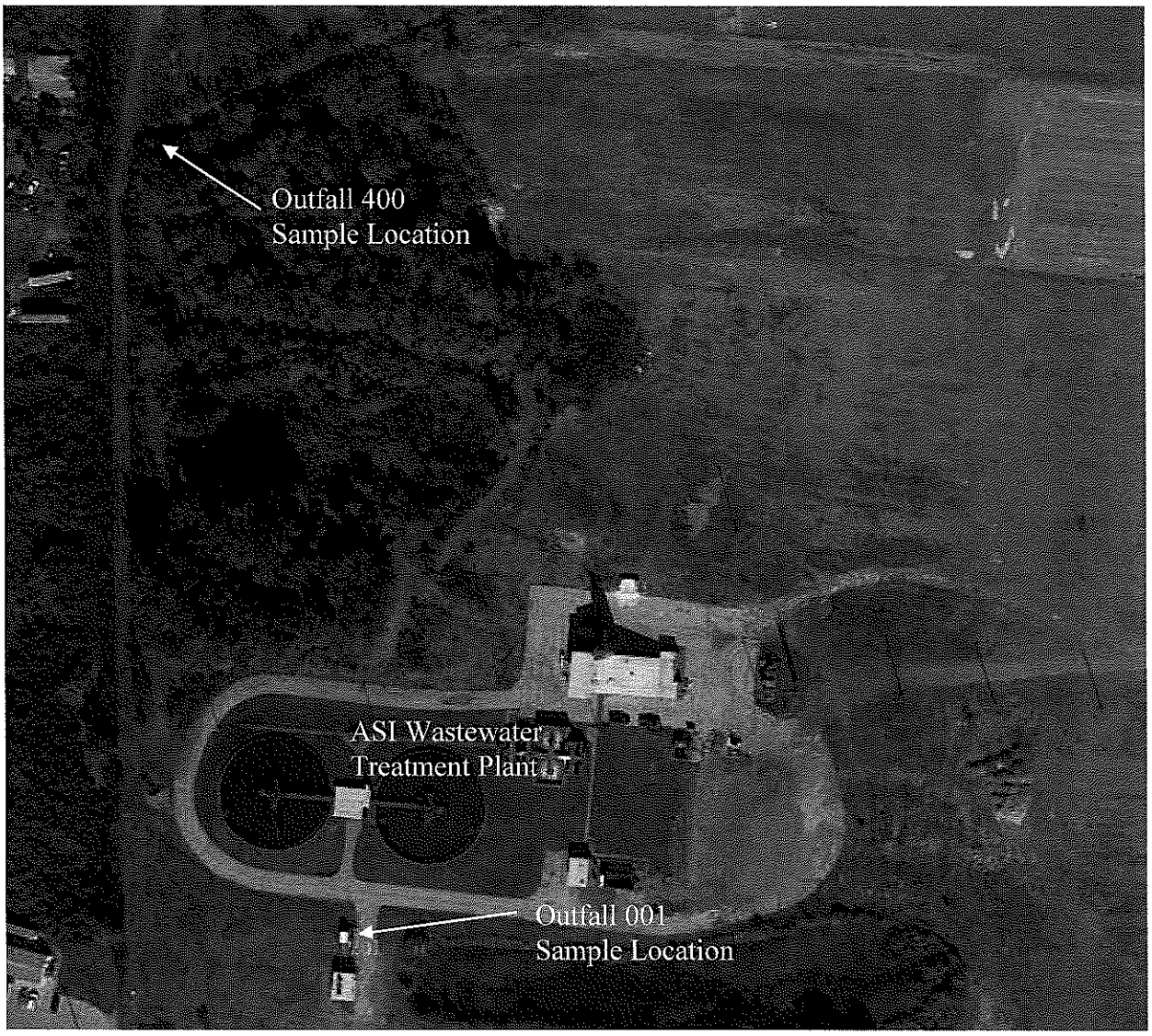


Figure 3 – ASI Storm Water Discharge - Outfall 200

Figure 4 – ASI Steel Storage Area Discharge

TABLE 1 - ASI – USEPA Sample Collection Information				
Sample No.	**Sample Type**	**Collection Date Time**	**Sample Description**	**Sampling Method**
S01	grab	11/13/13 12:00 pm	**NPDES Outfall 001** – Samples were collected from the representative wastewater treatment plant sampling point, used by ASI employees for NPDES compliance monitoring, prior to discharge to the Mississippi River. Samples were collected for TSS, total metals, oil and grease, PCBs, and anions analyses.	A pole with a glass jar attached was used to collect the grab samples from the parshall flume at ASI's WWTP. Sample was poured from the glass container into the sample containers except for oil and grease. The oil and grease sample was collected directly into the glass sample container.
S02	grab	11/13/13 1:00 pm	**NPDES Outfall 400** - Samples were collected from the representative sampling point used by ASI employees for NPDES compliance monitoring. Samples were collected for total metals and oil and grease analyses.	A pole with a glass jar attached was used to collect the grab samples from the unnamed creek before flow off of ASI's property through a culvert. Sample was poured from the glass container into the sample containers except for oil and grease. The oil and grease sample was collected directly into the glass sample container.
S03	grab	11/13/13 1:55 pm	**NPDES Outfall 200** - Samples were collected from the representative sampling point used by ASI employees for NPDES compliance monitoring from the Chessen Lane right-of-way. Samples were collected for TSS, total metals, oil and grease, PCBs, and anions analyses.	A pole with a glass jar attached was used to collect the grab samples from Miami Creek before flow off-site through a culvert under Chessen Lane. Sample was poured from the glass container into the sample containers except for oil and grease. The oil and grease sample was collected directly into the glass sample container.
S04	grab	11/15/13 9:55 am	**Discharge off Steel Bloom Storage Area** - Samples were collected from a potential industrial/storm water discharge from process water that appeared to be pumped from a below grade steel bloom storage area. Samples were collected for total metals for analysis.	The sample jar was positioned to capture flow directly from to an elevated pipe. From this elevated pipe, the discharge had ponded in a low point southeast of the EMS. Only a total metals sample was taken.
B01	grab	11/13/13 12:14 pm	**Field Blank Sample**– Blank Samples for TSS, total metals, oil and grease, PCBs, and anions analyses were prepared after sampling for S01.	Blanks were prepared by pouring the blank water (distilled deionized water from the Region 5 Central Regional) into the appropriate sample containers.
B02	grab	11/15/13 10:00 am	**Field Blank Sample**– Blank Samples for total metals analysis were prepared after sampling for S04.	Blanks were prepared by pouring the blank water (distilled deionized water from the Region 5 Central Regional) into the appropriate sample containers.

TABLE 2 – Sample Bottle, Method, and Preservative Information			
Sample Bottle Type:	**Analyses Performed:**	**Analysis Method Used:**	**Sample Preservative Used:**
1 L glass wide mouth bottle	pH	N/A	None – analyzed in field
1 L Polyethylene bottle	Total Suspended Solids	CRL Standard Operating Procedure AIG018, Revision No: 4.0 (Standard Methods 2540 D).	Cool at <6°C
500mL bottle Polyethylene or glass	Total Metals	CRL Standard Operating Procedure METAL 003, Revision 6.12, EPA ICP Method 200.7	HNO_3 to pH<2
1 L glass wide mouth clear bottle	Oil and Grease	CRL Standard Operating Procedure GC030: Rev 7 (Standard Method 1664)	H_2SO_4 to pH<2, Cool at <6°C
1 L glass bottle, narrow mouth, amber	Pesticides/PCBs	CRL Standard Operating Procedure GC002: Rev 4	Cool at <6°C
250 mL Polyethylene or glass	Anions (Bromide, Fluoride, Chloride, and Sulfate)	CRL Standard Operating Procedure AIG045A, Revision No. 10. (Reference Method EPA 300.0)	Cool at <6°C

4.1 Sampling Results

Below in Table 3 are the compiled results of the sampling conducted on November 13 and 15, 2013 at ASI. Sampling was performed by Jeremy Deyoe, USEPA Region 5, Water Division; Thomas Mendez, USEPA Region 5, Water Division; Keith Middleton, USEPA, Region 5, Water Division and Johnathan Moody USEPA Region 5, Water Division. All pH sampling was performed by Chris Monke of Illinois EPA. All samples were tagged, placed in a cooler and packed with ice. The samples that were taken on November 13th were sealed in coolers with custody tags, and mailed to USEPA, Region 5 Central Regional Laboratory. Samples taken on November 15th were sealed in coolers with custody tags and later hand delivered to the CRL.

TABLE 3 - SUMMARY OF USEPA WASTEWATER SAMPLING RESULTS FOR ASI, ALTON, IL (Results in mg/l unless otherwise indicated)						
Parameter (all in mg/L unless otherwise noted)	**Outfall 001 – WWTP S01**	**Outfall 400 Storm Water Outfall S02**	**Outfall 200 Storm Water Outfall S03**	**Discharge From Steel Bloom Storage S04**	**Field Blanks Taken at WWTP B01**	**Field Blanks Taken at Steel Bloom Storage B02**
Date Time	11/13/13 12:00 pm	11/13/13 1:00 pm	11/13/13 1:55 pm	11/15/13 9:55 am	11/13/13 12:14 pm	11/15/13 10:00 am
Total Suspended Solids	U	X	911	X	U	X
pH	8.7	8.6	9.9	≈ 11-13	X	X
Fluoride	1.63	X	1.36	X	U	X

Chloride	57.0	X	98.2	X	U	X
Sulfate as SO4	129	X	74.3	X	U	X
Bromide	U	X	0.21	X	U	X
Oil & Grease	1.53	U	1.91	X	U	X
Total Metals						
Aluminum	0.310	0.226	0.515	1.09	U	U
Antimony	U	U	U	U	U	U
Arsenic	U	U	U	U	U	U
Barium	0.0441	0.0260	0.0895	0.135	U	U
Beryllium	U	U	U	U	U	U
Boron	0.380	0.487	0.355	0.367	U	U
Cadmium	U	U	U	U	U	U
Calcium	77.3	37.4	113	125	U	U
Chromium	U	0.00688	0.0208	0.0125	U	U
Cobalt	U	U	U	U	U	U
Copper	U	U	U	U	U	U
Iron	0.524	0.269	0.860	U	U	U
Lead	U	U	0.0389	U	U	U
Lithium	0.0767	0.0425	0.0446	0.00613	U	U
Magnesium	22.2	16.5	21.7	U	U	U
Manganese	0.0708	0.113	0.162	U	U	U
Molybdenum	0.162	0.0207	0.0267	0.0532	U	U
Nickel	0.00696	U	U	U	U	U
Potassium	8.16	11.9	14.2	22.1	U	U
Selenium	U	U	U	U	U	U
Silver	U	U	U	U	U	U
Sodium	49.8	62.7	61.8	58.2	U	U
Strontium	0.195	0.158	0.256	0.531	U	U
Thallium	U	U	U	U	U	U
Tin	U	U	U	U	U	U
Titanium	U	U	0.0116	U	U	U
Vanadium	U	0.0124	0.0128	0.0307	U	U
Zinc	0.0354	U	0.0834	U	U	U
PCBs						
PCB-1016	U	X	U	X	U	X
PCB-1221	U	X	U	X	U	X
PCB-1232	U	X	U	X	U	X
PCB-1242	U	X	U	X	U	X
PCB-1248	U	X	U	X	U	X
PCB-1254	U	X	U	X	U	X
PCB-1260	U	X	U	X	U	X
PCB-1262	U	X	U	X	U	X
PCB-1268	U	X	U	X	U	X

U - below detection limit
X –was not tested for

5.0 Discharge Monitoring Reports (DMRs) review

EPA inspectors reviewed ASI DMR data to account for the forty-six NPDES permit effluent violations at ASI's wastewater treatment plant identified before the inspection. Thirty-six of these violations were mass load violations that did not consider the storm water credit calculations done by ASI. Once the storm water credit is applied, these exceedances are no longer considered permit violations. Ten other permits violations still did occur; two total suspended solids exceedances occurring in 2010, one residual chlorine exceedance occurring in 2009, and seven residual chlorine exceedances occurring in 2011. ASI officials explained that the seven residual chlorine exceedances occurred due to additives used in the treatment process at the wastewater treatment plant. After the polymer used in the treatment process was changed, the residual chlorine violations ceased.

5.1 SWPPP review

A review of the SWPPP, dated October 2013, was conducted to determine if it complied with the requirements of Special Condition 17 of the NPDES permit. The following items were found to be of concern during the review from both EPA inspections:

- The finalized SWPPP should be signed by the responsible ASI official.
- It is unclear if the erosion control measures listed in Table 1 are designed to the 25 year, 24-hour storm event, as required in the NPDES permit.
- The SWPPP topographic map (Part E.1) contains hard to read contours, the map does not show the roadside ditch on ASI's southern property boundary. It does not appear that all of the surface water bodies are listed, and it may not indicate all of the potential storm water discharge points from ASI's site.
- The SWPPP site map (Part E.2) needs to be updated to show the paved and building areas as hatched areas and not lines. The K061 baghouse area should be labeled along with any other dust generation areas. Areas subject to potential soil erosion should be labeled on the map, and any other item omitted from the requirements listed in Special Condition 17, Section E2 of ASI's NPDES permit.
- Outfall 200 is characterized as being a former slag storage area. EPA observed slag still being stored (PB140147) there and scrap metal is stored (PB140149) in the Outfall 200 drainage area. The storage of these materials may result in a storm water discharge associated with industrial activity (40 CFR 122.26(b)(14)). Discharges to Miami Creek or off-site from these areas could result in the violation of Special Condition 9 of ASI's NPDES permit.
- Lack of inspection documentation for inspections of storm water drainage areas (outside of the NPDES permitted outfalls) as noted within the preventative maintenance section of Table 1 of the SWPPP.
- Scrap steel was located near Miami Creek, which is different than what was specified in Table 1 of the SWPPP.

- EPA inspectors observed trash in drainage ditches, including the Miami Creek and in the drainage area to Outfall 200 (photo PB140143).
- ASI's SWPPP did not describe the appropriate elements of ASI's Spill Prevention Control and Countermeasures Plan, as required in Section J within Special Condition 17 of ASI's NPDES permit.
- During the water sampling conducted on the second day of the inspection, EPA inspectors noticed a culvert that could potentially drain storm water runoff off-site (PB130096) west of ASI's WWTP. It appeared that this area could have storm water runoff that would enter the pipe and discharge off-site to the property west of ASI. In general most of ASI's site is graded to drain south. ASI's SWPPP did not identify any storm water discharge points off of ASI site from this location or any storm water discharge points along ASI's south property border.
- Lack of details regarding the SWPPP employee training offered and any subsequent record keeping (i.e. who took what training course).
- ASI's quarterly inspection reporting appears not to meet all ASI's NPDES permit requirements in Special Condition 17 pertaining to the requirements set forth in Section H.2 including documenting of all observation categories as listed in the permit.
- The visual observations of ASI staff at Outfall 200 within its SWPPP quarterly inspection reports do not match EPA observations; ASI staff indicated that the discharges were clear.
- ASI's annual inspection reporting appears not to meet all ASI's NPDES permit requirements in Special Condition 17 pertaining to the requirements set forth in Section I, including verifying all the elements of SWPPP are accurate.

6.0 Findings and Observations

Several areas of concern and potential violations were observed at the ASI facility. The following observations were made during either the November 12-15, 2013 CWA inspection and/or the August 25-28, 2014 multi-media inspection. A tabulation of those concerns are presented here:

- As determined in both inspections, ASI's pumping of sludge from its wastewater clarifiers to low area northwest of the wastewater treatment plant may be considered a bypass (as defined within ASI's NPDES permit and in 40 CFR 122.41 (m)). Sludge needs to be disposed of properly.
- Sampling results indicate that Outfall 001 and 200 have elevated concentrations of iron.
- Sampling results indicate that Outfall 001, 200, and 400 have elevated concentrations of manganese.
- Sampling results indicate that Outfall 200 and 400 have high concentrations of sodium, potassium, magnesium, and calcium.

- EPA inspectors observed a cloudy and discolored discharge from a point on ASI's property within Miami Creek upstream Outfall 200. This cloudiness continued through Outfall 200 and existed several hundred feet downstream before dissipating. Sampling results indicate an elevated total suspended solids result that support this observation. Discharges of this appearance from Outfall 200 may not meet the State of Illinois water quality standards, as defined in 35 IAC 302.203 and/or Special Condition 9 in ASI's NPDES permit.
- EPA inspectors observed a cloudy discharge from a pipe that appeared to be pumped from ASI's continuous caster/steel bloom storage pit. Sampling results from both inspections indicated a pH value exceeding 11.0 from the samples taken from this location.
- Lack of good housekeeping in and around the unnamed creek (Outfall 400) and Miami Creek (Outfall 200).
- Lack of good housekeeping/maintenance for ASI's wastewater treatment plant clarifiers.
- It appears that it is possible that K061 dust, leaking at the bottom of the baghouse, can reach Miami Creek via storm water runoff.
- On-going clean-up of SWMU #5 and the effects on the CWA compliance
- Noted SWPPP concerns in Section 5.2 of this inspection report.

7.0 List of Attachments

- Attachment 1 – Site Visit Photolog
- Attachment 2 – Flow Diagram Steel Production Facility
- Attachment 3 – Water Flow Diagram
- Attachment 4 – Outfall 001 WWTP Flow Diagram
- Attachment 5 – List of Documents Received from ASI
- Attachment A – EPA Inspection Report for the ASI inspection that took place on August 25-28, 2014.
- Attachment A1 – Site Visit Photolog from August 25-28, 2014 inspection

Attachment 1

Alton Steel, Inc.
EPA Inspection August 25-28, 2014
All photos taken by Keith Middleton, Environmental Engineer, U.S. EPA
Camera: Olympus u850SW,S850SW

1: PB120001.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 7:53 AM
Camera Direction: N/A
Description: Camera Equipment used during the ASI inspection.

