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Robert Moser, MD, Acting Secretary

Department of Health & Environment

Sam Brownback, Governor

January 21, 2011

Andrew G. Thiros, Esq.  
United States Steel Corporation  
Law Department  
600 Grant Street  
Pittsburgh, Pennsylvania 15219-2800

By USPS and e-mail


RE: Girard Smelters CAFO  
Cherokee-Lanyon #2/Girard Zinc Works

Dear Andrew:

Enclosed find a copy of the fully executed consent agreement and final order relative to the above-referenced sites.

As I have indicated to you in the past, we appreciate the cooperation exhibited by US Steel in this matter and look forward to a continuing positive relationship as we move toward the final a remediation and restoration of the sites.

Should you have any questions, do not hesitate to contact me.

Respectfully  


Paul Gerard Marx  
Attorney, KDHE

BER SCANNED  
JUL 13 2011

C: Rick Bean, KDHE  
Deanna Ross, KDHE  
Pamela Green, KDHE

**STATE OF KANSAS  
DEPARTMENT OF HEALTH AND ENVIRONMENT**

In the Matter of:	)	
	)	
Environmental Contamination at the	)	
	)	
CHEROKEE-LANYON #2 AND	)	
GIRARD ZINC WORKS	)	Case No. 10-E-177BER
IN GIRARD, KANSAS	)	
	)	
UNITED STATES STEEL CORPORATION,	)	
Respondent.	)	

**CONSENT AGREEMENT AND FINAL ORDER**

The Parties hereto, the Kansas Department of Health and Environment ("KDHE"), and UNITED STATES STEEL CORPORATION, (also referred to herein as "Respondent"), a Delaware corporation authorized to do business in the State of Kansas, having agreed that settlement of this matter is in the best interests of all parties and the public, hereby represent and state the following:

1. Respondent agrees to undertake all actions required by the terms and conditions of this Order.
2. This Order is a Final Order of the Secretary of the Kansas Department of Health and Environment ("Secretary") pursuant to the Kansas Administrative Procedures Act ("KAPA"). Respondent agrees that jurisdiction is proper and not to contest this Order,

the authority of the Secretary to issue this Order or any action by KDHE to enforce the terms of this Order.

3. No change in the ownership or corporate status of Respondent shall alter its responsibilities under this Order.
4. Respondent shall provide a copy of this Order to any subsequent owners or successors before ownership rights are transferred. Respondent shall provide a copy of this Order to all contractors, subcontractors, laboratories and consultants which are retained to conduct any work performed under this Order, within fourteen (14) days after the effective date of this Order or the date of retaining their services. Notwithstanding the terms of any contract, Respondent is, and shall remain, responsible for compliance with this Order and for ensuring that its contractors and agents comply with this Order.
5. Neither entry into nor performance of this Order shall constitute or be construed as an admission or acknowledgment by Respondent of any fact, legal issue, or conclusion of law, or of any liability, fault or responsibility, or of a waiver of any rights, privileges, or defenses, or as evidence of such with respect to the Site and the surrounding environment, nor shall it be admitted in evidence against Respondent