2: PB120002.JPG

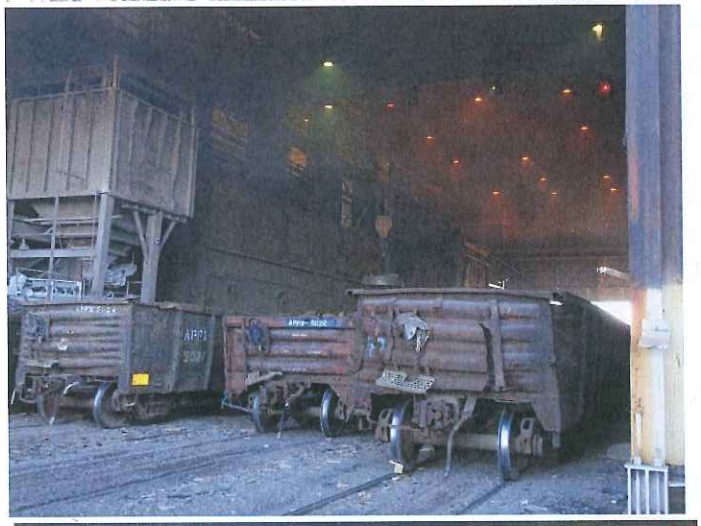
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 2:14 PM
Camera Direction: East
Description: Miami Creek downstream of Outfall 200

3: PB120003.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 2:15 PM
Camera Direction: West
Description: Outfall 200

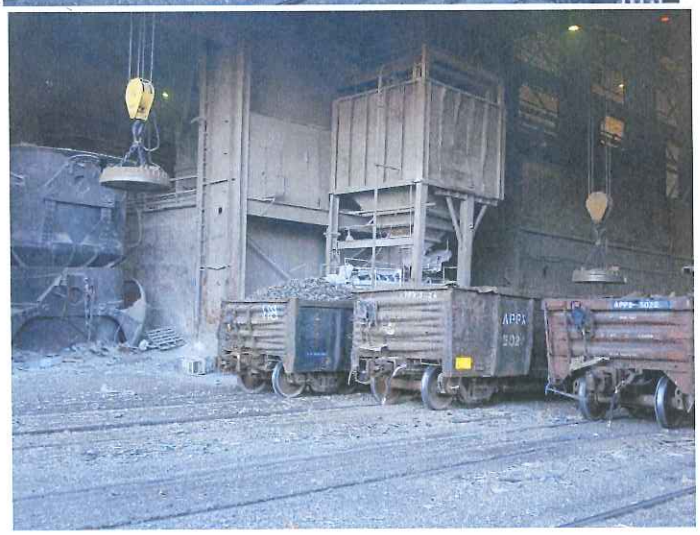
4: PB120004.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 2:16 PM
Camera Direction: South
Description: Unconnected creek south of ASI property along Chessen Lane



5: PB120005.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:16 PM
Camera Direction: West
Description: Scrap unloading area.



6: PB120006.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:17 PM
Camera Direction: Southwest
Description: Scrap unloading area

7: PB120007.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:18 PM
Camera Direction: East
Description: Rail line to bring scrap into building.

8: PB120008.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:19 PM
Camera Direction: North
Description: Pump house and cooling towers

9: PB120009.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:26 PM
Camera Direction: Inside
Description: Ceramic ladle and hoist.

10: PB120010.JPG

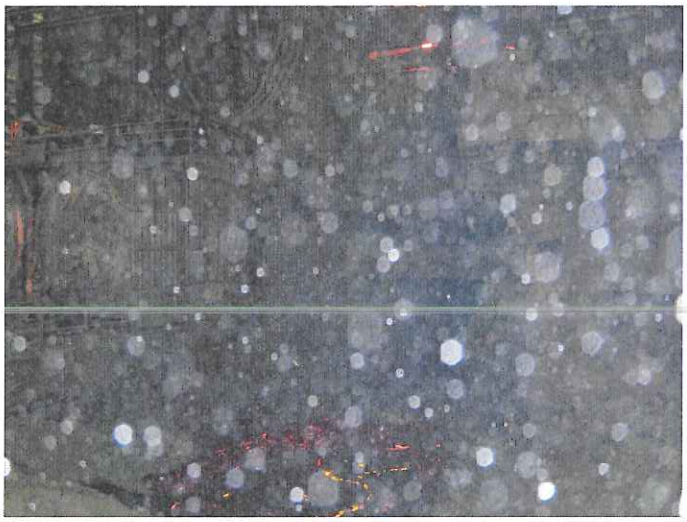
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:27 PM
Camera Direction: Inside
Description: Ceramic ladle

11: PB120011.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:28 PM
Camera Direction: Inside
Description: On-going melt

12: PB120012.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:29 PM
Camera Direction: Inside
Description: On-going melt



13:`PB120013.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:32 PM
Camera Direction: Inside
Description: Error.

14: PB120014.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:33 PM
Camera Direction: Inside
Description: Inside EMS

15: PB120015.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:33 PM
Camera Direction: Inside
Description: Inside EMS

16: PB120016.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:34 PM
Camera Direction: Inside
Description: Inside EMS

17: PB120017.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:35 PM
Camera Direction:
Description: Steel additives used during process

18: PB120018.JPG

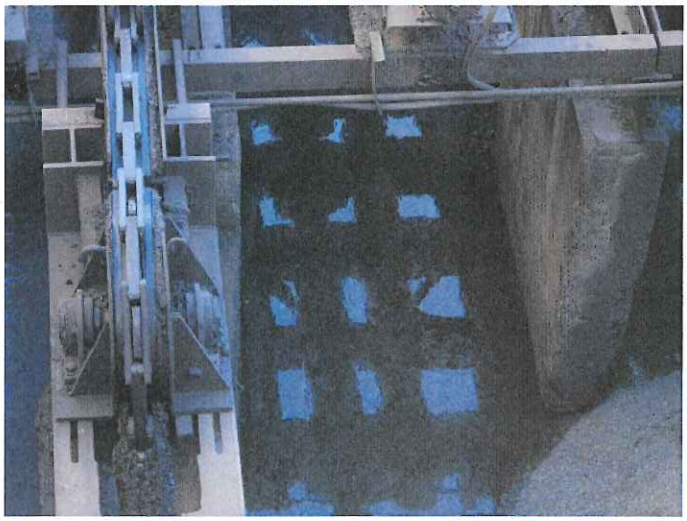
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:36 PM
Camera Direction: West
Description: Material cooling area.

19: PB120019.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:37 PM
Camera Direction: Down
Description: Sheen on water below material cooling area.

20: PB120020.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:38 PM
Camera Direction: Down
Description:Sheen on water below material cooling area.



21: PB120021.JPG

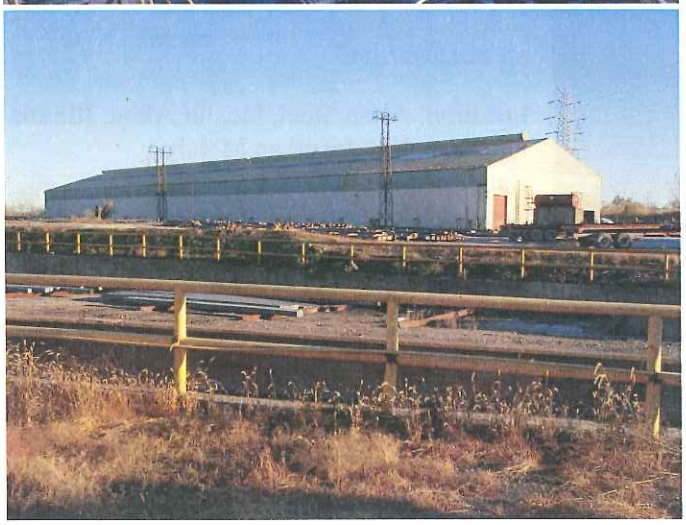
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:38 PM
Camera Direction: Down
Description: Sheen on water below material cooling area.

22: PB120022.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:39 PM
Camera Direction: Down
Description: Location where water was pumped out of cooling area.

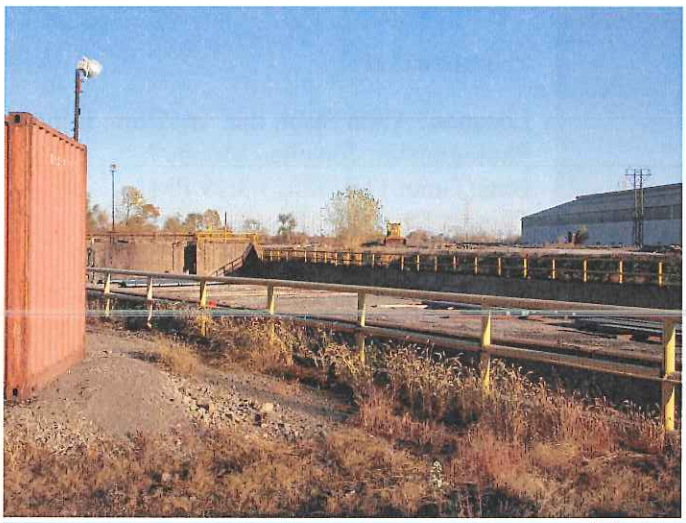
23: PB120023.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:40 PM
Camera Direction: North
Description: Material coming out of caster into cooling area.



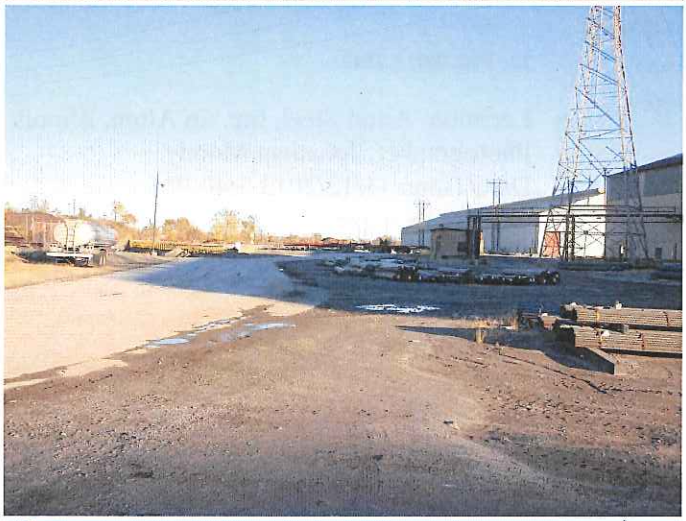
24: PB120024.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:42 PM
Camera Direction: South
Description: Material storage area south of cooling area.



25: PB120025.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:42 PM
Camera Direction: Southwest
Description: Material storage area south of cooling area.



26: PB120026.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:44 PM
Camera Direction: East
Description: Material storage area south of cooling area.

27: PB120027.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:44 PM
Camera Direction: Southeast
Description: Material storage area south of cooling area.

28: PB120028.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:45 PM
Camera Direction: South
Description: Totes in a storage area south and west of the material cooling area.

29: PB120029.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:48 PM
Camera Direction: Inside
Description: Inside the 14" mill.

30: PB120030.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:48 PM
Camera Direction: Inside
Description: Inside the 14" mill.

31: PB120031.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:52 PM
Camera Direction: Inside
Description: Inside the 14" mill.

32: PB120032.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:53 PM
Camera Direction: Inside
Description: Error

33: PB120033.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:53 PM
Camera Direction: Inside
Description: Inside the 14" mill.

34: PB120034.JPG

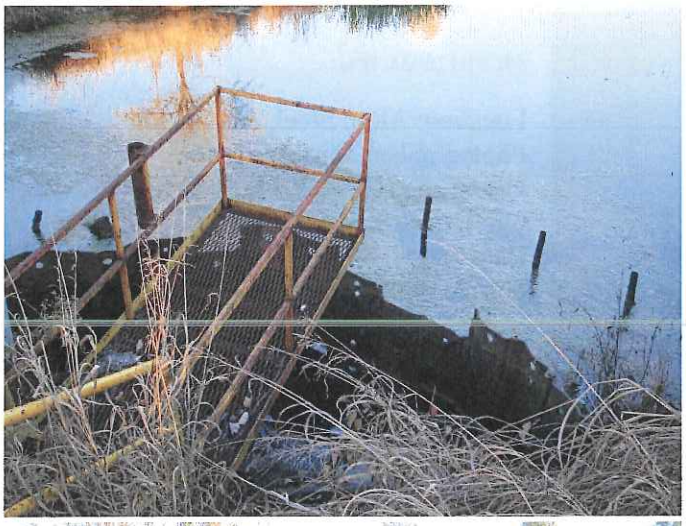
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:56 PM
Camera Direction: East
Description: Sump with running water outside of the west door of the 14" mill.

35: PB120035.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 3:56 PM
Camera Direction: East
Description: West door of the 14" mill. Sump shown in PB120034.JPG is on the right side of this photo.

36: PB120036.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:01 PM
Camera Direction: East
Description: SWMU #5 – Pond near 14" mill.



37: PB120037.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:02 PM
Camera Direction: Down
Description: SWMU #5 – Pond near 14" mill

38: PB120038.JPG

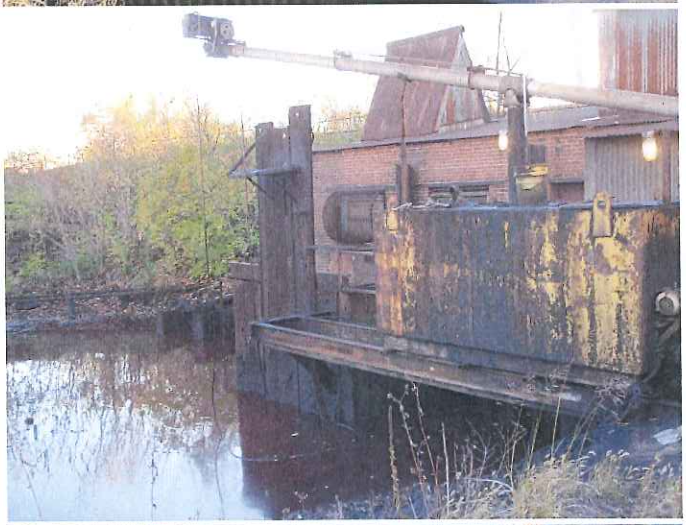
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:04 PM
Camera Direction: South
Description: Hose with running water south of the 14" mill.

39: PB120039.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:05 PM
Camera Direction: North
Description: Upstream connection of the hose shown in PB120039.JPG.

40: PB120040.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:05 PM
Camera Direction: North
Description: Pipe leaking water out of the south side of the 14" mill. Close up of same location as shown PB120039.JPG.



41: PB120041.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:07 PM
Camera Direction: West
Description: Oil skimmer for SWMU #5.

42: PB120042.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:10 PM
Camera Direction: North
Description: PCB drum near SWMU #5.

43: PB120043.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:27 PM
Camera Direction: East
Description:Weir outlet of the surface lagoon.

44: PB120044.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:27 PM
Camera Direction:
Description: Weir outlet of the surface lagoon.

45: PB120045.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:34 PM
Camera Direction: West
Description: Influent tank at the WWTP.

46: PB120046.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:36 PM
Camera Direction: South
Description: Overflow pond and valve at WWTP.

47: PB120047.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:39 PM
Camera Direction: South
Description: Clarifier at the WWTP.

48: PB120048.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:41 PM
Camera Direction: North
Description: Vegetation on the overflow weir at the WWTP clarifier.

49: PB120049.JPG

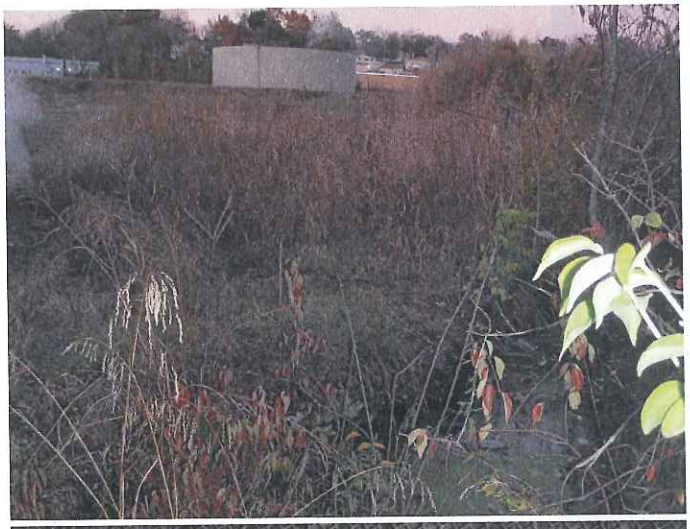
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:43 PM
Camera Direction: West
Description: pH and temperature reading at the final flume.

50: PB120050.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:43 PM
Camera Direction: Down
Description: Final flume.

51: PB120051.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:52 PM
Camera Direction: East
Description: Stormwater Collection at the western propertyline. Compliance point 400.



52: PB120052.JPG

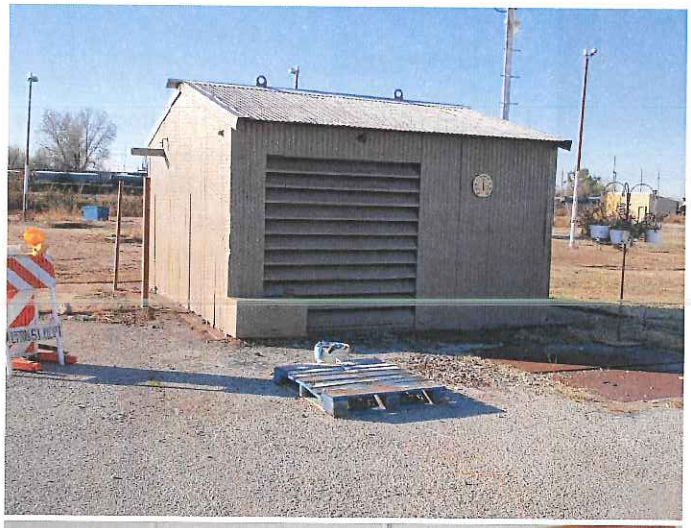
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 4:55 PM
Camera Direction: Northeast
Description: At compliance point 400 looking northeast.

53: PB120053.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/12/2013 5:09 PM
Camera Direction: Down
Description: At compliance point 200.

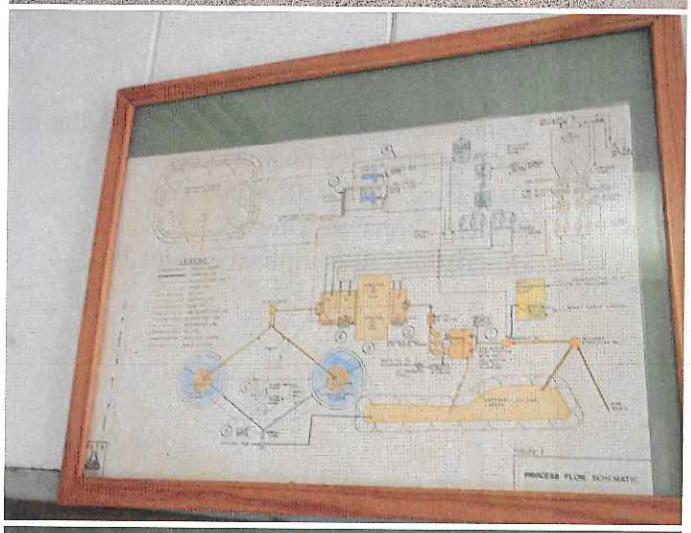
54: PB130054.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:17 AM
Camera Direction: Inside
Description:Sign at main office.



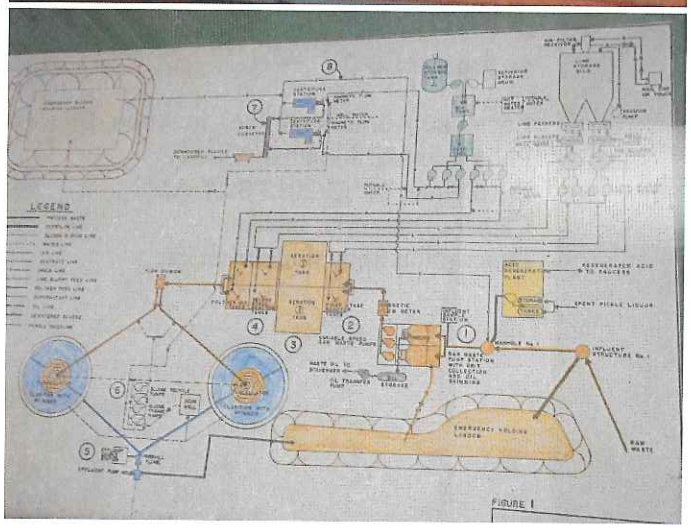
55: PB130055.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:39 AM
Camera Direction: South
Description: Storage at WWTP with thermometer for exterior temperature.



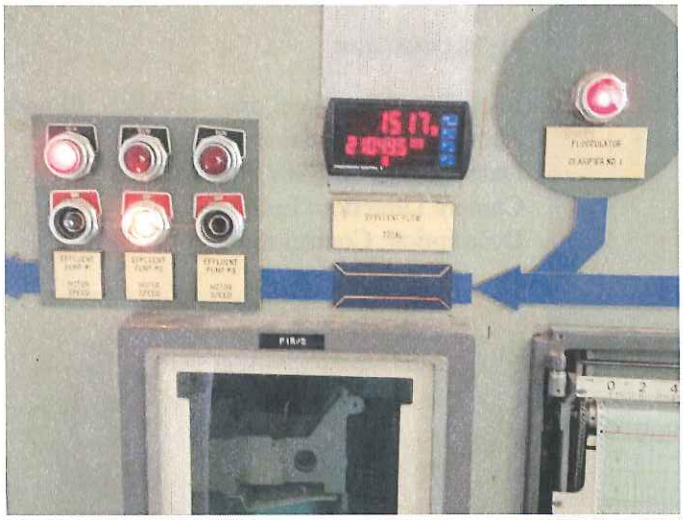
56: PB130056.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:50 AM
Camera Direction: Inside
Description: WWTP Diagram.



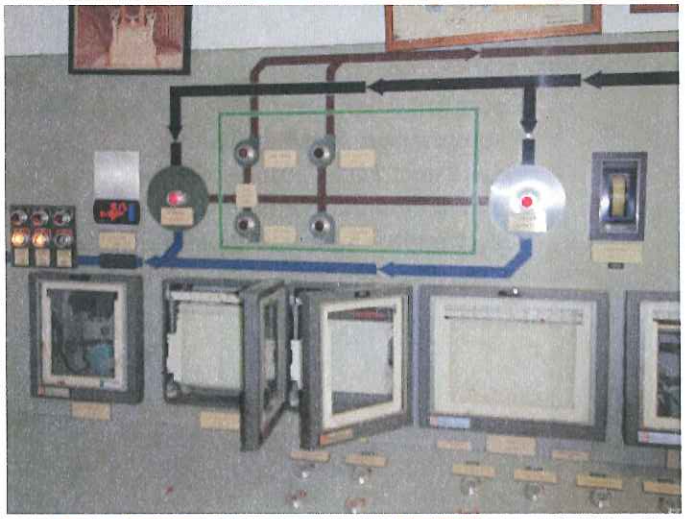
57: PB130057.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:50 AM
Camera Direction: Inside
Description: WWTP Diagram.



58: PB130058.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:53 AM
Camera Direction: Inside
Description: Flow meter in control room at the WWTP.

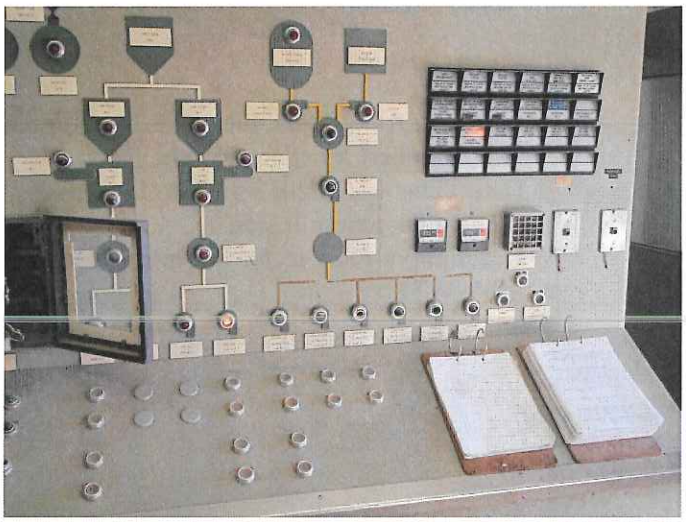


59: PB130059.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:54 AM
Camera Direction: Inside
Description: Control room at the WWTP.

60: PB130060.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:54 AM
Camera Direction: Inside
Description: Control room at the WWTP.



61: PB130061.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:54 AM
Camera Direction: Inside
Description: Control room at the WWTP.

62: PB130062.JPG

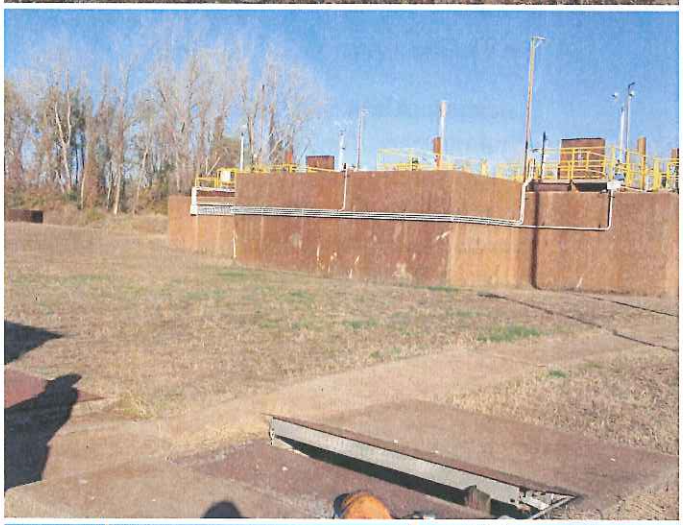
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:54 AM
Camera Direction: Inside
Description: Control room at the WWTP.

63: PB130063.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:56 AM
Camera Direction: West
Description: Wet well meter at the WWTP.

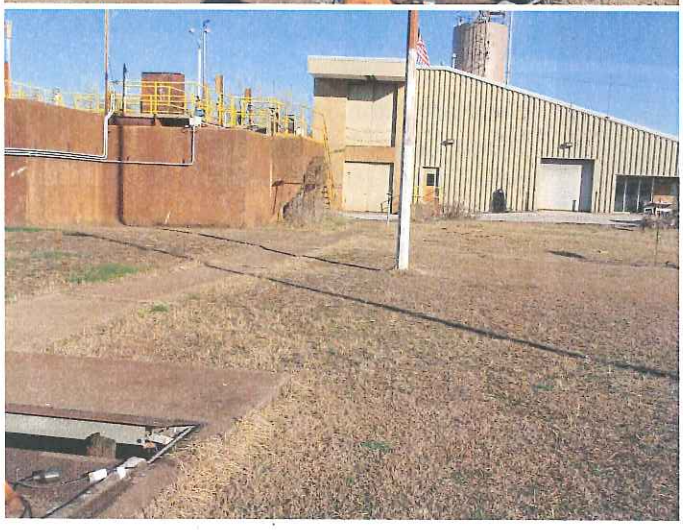
64: PB130064.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:57 AM
Camera Direction: West
Description: Overview of the wet well or influent tank at the WWTP.



65: PB130065.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:59 AM
Camera Direction: Northwest
Description: Reactor tanks at the WWTP.



66: PB130066.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 8:59 AM
Camera Direction: North
Description: Reactor tanks at the WWTP.

67: PB130067.JPG

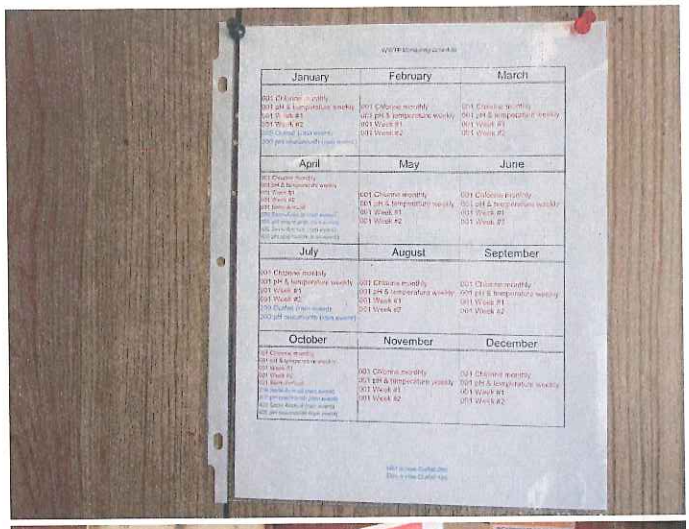
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:04 AM
Camera Direction: Inside
Description: Sampling fridge in WWTP lab.

68: PB130068.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:04 AM
Camera Direction: Inside
Description: Thermometer in the sampling fridge at the WWTP lab.

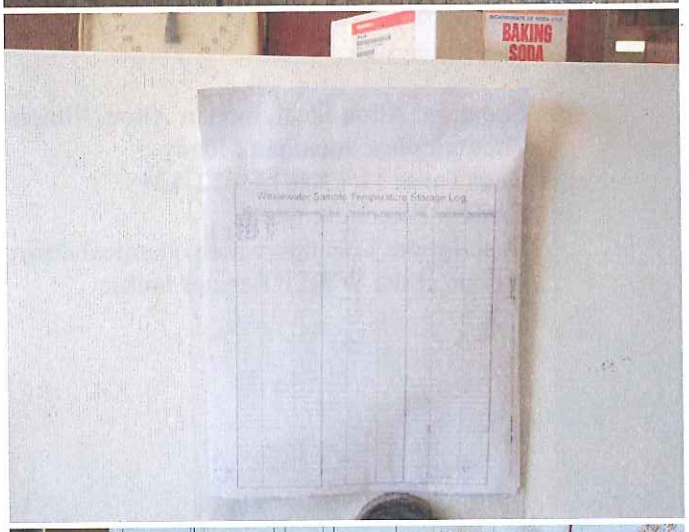
69: PB130069.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:07 AM
Camera Direction: Inside
Description: Sampling bottles and chlorine meter at the WWTP lab.



70: PB130070.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:08 AM
Camera Direction: Inside
Description: Sampling schedule at the WWTP lab.

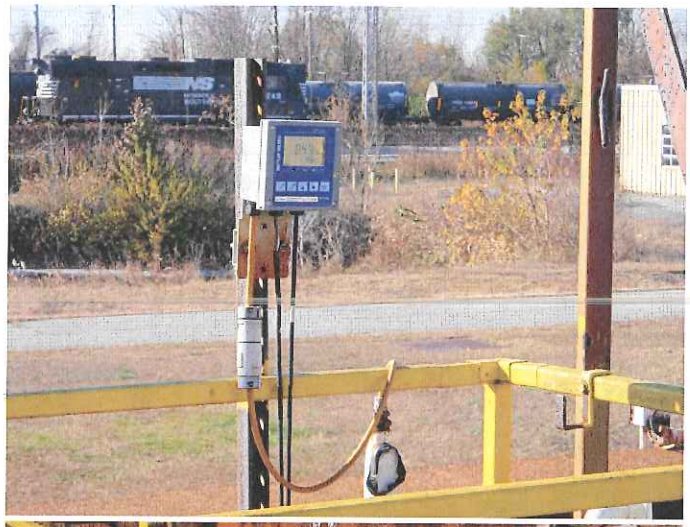


71: PB130071.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:08 AM
Camera Direction: Inside
Description: Temperature log at the WWTP lab.

72: PB130072.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:09 AM
Camera Direction: West
Description: Reactor tanks at the WWTP.



73: PB130073.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:11 AM
Camera Direction: South
Description: Meter at the reactor tanks.

74: PB130074.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:12 AM
Camera Direction: North
Description: Location where chemical dosing is done at the WWTP Reactor tanks.

75: PB130075.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:14 AM
Camera Direction: Northeast
Description: At the reactor tank at the WWTP. The black hose is dripping the KlerAid product.

76: PB130076.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:14 AM
Camera Direction: Northeast
Description: At the reactor tank at the WWTP. The black hose is dripping the KlerAid product. This is a close up of the PB130076.JPG.

77: PB130077.JPG

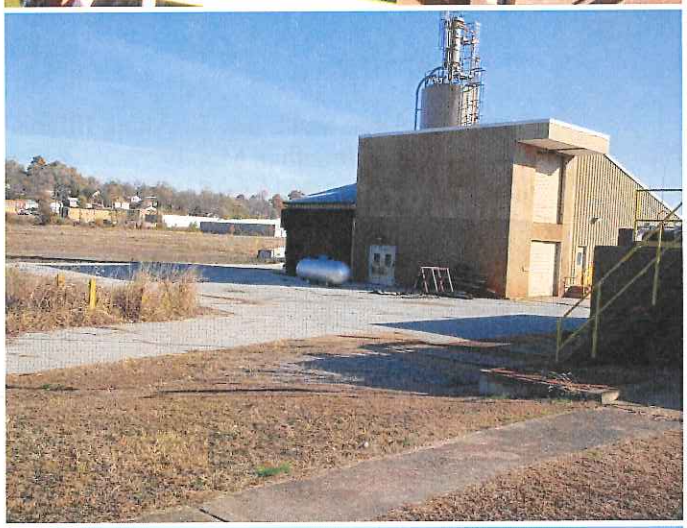
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:17 AM
Camera Direction: North
Description: Corrsion at the reactor tanks at the WWTP.

78: PB130078.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:18 AM
Camera Direction: North
Description: Corrsion at the reactor tanks at the WWTP.

79: PB130079.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:18 AM
Camera Direction: Down
Description: Last tank in the reactor tanks at the WWTP. Product is being added in this tank.



80: PB130080.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:22 AM
Camera Direction: Northeast
Description: Office at the WWTP.

81: PB130081.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:22 AM
Camera Direction: East
Description: Reactor tanks at the WWTP.

82: PB130082.JPG

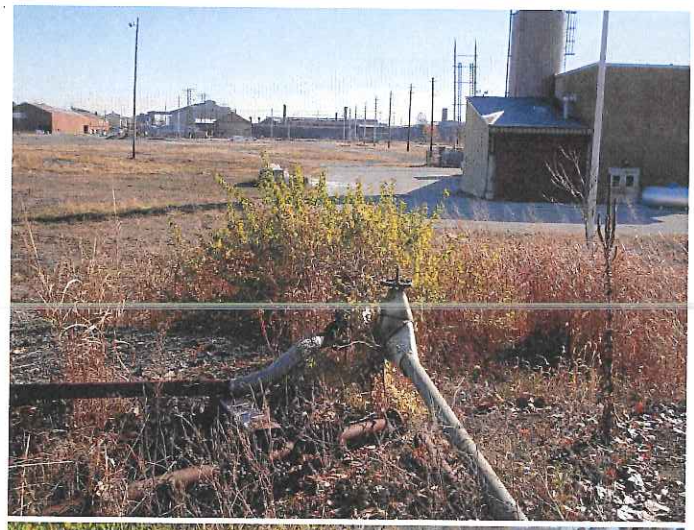
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:23 AM
Camera Direction: Down
Description: Vegetation in the trough at the WWTP clarifier.

83: PB130083.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:23 AM
Camera Direction: Down
Description: Vegetation on the weirs at the WWTP clarifier.

84: PB130084.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:26 AM
Camera Direction: South
Description: Sludge dischage to pond north of WWTP.



85: PB130085.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:27 AM
Camera Direction: East
Description: Pumps and split for the sludge discharge to the pond north of the WWTP.

86: PB130086.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:27 AM
Camera Direction: North
Description: Pumps and split for the sludge discharge to the pond north of the WWTP.

87: PB130087.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:28 AM
Camera Direction: East
Description: Left over lime slurry at the WWTP, possibly years worth of material according to facility representative.

88: PB130088.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:33 AM
Camera Direction: Down
Description: Sample grab at the WWTP final flume.

89: PB130089.JPG

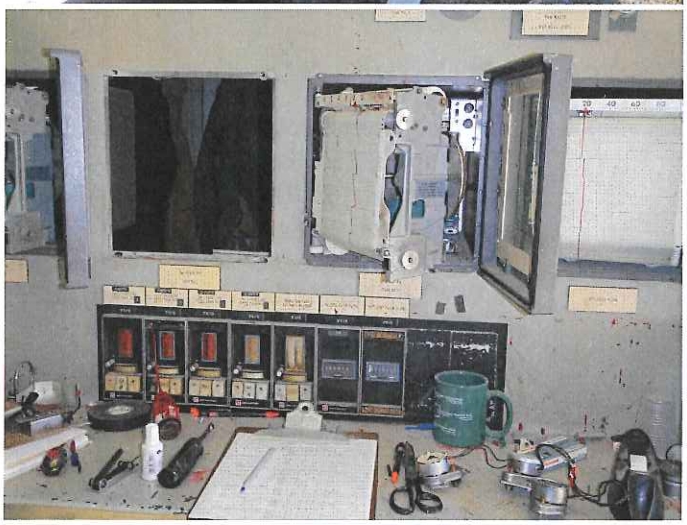
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:33 AM
Camera Direction: South
Description: Flow meter at the final flume at the WWTP. Notice the wood proping the metal angle bar.

90: PB130090.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:33 AM
Camera Direction: South
Description: Flow meter at the final flume at the WWTP. Notice the wood proping the metal angle bar.

91: PB130091.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:35 AM
Camera Direction: North
Description: Final flume at the WWTP.

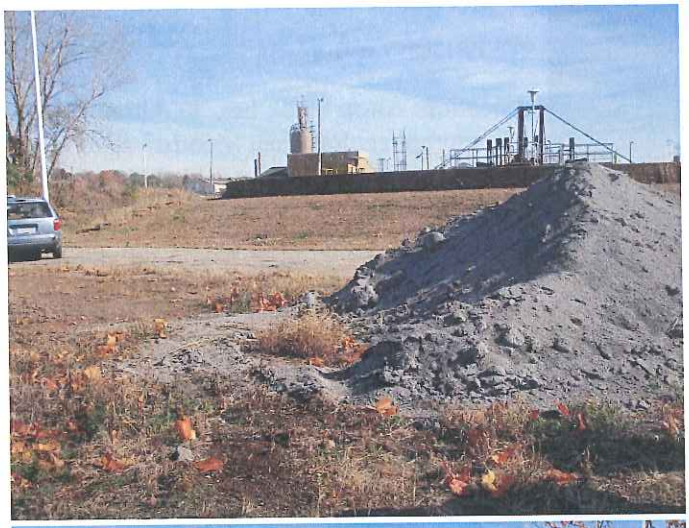


92: PB130092.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:49 AM
Camera Direction: Inside
Description:Control panel at the WWTP.

93: PB130093.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 9:50 AM
Camera Direction: Inside
Description: Flow totalizer at the WWTP.



94: PB130094.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 11:31 AM
Camera Direction: East
Description: Pile at a culvert to the west of the WWTP near the property line.

95: PB130095.JPG

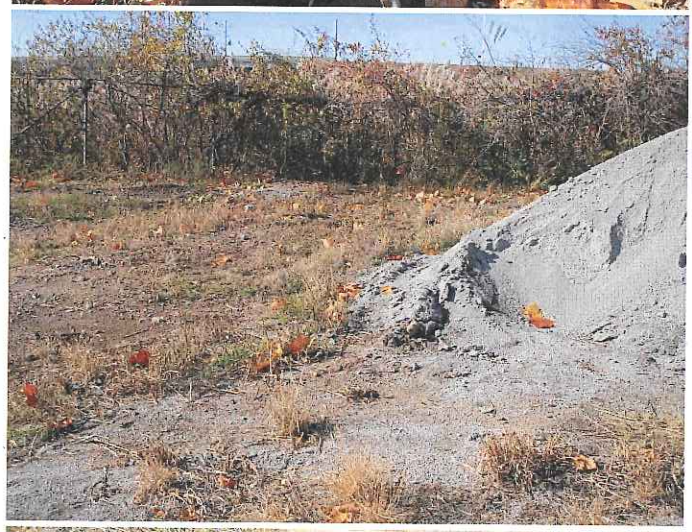
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 11:32 AM
Camera Direction: West
Description: Pile at a culvert to the west of the WWTP near the property line. In the background is the culvert taking flow offsite.

96: PB130096.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 11:32 AM
Camera Direction: West
Description: Closeup of the culvert shown in PB130095.JPG.

97: PB130097.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 11:32 AM
Camera Direction: West
Description: Closeup of the culvert shown in PB130095.JPG and PB130096.JPG.

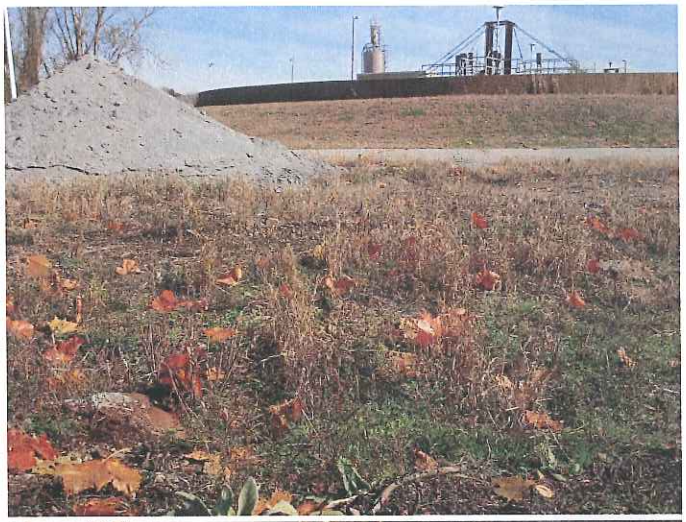


98: PB130098.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 11:33 AM
Camera Direction: West
Description: South side of the same pile as shown in PB130094.JPG and PB130095.JPG. There is a second culvert just south of the culvert shown in PB130095.JPG through PB130097.JPG.

99: PB130099.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 11:33 AM
Camera Direction: North
Description: Close up of second culvert shown in PB130098.JPG.



100: PB130100.JPG

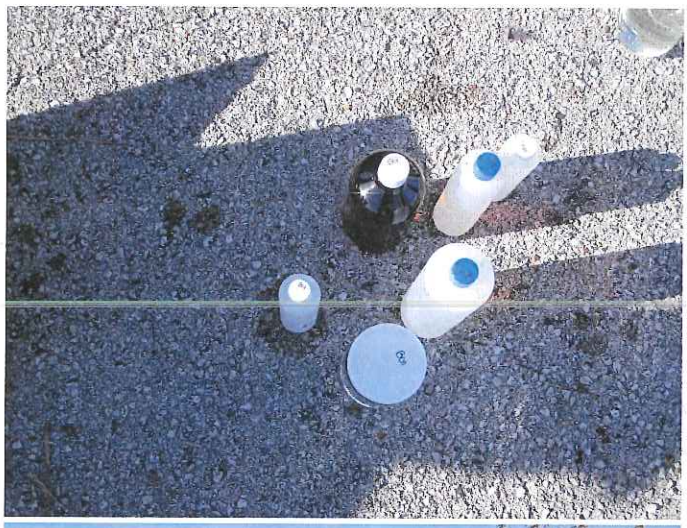
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 11:33 AM
Camera Direction: East
Description: In the foreground is the second culvert shown in PB130098.JPG and PB130099.JPG. The pile is the same material shown in PB130095.JPG.

101: PB130101.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 12:11 PM
Camera Direction: Down
Description: Sample S01.

102: PB130102.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 12:16 PM
Camera Direction: Down
Description: Field Blanks.

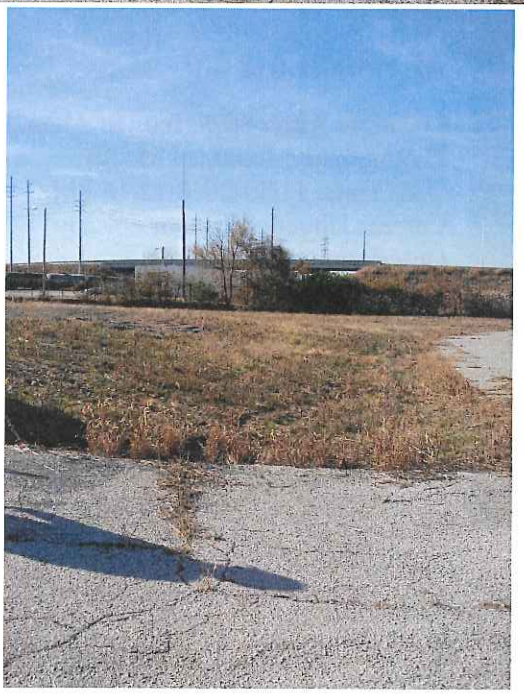


103: PB130103.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 12:18 PM
Camera Direction: Down
Description: Field Blanks, B01

104: PB130104.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 12:45 PM
Camera Direction: Southeast
Description: Culvert at the overflow pond south of the WWTP.



105: PB130105.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 12:45 PM
Camera Direction: West
Description: Standing at the Culvert showin in PB130104.JPG and looking to the West.

106: PB130106.JPG

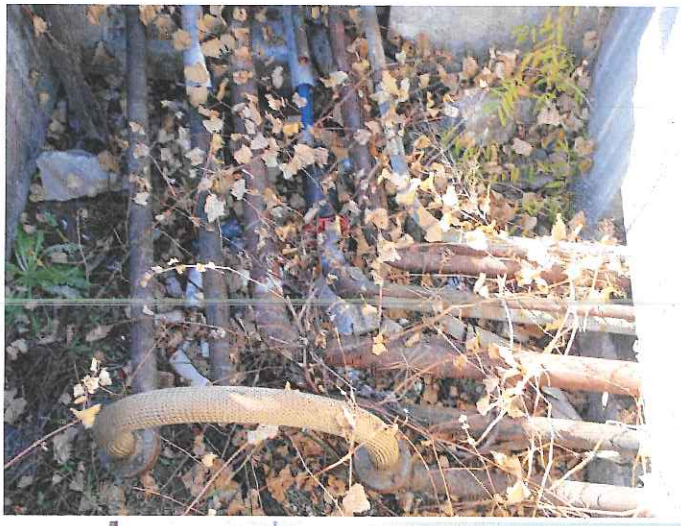
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 12:46 PM
Camera Direction: East
Description: Culvert under roadway to the west of the overflow pond south of the WWTP.

107: PB130107.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:23 PM
Camera Direction: Down
Description: Looking inside the vault just west of the WWTP.

108: PB130108.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:23 PM
Camera Direction: West
Description: Vault just west of the WWTP, Looking toward the WWTP.

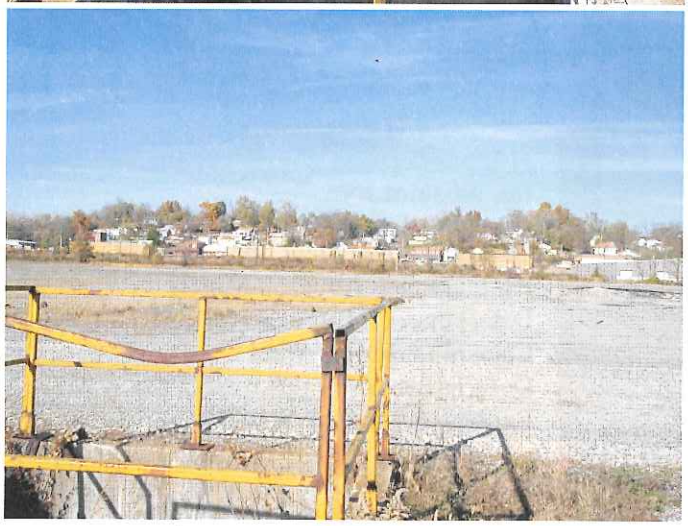


109: PB130109.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:24 PM
Camera Direction: Down
Description: Vault further east of the vault shown in PB130108.JPG.

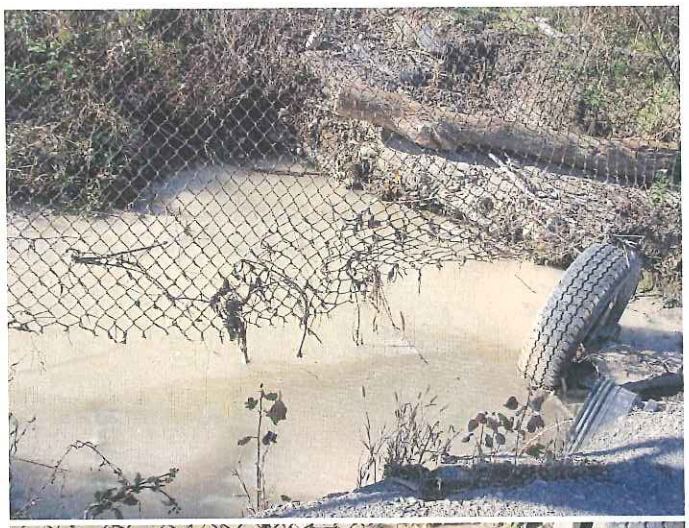
110: PB130110.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:24 PM
Camera Direction: West
Description: Same vault as shown in PB130109.JPG.



111: PB130111.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:24 PM
Camera Direction: North
Description: Same vault as shown in PB130109.JPG. Looking in the direction of the incoming pipes.



112: PB130112.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:39 PM
Camera Direction: West
Description: Location of sample S03. (Outfall 200)

113: PB130113.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:39 PM
Camera Direction: Down
Description: Location of sample S03. (Outfall 200)

114: PB130114.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:39 PM
Camera Direction: East
Description: East of the location of S03. (Outfall 200)

115: PB130115.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:41 PM
Camera Direction: South
Description: location of S03. (Outfall 200)

116: PB130116.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:50 PM
Camera Direction: Down
Description: Sample S03.

117: PB130117.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:50 PM
Camera Direction: Down
Description: Sample S03.

118: PB130118.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/13/2013 1:52 PM
Camera Direction: N/A
Description: Sample S03.

119: PB140119.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:45 AM
Camera Direction: Southeast
Description: Water on the pavement from the contact cooling water towers.

120: PB140120.JPG

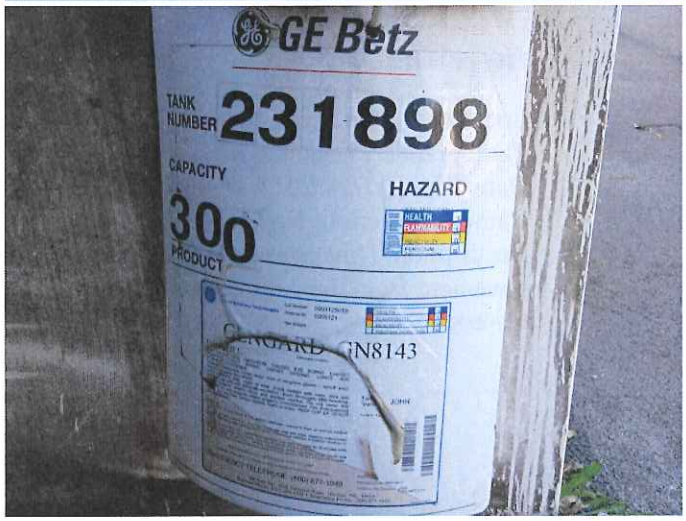
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:45 AM
Camera Direction: Northeast
Description: Downstream end of the wet pavement from the contact cooling water towers.

121: PB140121.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:45 AM
Camera Direction: Southwest
Description: Upstream end of the wet pavement at the contact water cooling tower. The cooling tower sump was overflowing during the inspection.

122: PB140122.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:45 AM
Camera Direction: North
Description: Standing at the overflowing from the contact cooling water overflowing sump looking toward the creek.



123: PB140123.JPG

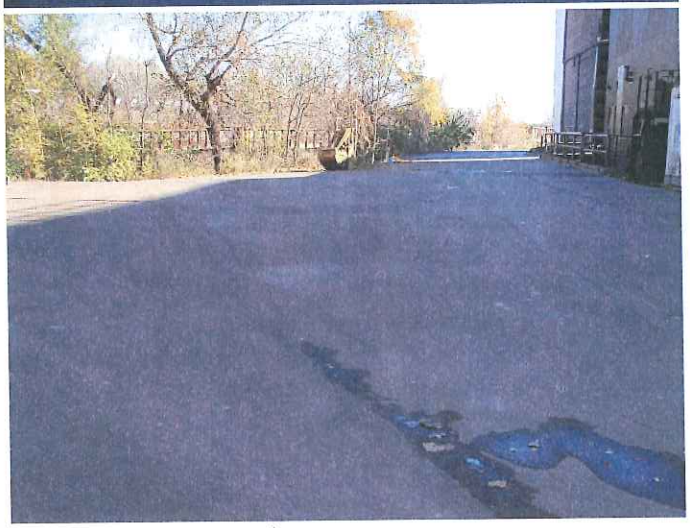
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:49 AM
Camera Direction: West
Description: Product used at the contact cooling water tank.

124: PB140124.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:49 AM
Camera Direction: South
Description: Product used at the contact cooling water tower. Placard shown in PB140123.JPG is on the side of the small white structure on the right side of this photo.

125: PB140125.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:50 AM
Camera Direction: West
Description:Location where process area has an apparent discharge.



126: PB140126.JPG

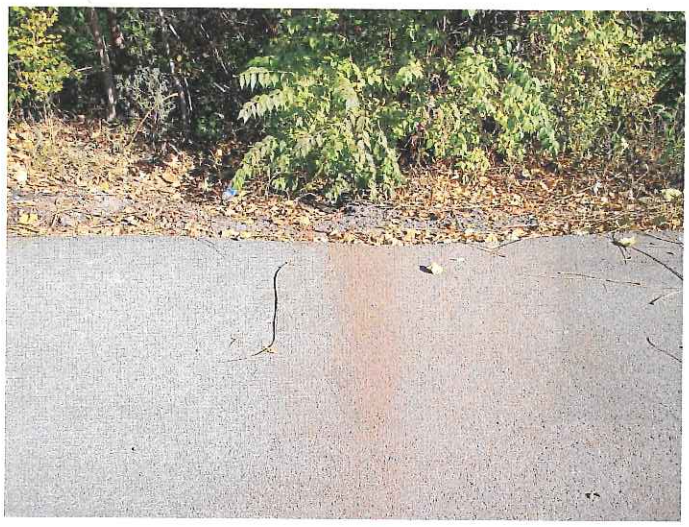
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:51 AM
Camera Direction: East
Description: Looking downstream from the process area with the apparent discharge toward the creek.

127: PB140127.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:51 AM
Camera Direction: Northeast
Description: Looking downstream from the process area with the apparent discharge to the creek.

128: PB140128.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:53 AM
Camera Direction: Northeast
Description: Small oil drip from a machine in an area tributary to the creek.



129: PB140129.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:56 AM
Camera Direction: Northeast
Description: Apparent flow path to creek from the processing area north of the EMS.

130: PB140130.JPG

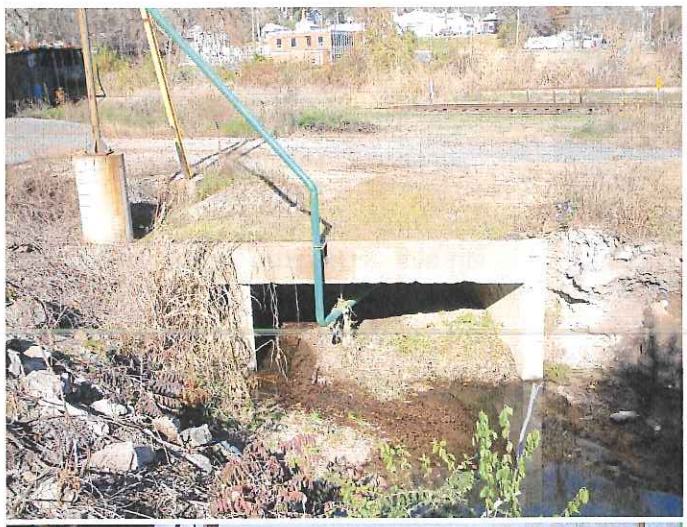
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:57 AM
Camera Direction: North
Description: Small erosion pathway leading to the creek.

131: PB140131.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:57 AM
Camera Direction: North
Description: Close up of the small erosion pathway leading to the creek. This is a closeup of the location shown in PB140130.JPB.

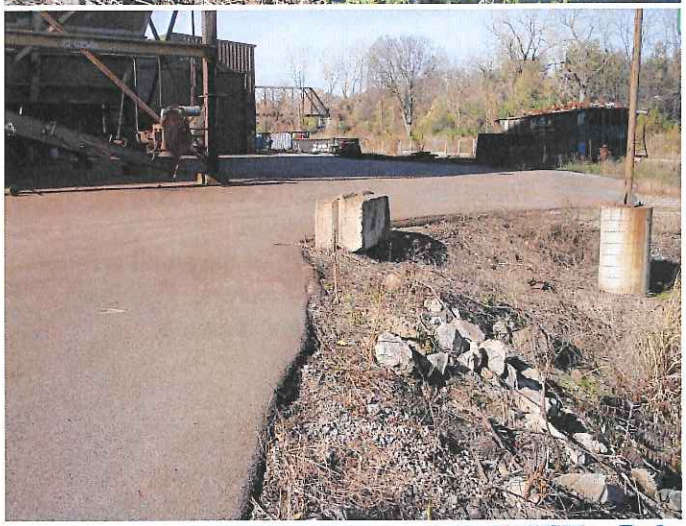
132: PB140132.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:57 AM
Camera Direction: North
Description: Close up of the small erosion pathway leading to the creek. This is a closeup of the location shown in PB140130.JPB.



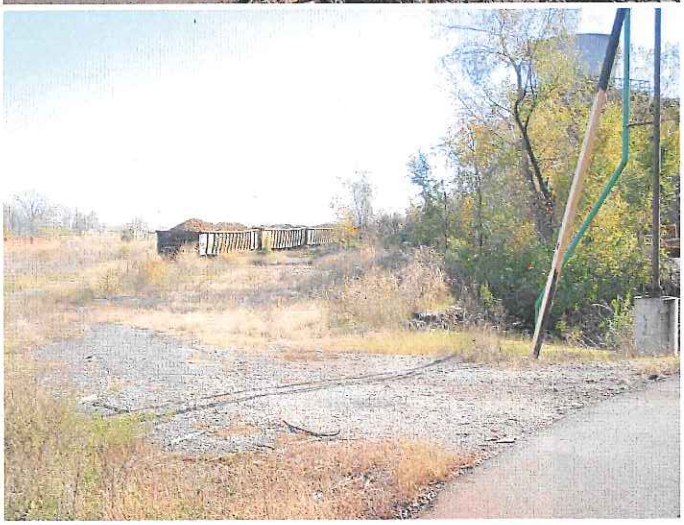
133: PB140133.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:58 AM
Camera Direction: Northwest
Description: Water feeding the creek along the north end of the facility. The water coming through the large culvert running underneath the east-west railway north of the facility was clear.



134: PB140134.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 10:59 AM
Camera Direction: Northwest
Description: Looking toward the machine with the oil leak shown in PB140124.JPG. The creek is the right of the photographer.



135: PB140135.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:02 AM
Camera Direction: East
Description: Railway cars full of material.

136: PB140136.JPG

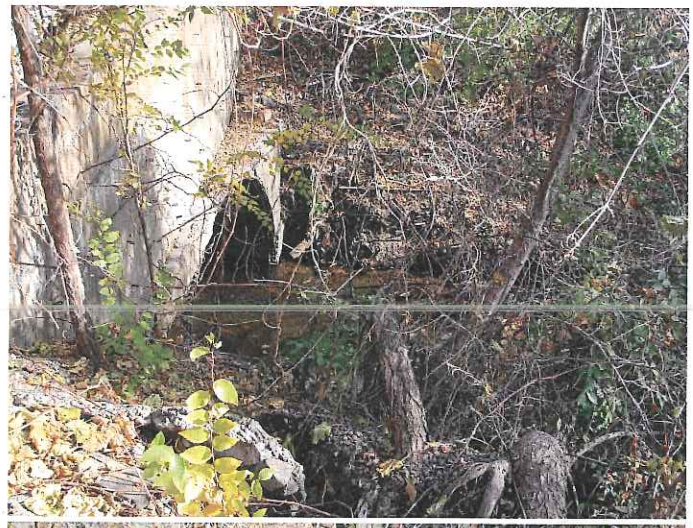
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:03 AM
Camera Direction: Northeast
Description: Material stored on the pavement on the north end of the facility. This was north of the Bag House.

137: PB140137.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:06 AM
Camera Direction: South
Description: In the creek at a location east of the cooling towers.

138: PB140138.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:09 AM
Camera Direction: Northeast
Description: Material adjacent to the waterway.



139: PB140139.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:10 AM
Camera Direction: East
Description: Creek just south of the photograph taken in PB140138.JPG.

140: PB140140.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:12 AM
Camera Direction: North
Description: Creek just east of facility.

141: PB140141.JPG

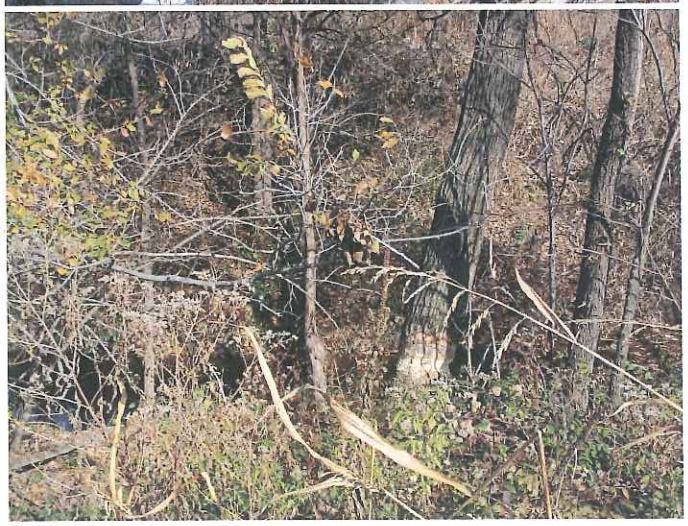
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:13 AM
Camera Direction: Northwest
Description: Material storage south of the creek and east of the facility.

142: PB140142.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:16 AM
Camera Direction: South
Description: Pool of water east of facility and north of additional material storage area.

143: PB140143.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:18 AM
Camera Direction: West
Description: Pool of water north of material storage and east of the facility.

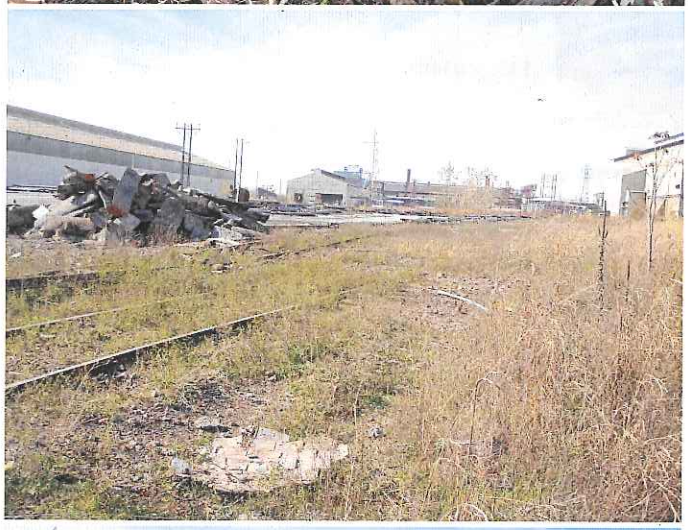


144: PB140144.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:20 AM
Camera Direction: North
Description: Creek and tree damaged by beaver to the east of the facility.

145: PB140145.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:21 AM
Camera Direction: North
Description: Creek east of the facility.



146: PB140146.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:31 AM
Camera Direction: Southwest
Description: Piles of material in area tributary to the creek. The creek is to the right of the photo.

147: PB140147.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:31 AM
Camera Direction: South
Description: Pile of material in area tributary to the creek. Creek is behind the photographer.

148: PB140148.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:31 AM
Camera Direction: Northeast
Description: Creek at second crossing east of the facility.

149: PB140149.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:31 AM
Camera Direction: Northeast
Description: Creek at second crossing east of the facility.

150: PB140150.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:32 AM
Camera Direction: Northeast
Description: Downstream end of the second creek crossing east of the facility.

151: PB140151.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:33 AM
Camera Direction: South
Description: Same location as PB140151.JPG. The water in the creek had a film.

152: PB140152.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:36 AM
Camera Direction: South
Description: Water and scrap approximatly 300' east of the second creek crossing east of the faciltiy.

153: PB140153.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:38 AM
Camera Direction: North
Description: Scrap pile with apparent runoff path to creek. North of the creek and east of the second crossing east of the facility.

154: PB140154.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:38 AM
Camera Direction: South
Description: Downstream end of the apparent runoff path from the scrap pile shown in PB140153.JPG.

155: PB140155.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:42 AM
Camera Direction: South
Description: Upstream of the culvert crossing with the railway at the far eastern edge of the property.

156: PB140156.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:43 AM
Camera Direction: North
Description: Downstream of the culvert crosign with the railway at the far eastern edge of the property. Water in creek is turbid.

157: PB140157.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:43 AM
Camera Direction: South
Description: Downstream of the culvert crosign with the railway at the far eastern edge of the property. Water in creek is turbid.

158: PB140158.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:45 AM
Camera Direction: South
Description: Downstream of the culvert crosign with the railway at the far eastern edge of the property. Water in creek is turbid.

159: PB140159.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:47 AM
Camera Direction: Northwest
Description: Downstream of the culvert crosign with the railway at the far eastern edge of the property. Water in creek is turbid.

160: PB140160.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:47 AM
Camera Direction: Northwest
Description: Downstream of the culvert crosign with the railway at the far eastern edge of the property. Water in creek is turbid.

161: PB140161.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:52 AM
Camera Direction: North
Description: Just upstream from compliance point 200. Turbid water in the creek. 1 of 5.

162: PB140162.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:52 AM
Camera Direction: West
Description: Just upstream from compliance point 200. Turbid water in the creek. 2 of 5.

163: PB140163.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:52 AM
Camera Direction: Southwest
Description: Just upstream from compliance point 200. Turbid water in the creek. 3 of 5.

164: PB140164.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:52 AM
Camera Direction: South
Description: Just upstream from compliance point 200. Turbid water in the creek. 4 of 5.

165: PB140165.JPG

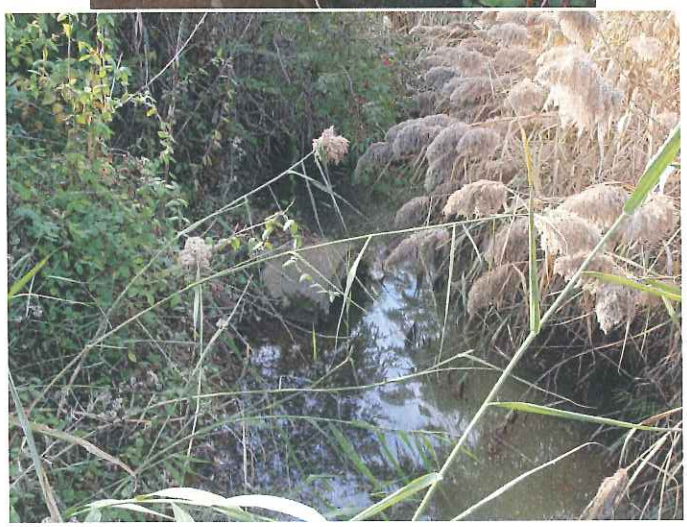
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 11:52 AM
Camera Direction: East
Description: Just upstream from compliance point 200. Turbid water in the creek. 5 of 5.

166: PB140166.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 12:04 PM
Camera Direction: East
Description: On-site scrap operations. Miami Creek is located on the left side of this photo.

167: PB140167.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:11 PM
Camera Direction: East
Description: Start of ditch to compliance Outfall 400 on the west property boundary.

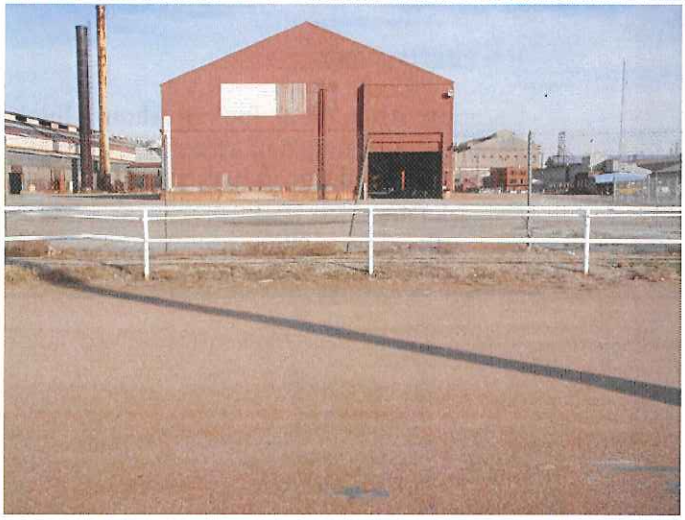


168: PB140168.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:11 PM
Camera Direction: West
Description: Just downstream of the location shown in photo PB140167.JPG. Culvert is approximatly 2' in diameter, partially submerged and enters on the south bank of the ditch.

169: PB140169.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:19 PM
Camera Direction: West
Description: Pit with large diamater pipe



170: PB140170.JPG

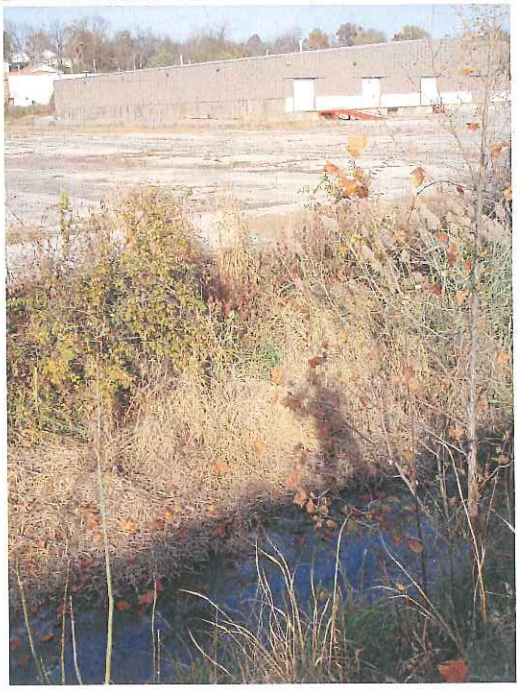
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:19 PM
Camera Direction: East
Description: Standing at the pit showin in PB140169.JPG and looking east toward the red buildling. Five pressure pipes similar to the 5 pipes shown in PB140167.JPG

171: PB140171.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:25 PM
Camera Direction: North
Description: Junction box in the area south of the ditch and west of the location shown in PB140167.JPG. Box contained three clay pipes. One each from the east, south and north.

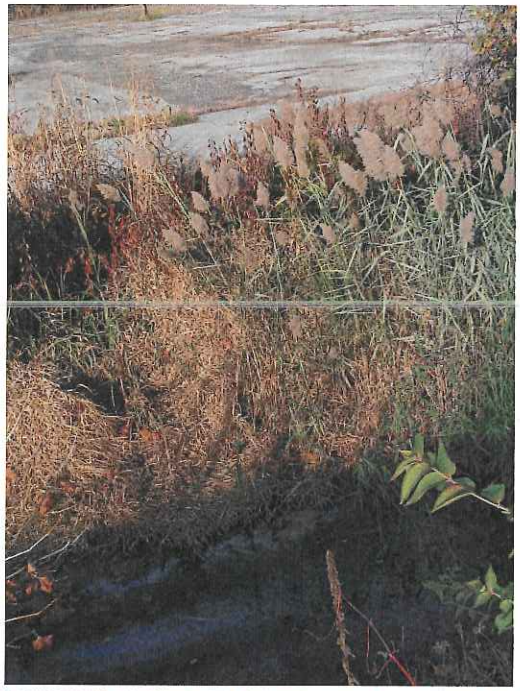
172: PB140172.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:29 PM
Camera Direction: North
Description: Sheen on water in the dicth leading to Outfall 400.



173: PB140173.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:30 PM
Camera Direction: Northeast
Description: Sheen on water in ditch to Outfall 400.



174: PB140174.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:31 PM
Camera Direction: Northeast
Description: Sheen on the water in the ditch to Outfall 400.

175: PB140175.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:31 PM
Camera Direction: Northeast
Description: Closeup of the sheen on the water in the ditch to Outfall 400. This is a close up of the sheen shown in PB140174.JPG.

176: PB140176.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:37 PM
Camera Direction: West
Description: Pile of material in area tributarty to the ditch to Outfall 400.

177: PB140177.JPG

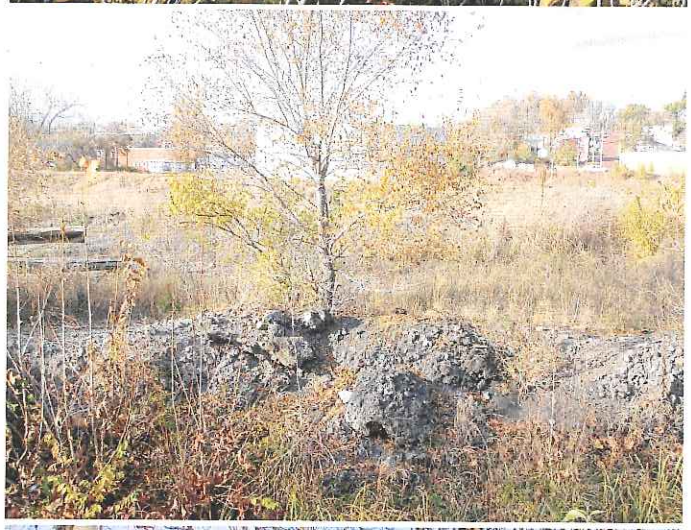
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:37 PM
Camera Direction: N
Description: Material stored in the area tributary to the ditch to Outfall 400 is to the left of the photographer. The ditch to Outfall 400 is in the distance.

178: PB140178.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:39 PM
Camera Direction: Down, North
Description: Water in the ditch to Outfall 400. Water is turbid.

179: PB140179.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:41 PM
Camera Direction: North
Description: Water in the dtich to Outfall 400. Water is turbid.



180: PB140180.JPG

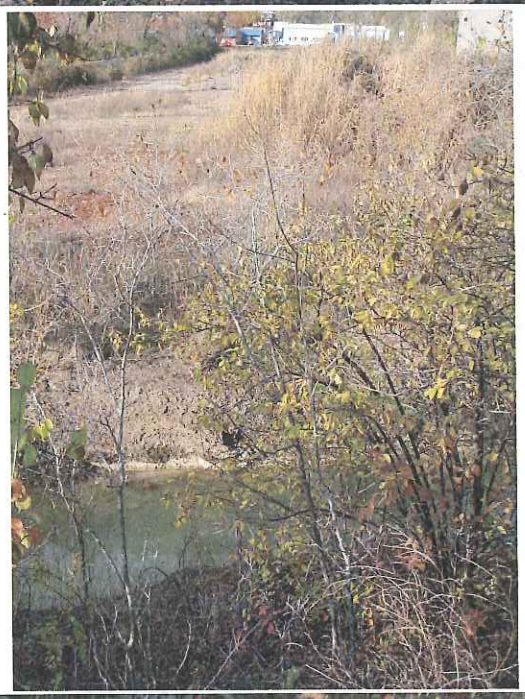
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:41 PM
Camera Direction: North
Description: Standing at the same location where PB140179.JPG was taken and looking up and north. The ditch to Outfall 400 is directly under the photo.

181: PB140181.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:44 PM
Camera Direction: East
Description: Piles of black material in the vegetation in the area tributary to the ditch to Outfall 400.

182: PB140182.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:45 PM
Camera Direction: North
Description: Black material in the tributary to the ditch to compliance point 400. The facility representative says this looks similar to spent coke. Ditch to Outfall 400 is in the distance.



183: PB140183.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:48 PM
Camera Direction: North
Description: Ditch to Outfall 400.

184: PB140184.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 2:57 PM
Camera Direction: South
Description: Water in the ditch to Outfall 400. Water is turbid.

185: PB140185.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:00 PM
Camera Direction: Down, South
Description: Water in the ditch to Outfall 400. Water was turbid.

186: PB140186.JPG

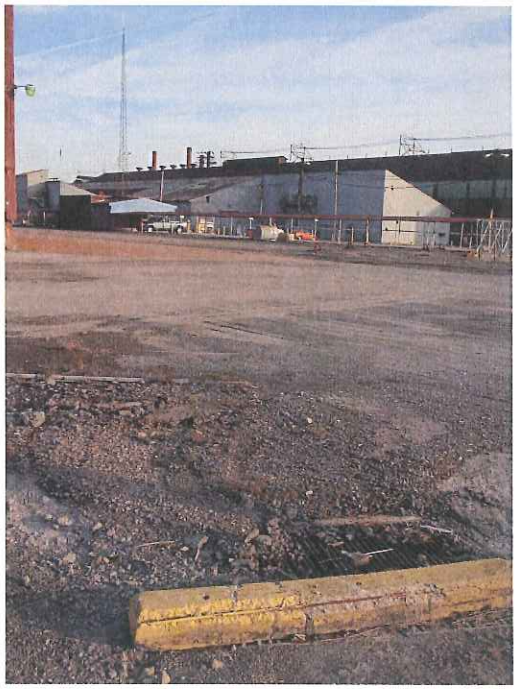
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:01 PM
Camera Direction: South
Description: bank of the ditch to Outfall 400 was covered in loose debris material.

187: PB140187.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:02 PM
Camera Direction: South
Description: Water in the ditch to Outfall. This is where the water in the ditch begins to changes color.

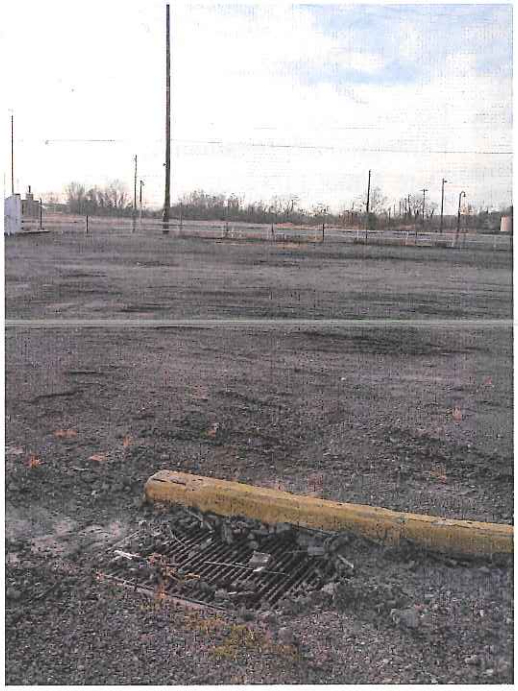
188: PB140188.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:03 PM
Camera Direction: Northwest
Description: Bank of the ditch to Outfall 400. This location is adjacent to the location shown in PB140187.JPG.



189: PB140189.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:33 PM
Camera Direction: Southeast
Description: Looking in the direction of the 4' to 5' diameter concrete pipe in the bottom of the vault in the foreground of this photo.



190: PB140190.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:34 PM
Camera Direction: West
Description: Same vault as shown in PB140189.JPG. The camera is looking in the other direction of the 4' – 5' diameter pipe.

191: PB140191.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:49 PM
Camera Direction: West
Description: Pit at the west end of the employee parking lot.

192: PB140192.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:49 PM
Camera Direction: Down, West
Description: Pit in the employee parking lot.

193: PB140193.JPG

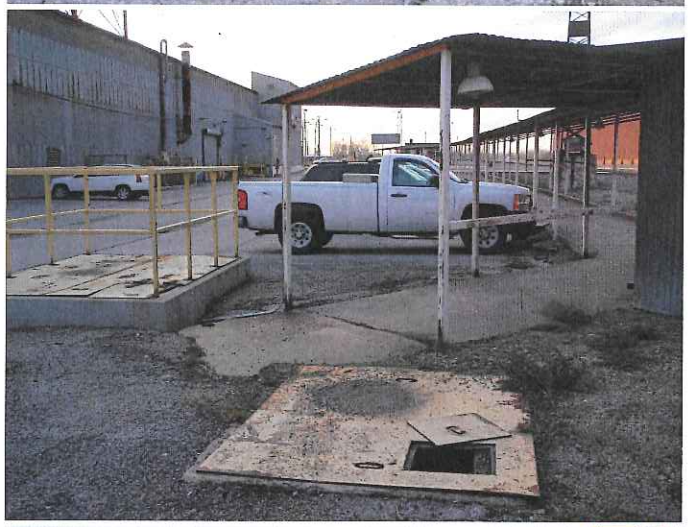
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:49 PM
Camera Direction: Down, West
Description: Pit in the employee parking lot.

194: PB140194.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:50 PM
Camera Direction: West
Description: Pit in the employee parking lot. Pipe at far end of box is approximatly 2' in diameter. Flow appears to flow from the east to the west.

195: PB140195.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 3:53 PM
Camera Direction: West
Description: Manhole just south of the pit shown in PB140191.JPG. This manhole appears to be connected to the pit shown in PB140191.JPG.



196: PB140196.JPG

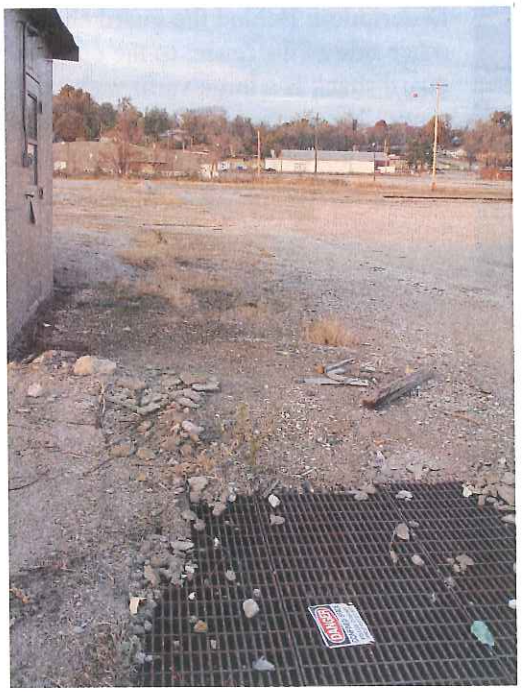
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 4:06 PM
Camera Direction: West
Description: At the east end of the employee parking lot. Two vaults with stormwater pipes.

197: PB140197.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 4:11 PM
Camera Direction: North
Description: At the main office building, looking in the direction of the employee parking lot. The two vaults shown in PB140196.JPG are in front of the red building and behind the blue car in the distance.

198: PB140198.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 4:12 PM
Camera Direction: North
Description: Stormwater inlet near the main office building.

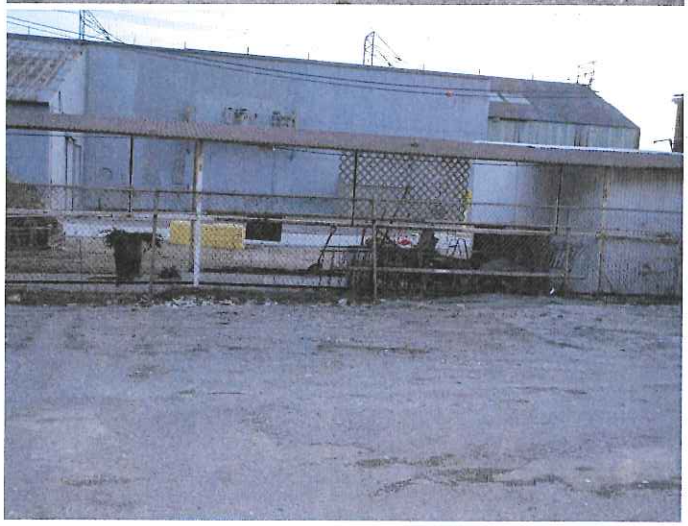


199: PB140199.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 4:27 PM
Camera Direction: North
Description:Inlet.

200: PB140200.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 4:49 PM
Camera Direction: East
Description: Area behind the guard shack. Were unable to locate any manholes or vaults in this area.

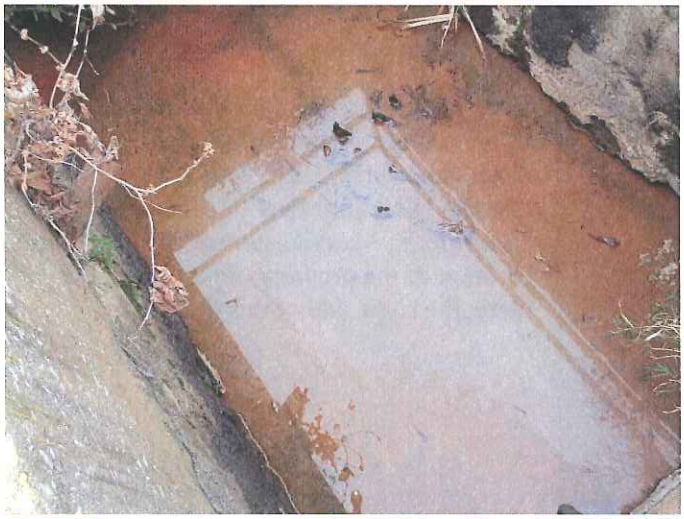


201: PB140201.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/14/2013 4:49 PM
Camera Direction: South
Description: Behind the guard shack. On the other side of the fence, to the east of the guard shack is a large vault with stormwater pipes. No manholes or stormwater vaults were found behind the guard shack.

202: PB150202.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:09 AM
Camera Direction: West, Down
Description: Same vault shown in PB140191.JPG at the east end of the employee parking lot. There is sheen on the surface of the water.



203: PB150203.JPG

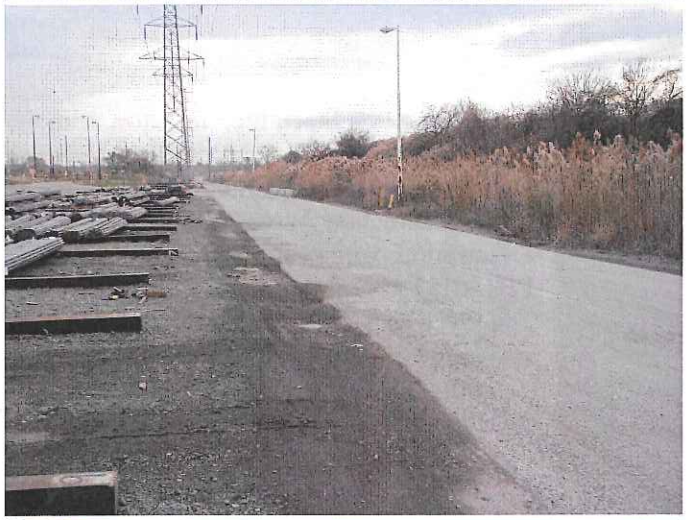
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:09 AM
Camera Direction: West, Down
Description: Same vault shown in PB140191.JPG at the east end of the employee parking lot. There is sheen on the surface of the water.

204: PB150204.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:11 AM
Camera Direction: West
Description: Same vault shown in PB140191.JPG at the east end of the employee parking lot. There is sheen on the surface of the water.

205: PB150205.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:46 AM
Camera Direction: Northeast
Description: Material storage at the southeast location of the property.

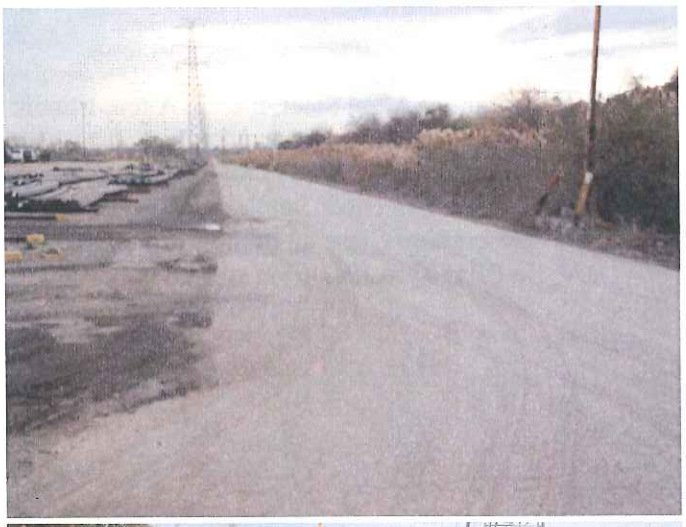


206: PB150206.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:46 AM
Camera Direction: East
Description: Material storage at the southeast location of the property. Property line is along the right side of this drawing.

207: PB150207.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:47 AM
Camera Direction: Northeast
Description: Material storage at the southeast location of the property.



208: PB150208.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:47 AM
Camera Direction: East
Description: Material storage at the southeast location of the property. Property line is along the right side of this photograph.

209: PB150209.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:55 AM
Camera Direction: West
Description: The south property line is along the left side of the photograph.

210: PB150210.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:55 AM
Camera Direction: South
Description: Runoff pathway at the south property line.

211: PB150211.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:55 AM
Camera Direction: South
Description:Close up of the pathway shown in PB150210.JPG.

212: PB150212.JPG

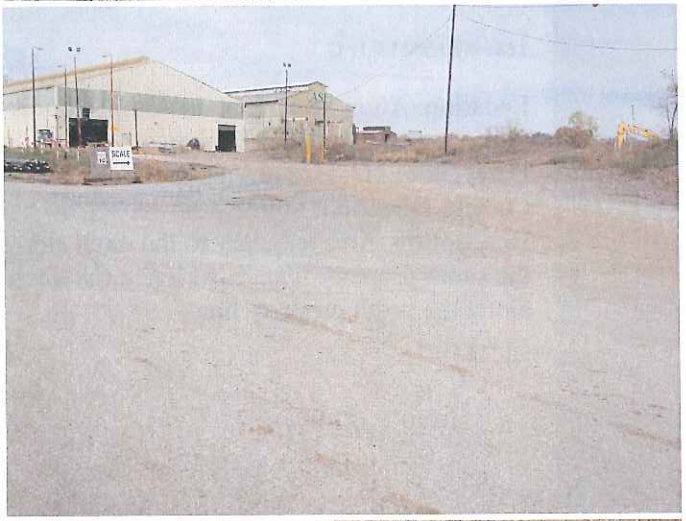
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:57 AM
Camera Direction: North
Description: SBQ east side.

213: PB150213.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:57 AM
Camera Direction: South
Description: location where an apparent runoff pathway at the south property line is visible.

214: PB150214.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 8:58 AM
Camera Direction: South
Description:Closeup of location shown in PB150214.JPG

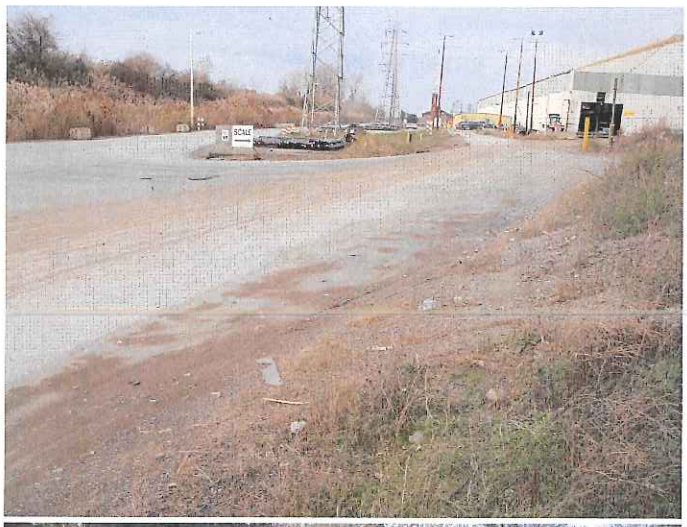


215: PB150215.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:02 AM
Camera Direction: Northwest
Description: Looking back at SBQ. Slope goes uphill.

216: PB150216.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:02 AM
Camera Direction: Southwest
Description: location of stormwater runoff at the south property line.



217: PB150217.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:03 AM
Camera Direction: West
Description: SBQ area.

218: PB150218.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:03 AM
Camera Direction: South
Description: Area tributary to the ditch along the south property line. Looking at the ditch along the south property line.

219: PB150219.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:05 AM
Camera Direction: West
Description: North side of the roadway along the south side of the property. East of the SBQ.

220: PB150220.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:09 AM
Camera Direction: Southeast
Description: Ponded water south of ASI facility.

221: PB150221.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:20 AM
Camera Direction: East
Description: location of the historic outfall location south and east of the property across the street from the Pubically Owned Treatment Works (POTW).

222: PB150222.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:21 AM
Camera Direction: East
Description: location of the historic outfall location south and east of the property across the street from the Pubically Owned Treatment Works (POTW).

223: PB150223.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:21 AM
Camera Direction: South
Description: location of the historic outfall location south and east of the property across the street from the Pubically Owned Treatment Works (POTW). Actual outlet location.

224: PB150224.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:22 AM
Camera Direction: South
Description: location of the historic outfall location south and east of the property across the street from the Pubically Owned Treatment Works (POTW). Actual outlet location.

225: PB150225.JPG

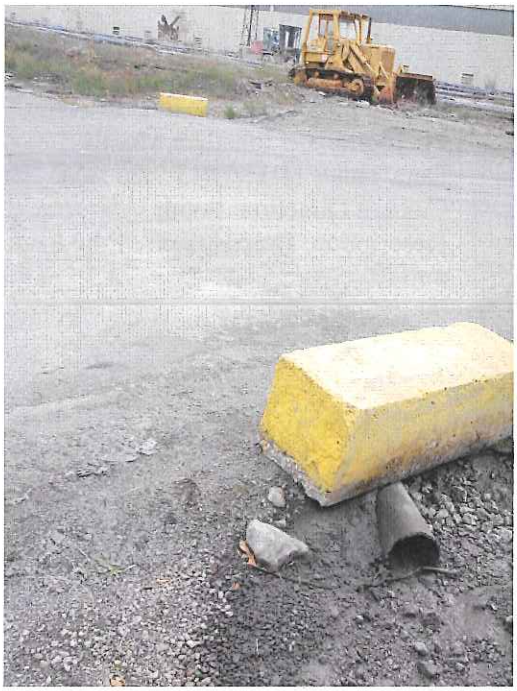
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:26 AM
Camera Direction: South
Description: Downstream of the historic outfall.

226: PB150226.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:34 AM
Camera Direction: Down
Description:Continous Caster Pump.

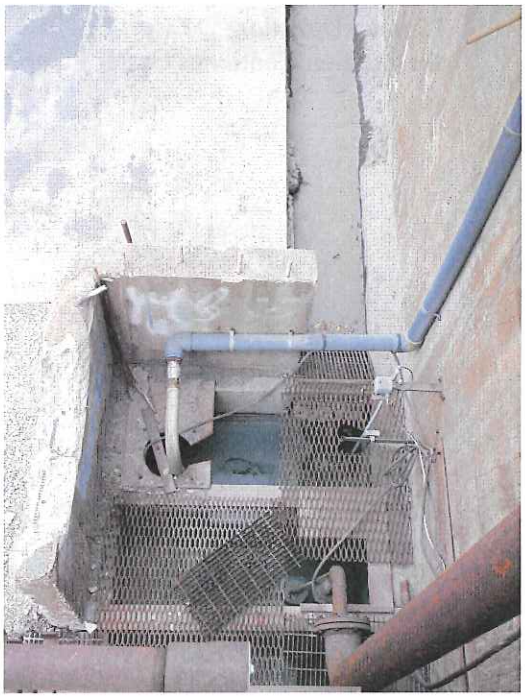
227: PB150227.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:35 AM
Camera Direction: South
Description: Outlet of the Continous Caster pump.



228: PB150228.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:35 AM
Camera Direction: Southeast
Description: Inlet of culvert to take flows from the continous caster pump.



229: PB150229.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:35 AM
Camera Direction: North, Down
Description: Pump in the sump at the continous caster.

230: PB150230.JPG

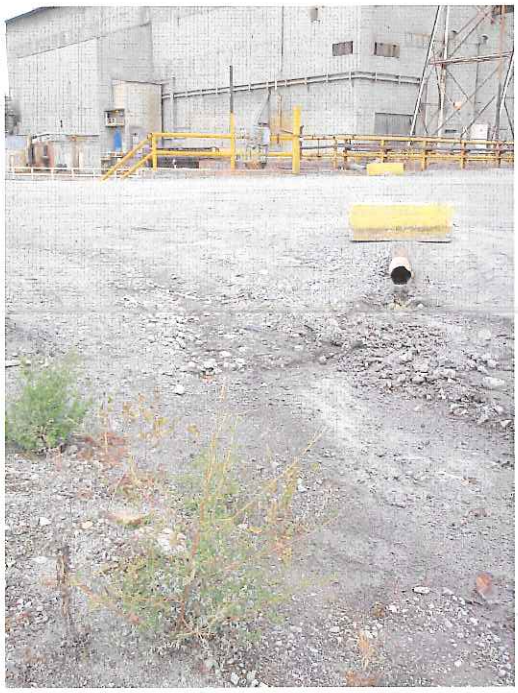
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:36 AM
Camera Direction: Down
Description: Pump in the sump at the continous caster.

231: PB150231.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:37 AM
Camera Direction: North
Description: Outlet from one of the pumps in the sump at the continous caster.

232: PB150232.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:37 AM
Camera Direction: Southeast
Description: Outlet end of the culvert receiving water from the outlet of the pumps in the sump at the continous caster.



233: PB150233.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:37 AM
Camera Direction: Northwest
Description: Outlet end of the culvert receiving water from the outlet of the pumps in the sump at the continous caster.

234: PB150234.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:38 AM
Camera Direction: Northeast
Description: Pool receiving flow from the continous caster.

235: PB150235.JPG

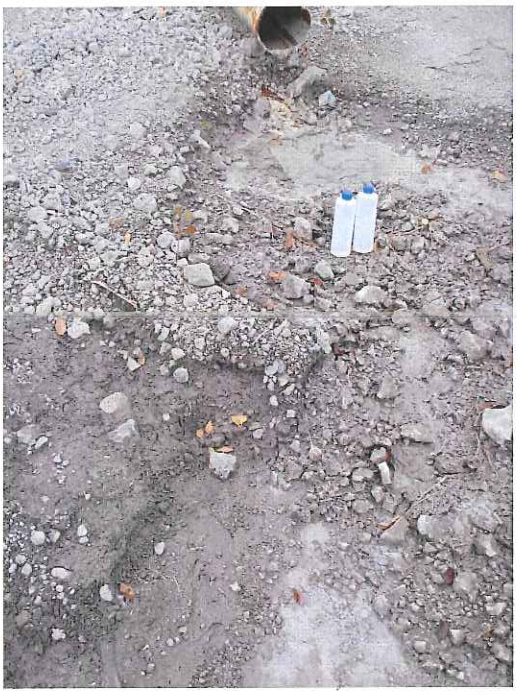
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:39 AM
Camera Direction: Northwest
Description: Pool receiving flow from the continous caster.

236: PB150236.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:39 AM
Camera Direction: North
Description: Pool receiving flow from the continous caster.

237: PB150237.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:44 AM
Camera Direction: South
Description: Pool receiving flow from the continous caster.



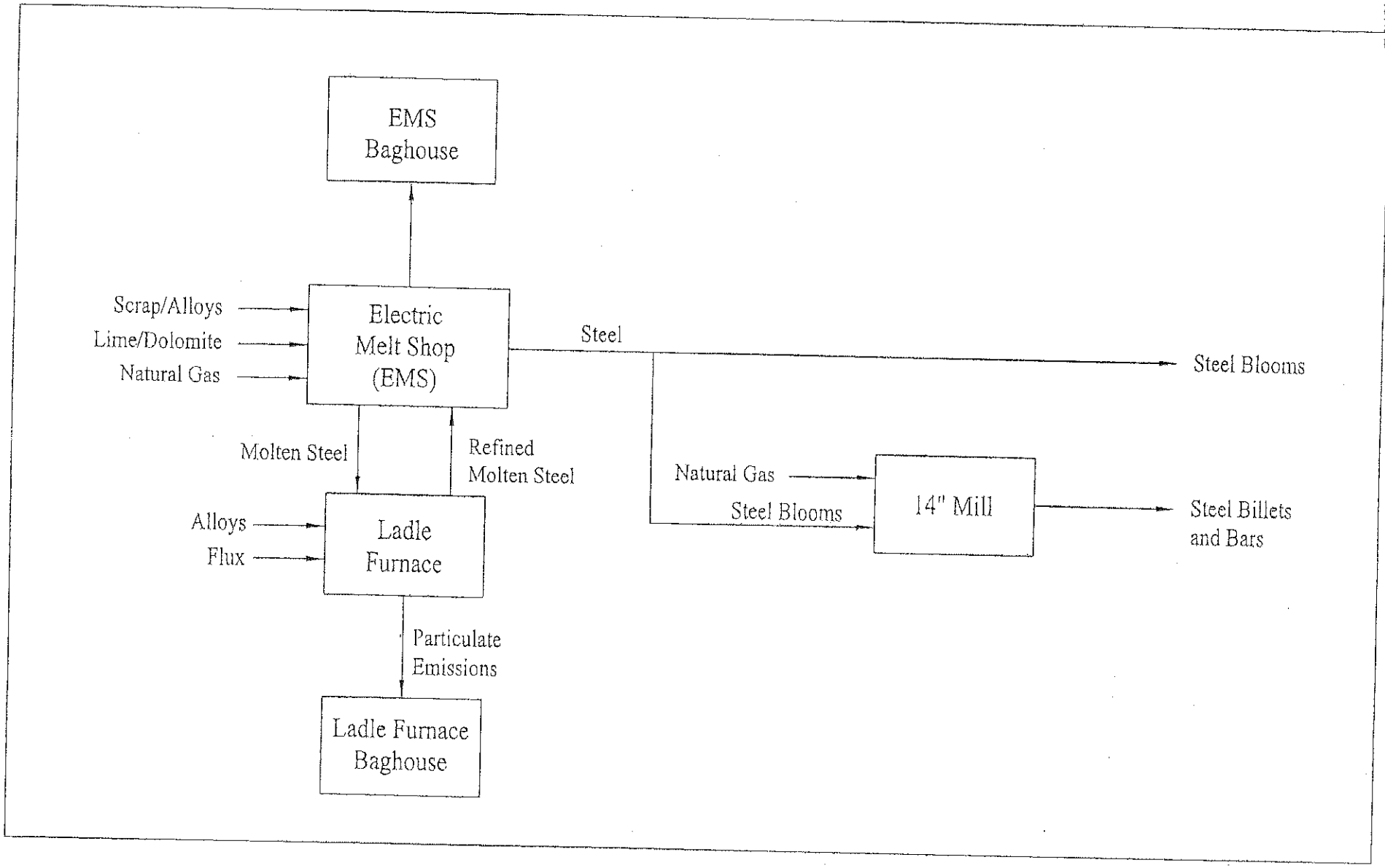
238: PB150238.JPG

Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:56 AM
Camera Direction: Northwest
Description: Sample S04.

239: PB150239.JPG

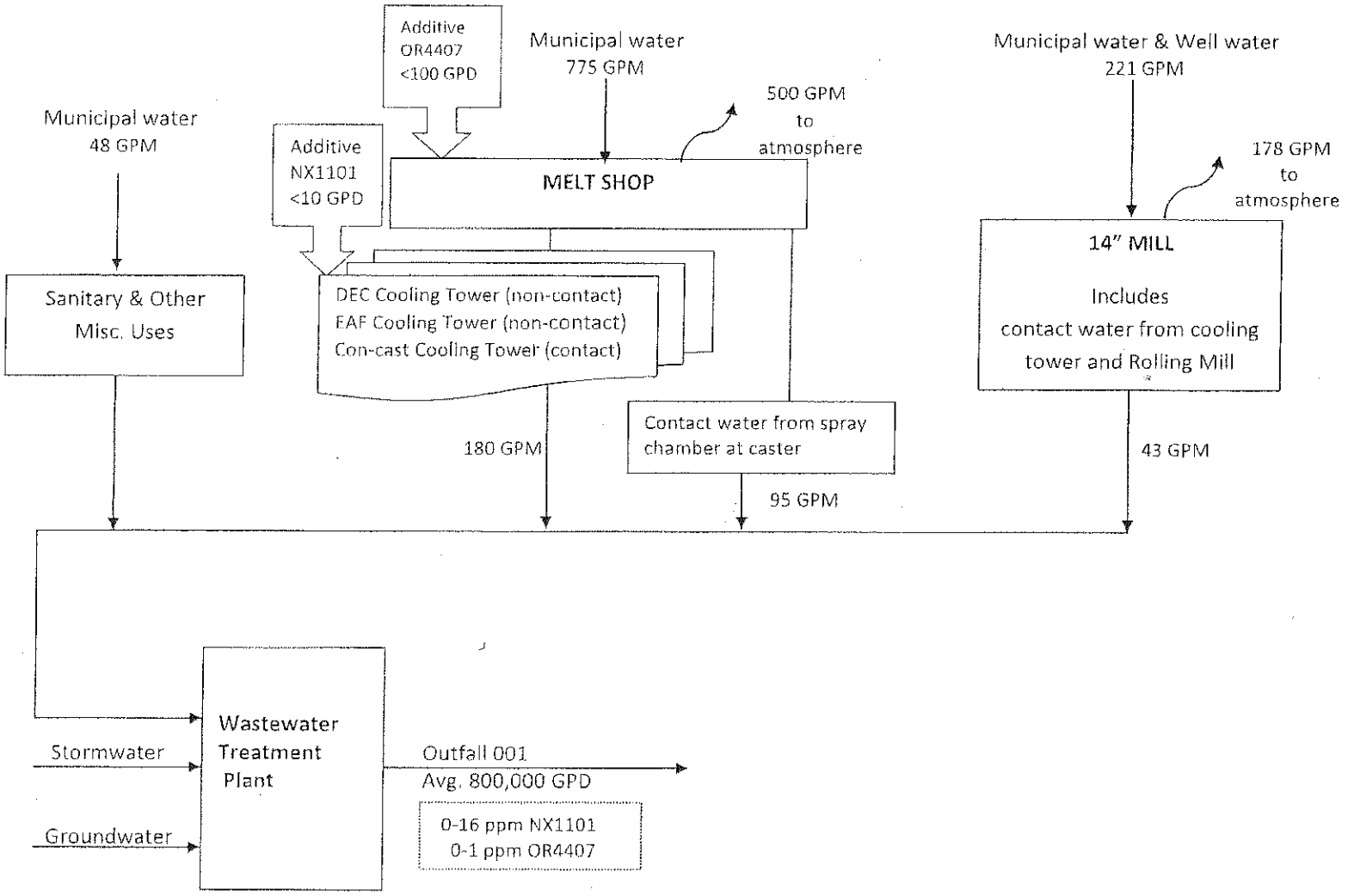
Location: Alton Steel, Inc. in Alton, Illinois
Photographer: Jonathan Moody
Date/Time: 11/15/2013 9:56 AM
Camera Direction: North
Description: Sample S04.

Process Flow Diagram: Steel Production Facility



Attachment 2

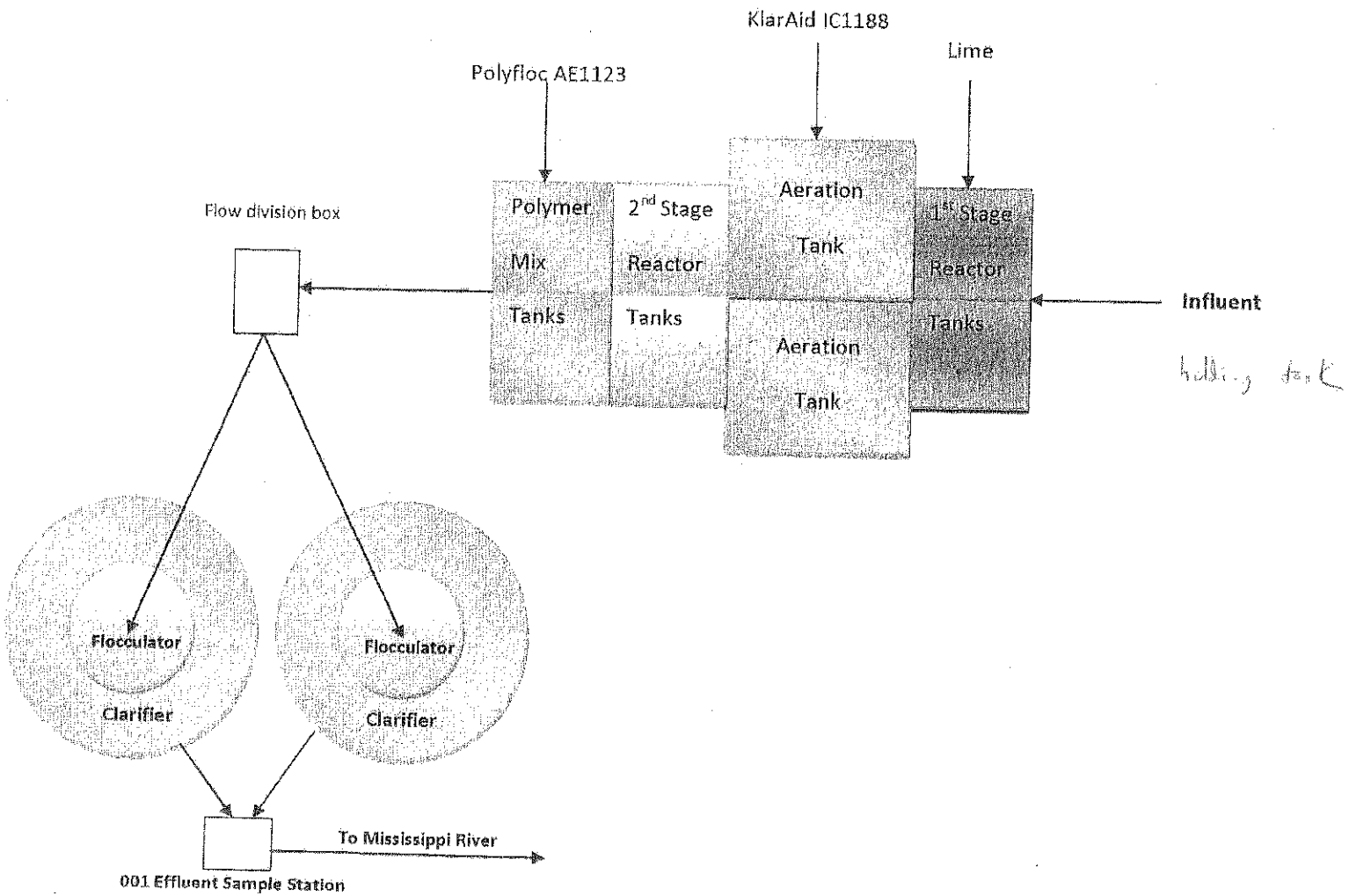
Alton Steel Inc. Outfall 001 Flow Diagram



NPDES: IL0000612

Attachment 3

Alton Steel Inc. Outfall 001 WWTP Flow Diagram



NPDES: IL0000612
11/2011

Attachment 4

Attachment 5

Documents Received For: Alton Steel Inc. – Alton, IL

Document Number	Document Description/Name	Date Received
1	Alton Steel Inc. Outfall 001 Flow Diagram	11/11/13
2	Alton Steel Inc. Process Flow Diagram: Steel Production Facility	11/11/13
3	Alton Steel Inc. Outfall 001 WWTP Flow Diagram	11/11/13
4	ASI's Storm Water Pollution Prevention Plan Alton Steel, Inc.	11/12/13
5	Testing Info for ASI's NPDES Outfall 200	11/15/13
6	ASI's 2012 NPDES Permit Application	11/18/13
7	Print 2958 – Storm Sewer survey of ASI west of Admin building	11/21/13
8	Print 4631 – Storm Sewer survey of ASI west of Admin building	11/21/13
9	Print 8741 – Storm Sewer survey of ASI west of Admin building	11/21/13
10	pH Measurement Procedures	11/25/13
11	pH log sheets from ASI's WWTP	11/25/13
12	ASI's Annual SWPPP Inspections	9/5/14
13	DMR Storm Water Credit Calculations	9/5/14
14	ASI's Quarterly SWPPP Inspections	9/8/14
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16		

Attachment 5

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Attachment A:

CLEAN WATER ACT COMPLIANCE EVALUATION INSPECTION REPORT
U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 5

Purpose: NPDES Permit No. IL0000612 Compliance Evaluation Inspection

Facility: Alton Steel Inc.
5 Cut Street
Alton, Illinois 62002

Date of Inspection: August 25-28, 2014

EPA Region 5 Water Division Representatives:
Keith Middleton, Environmental Engineer,
middleton.keith@epa.gov, (312) 886-6465

Jeremy Deyoe, Environmental Engineer,
deyoe.jeremy@epa.gov, (312) 353-8512

Alton Steel Representatives:
Jeannie Kelly, Director of Regulatory Compliance, (618) 792-4645

Toni Paulus, Environmental Manager, (618) 374-3570

Report Prepared by:
Keith Middleton, P.E., Environmental Engineer

Report Date: August 28, 2015

Inspector Signature _____

REPORT CONTENTS

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2.0 Inspection Procedures
2.1 Opening Conference
2.2 Inspection Activities
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4.0 Sampling Description
5.0 DMR Records Review
5.1 Storm Water Pollution Prevention Plan (SWPPP) Review
6.0 Findings and Observations
7.0 List of Attachments

1.0 Introduction

On August 25-28, 2014, representatives from the U.S. Environmental Protection Agency, Region 5 Water Division performed a Clean Water Act (CWA) National Pollutant Discharge Elimination System (NPDES) permit Compliance Evaluation Inspection (CEI) at Alton Steel, Inc (ASI) in Alton, Illinois. The purpose of this inspection was to follow-up on concerns observed during an earlier inspection conducted on November 12-15, 2013. The inspection was also a part of an on-going multimedia inspection targeting ASI's environmental compliance within the Resource Conservation and Recovery Act (RCRA), Spill Prevention, Control, and Countermeasure (SPCC), and CWA regulations. This inspection included an opening conference, facility process overview, multiple site tours, and closing conference. The CWA/water portion of this multimedia focused on the Solid Waste Management Units (SWMU) and there role in CWA compliance, the storm water credit calculations done by ASI, the storm water collection system west of ASI's administration building, ASI's Storm Water Pollution Prevention Plan (SWPPP), ASI's wastewater treatment plant (WWTP), and potential discharges coming from ASI's continuous caster/steel bloom storage pit. Any findings are summarized within this report and any concerns observed during this inspection are tabulated in Section 6 of the November 12-15, 2013 ASI inspection report.

2.0 Inspection Procedures

Participants present for various periods of time during the water portion of the multimedia inspection were:

- Keith Middleton, Environmental Engineer, U.S. EPA
- Jeremy Deyoe, Environmental Engineer, U.S. EPA
- Spiros Bourgkos, Environmental Engineer, U.S. EPA
- Cher Benisek, Geologist, U.S. EPA
- Mark Moloney, Environmental Engineer, U.S. EPA
- Jeannie Kelly, Director of Regulatory Compliance, ASI
- Toni Paulus, Environmental Manager, ASI

All participants from U.S. EPA presented their inspector credentials to the facility representatives at the beginning of the inspection.

2.1 Opening Conference

On Monday, November 12th, 2013 at 1:00 pm, EPA inspectors made entry on to the site for this multimedia inspection. Toni Paulus and Jeannie Kelly represented ASI during the opening conference. The proposed inspection plan was presented to ASI representatives and the anticipated focus for each part of the multimedia inspections. An explanation and the locations of each of the SWMU located on ASI site was asked for and provided. The important SWMU for CWA compliance is SWMU #5, which encompasses the lagoon system that drains to the WWTP. EPA inspectors concluded the Opening Conference and did a preliminary drive-through of ASI site with emphasis on the SWMUs and the NPDES outfalls. While driving by the WWTP, Jeanne Kelly reiterated that "dirty water" or sludge was pumped out of the WWTP clarifiers to a depression area north of the WWTP, as documented in the previous November 12-15, 2013 inspection. Plant growth was also noticed within the center of the clarifiers (Photo IMG_0964). At Outfall 400, algae was seen around the outfall location. The same discolored discharge at Outfall 200 that was observed during the November 12-15, 2013 inspection (Photo IMG_0966).

2.2 Inspection Activities

Each day of inspection began at approximately 8:30 am with a daily opening meeting in a conference room within the ASI administrative building with either Toni Paulus or Jeanne Kelly. On the first full inspection day, August 26th, EPA water inspectors spent time reviewing NPDES permit DMR information, discussed ASI operations in more detail and participated in the Resource Conservation and Recovery Act (RCRA) site walk-through. On Wednesday, August 27th, EPA water inspectors assisted Cher Benisek in doing the Spill Prevention, Control, and Countermeasure (SPCC) portion of the inspection. On the final day of the inspection, Thursday August 28th, EPA water inspectors followed-up on some concerns with the storm water collection system west of the ASI administration building and investigated the discharge coming from the continuous caster storage pit.

3.0 Facility Process Description

ASI is now running the Electric Melt Shop (EMS) three days a week with two 12 hours shifts. The 14-inch mill is run a five days a week for 24 hours a day.

During the RCRA walk-through, a more detail explanation was given by ASI on how the 14-inch mill cooling tower interacts with the lagoon system. Water from the cooling tower also goes through a baffle, for oil collection, and a scale drag before being recycled back to the 14-inch mill process. Blowdown water from the 14-inch mill enters the lagoon system and is treated at the WWTP. The pits and wet wells are physically within the 14-inch mill and are also pumped to the lagoons for eventual treatment at the WWTP.

3.1 Wastewater Treatment Plant (WWTP)

During the opening conference, EPA confirmed that the WWTP is operated Monday through Friday from 6 am to 3pm. ASI only discharges from the WWTP when an operator is present.

EPA inspectors conducted a walk-through of the wastewater treatment plant during the RCRA inspection on the second day of the inspection. The focus of the WWTP walk-though was ASI's sludge processing procedures of sludge in its two clarifiers. Originally, the WWTP was constructed with sludge centrifuges that would dewater sludge before disposal. The centrifuges were deemed unnecessary when ASI re-started operation in 2001 and were removed. It was confirmed again during the WWTP walk-through that approximately 1250-2500 gallons of sludge is pumped every other day into the depressional area north of the clarifiers.

3.2 Site Assessment

EPA water inspectors participated in the RCRA and SPCC site inspections in order to further assess ASI compliance with its NPDES permit and the CWA.

The RCRA site walk-through, on the second day of the inspection, started out by checking the used oil being stored within and outside the old Tube Mill Buildings. It didn't appear that any of this stored oil was either currently leaking nor were there signs of previous spillage that would affect CWA compliance. Next, EPA inspectors looked at the KO61 storage area and it appeared that there could be storm water runoff from this area to Miami Creek. The cooling tower pump that was identified during the previous inspection as spraying water on to the ground had been fixed. The RCRA walk-through was completed after a visit to the 14-inch mill cooling towers and the WWTP (both areas are covered in another previous section). EPA inspectors also drove and viewed SWMU #4 (landfill), SWMU #3, and SWMU #5. The collection of hazardous materials, including PCBs, within SWMU #5 was not observed during this inspection.

The SPCC site walk-through was conducted on the third day of the inspection. Near the 14-inch mill, it was discovered that a pump was leaking (IMG_0039). The area where the pump was leaking was partially covered and, during a heavy storm event, would drain to the lagoon system and would be treated at the ASI WWTP. After looking through the 14-inch mill, EPA inspectors looked at a slag waste collection area and the slag cooling area. The low depressional area south of the EMS captures slag and storm water runoff. This water is eventually pumped to the lagoon system south of the 14-inch mill. At the slag waste area, slag is stored here for cooling before being processed by Stein Mill Services. Water is sprayed on the hot slag every 8 minutes. French drains on the south side of the storage building drain the water to the low depressional area. EPA inspectors also walked through the EMS building and through the HTMR. The HTMR was a metal recovery operations that has been shut down. EPA water inspectors observed no CWA or NPDES compliance issues in either of these locations.

On the last day of this inspection, EPA water inspectors conducted a site walk-through at the storm sewer collection sewers near the start of the unnamed creek to Outfall 400. This area was identified in the November 12-15, 2013 inspection as having a storm sewer, which was identified in the SWPPP as connected to ASI's WWTP, as possibly discharging to the unnamed creek. Through the evaluation of a storm sewer survey provided by ASI and additional visual observations, it does not appear any storm sewer in this area is connected to the unnamed creek and Outfall 400. Next, EPA water inspectors drove to the ASI WWTP and the NPDES storm water outfall to take pictures and to again document any discharges. As previously observed, a milky white discharge from Outfall 200 was documented (IMG_0966 & IMG_0967). This site walk-through concluded at the continuous caster pit/steel bloom storage area. Another sample was taken of the potential discharge. This sample was field tested for pH and conductivity.

4.0 Sampling Description

Previously during the November 12-15, 2013 inspection, EPA inspectors took water samples at ASI's NPDES Outfall 001, Outfall 200, Outfall 400, and at a potential industrial discharge near ASI's Continuous Caster. For this inspection, water samples were taken at the industrial discharge location on Thursday, August 28th of this discharge to field test for pH.

Figure 1 shows the location of where this sample was taken. The results of the three pH samples were 11.12, 11.09, and 11.09. The pH meter was an Extech Instruments Oyster – 10pH/mV/Temperature meter and was properly calibrated before the sampling was conducted. The conductivity of this discharge was also checked in the field using an Amber Science conductivity meter model 604 probe. The approximate conductivity of this discharge was1,259 μS/cm.

Figure 1 – ASI Steel Storage Area Discharge

5.0 DMR Records Review

NPDES violations reported by ASI in its DMRs between January 2009 and April 2014 were reexamined after taking into account the storm water calculations (per Special Condition 13 of the NPDES permit). Specifically in 2014, ASI reported three NPDES permit exceedances in the month of April, two for Total Suspended Solids permitted load limits and for one Iron permitted load limits. All three violations were considered not be violations after the storm water credit calculation was applied. The storm water credit calculations and assumptions made by ASI appeared to be acceptable. Copies of the storm water credit calculation were provided by ASI for for each month there had been a violation reported in the DMRs.

5.1 Storm Water Pollution Prevention Plan (SWPPP) Review

EPA water inspectors also reviewed ASI's SWPPP during the records review. Copies of ASI's quarterly and annual SWPPP inspections were requested and provided. Concerns observed with ASI's SWPPP have been tabulated in Section 5.2 of EPA's November 12-15, 2014 report.

6.0 Findings and Observations

Any concerns observed at ASI have been incorporated into Section 6.0 of EPA's report for the November 12-15, 2013 inspection.

7.0 List of Attachments

- Attachment A1 – Site Visit Photolog

Attachment A1

Alton Steel, Inc.
EPA Inspection August 25-28, 2014
All photos taken by Keith Middleton, Environmental Engineer, U.S. EPA
Camera: Canon PowerShot SD1400 IS & Canon PowerShot SX230 HS

1: IMG_0037
Description: Sludge pump location with WWTP clarifier on the right
Location: ASI WWTP
Camera Direction: South
Date/Time: August 26, 2014, 1:39 PM

2: IMG_0038
Description: Final disposition of WWTP clairfier sludge
Location: North of ASI's WWTP
Camera Direction: Northwest
Date/Time: August 26, 2014, 1:40 PM

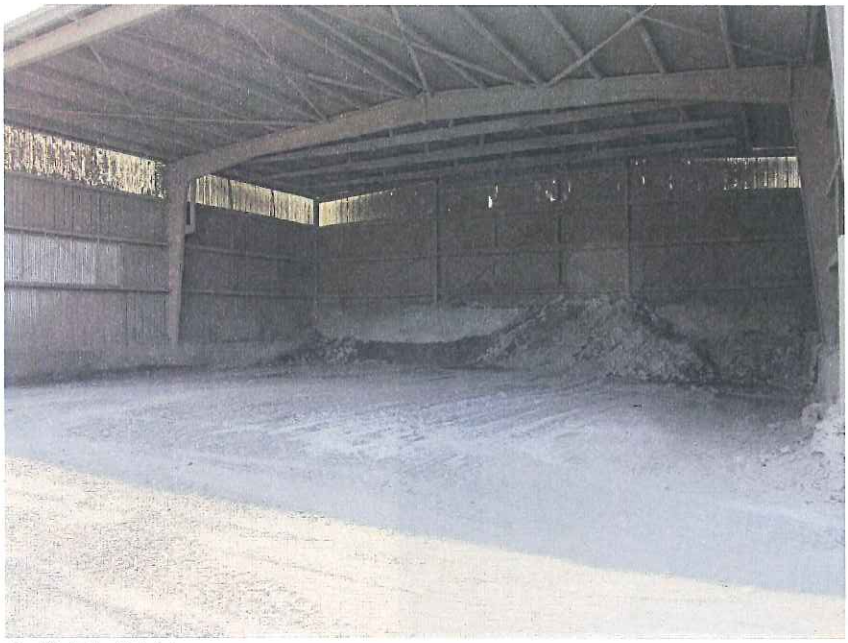
3: IMG_0039
Description: Overflowing pumps west of 14-inch mill
Location: Steel Bloom Storage Area
Camera Direction: Southeast
Date/Time: August 27, 2014, 8:49 AM

4: IMG_0040
Description: Low area that collects slag and stormwater runoff before being pumped to lagoons
Location: South of EMS
Camera Direction: West
Date/Time: August 27, 2014, 11:11 AM

5: IMG_0041
Description: Low area that collects slag and stormwater runoff before being pumped to lagoons
Location: South of EMS
Camera Direction: North
Date/Time: August 27, 2014, 11:12 AM

6: IMG_0042
Description: Ditch that collects slag and stormwater runoff before being pumped to lagoons
Location: South of EMS
Camera Direction: South
Date/Time: August 27, 2014, 11:12 AM

7: IMG_0043
Description: Slag Storage Area
Location: West of EMS
Camera Direction: South
Date/Time: August 27, 2014, 11:16 AM



8: IMG_0044
Description: Slag Storage Area
Location: West of EMS
Camera Direction: Southeast
Date/Time: August 27, 2014, 11:16 AM

9: IMG_0045
Description: Discharge from Continuous Caster pit
Location: East of Continuous Caster within Scrap Yard
Camera Direction: West
Date/Time: August 28, 2014, 11:37 AM

10: IMG_0046
Description: Discharge from Continuous Caster pit
Location: East of Continuous Caster within Scrap Yard
Camera Direction: East
Date/Time: August 28, 2014, 11:38 AM

11: IMG_0964
Description: WWTP Clairfiers
Location: ASI WWTP
Camera Direction: West
Date/Time: August 28, 2014, 9:11 AM

12: IMG_0965
Description: Outfall 400
Location: Oufall 400; Northwest of ASI WWTP
Camera Direction: East
Date/Time: August 28, 2014, 9:19 AM

13: IMG_0966
Description: Outfall 200
Location: Oufall 200; West of Chessen Lane
Camera Direction: Southwest
Date/Time: August 28, 2014, 9:31 AM

14: IMG_0967
Description: Close up of Outfall 200
Location: Oufall 200; West of Chessen Lane
Camera Direction: West
Date/Time: August 28, 2014, 9:32 AM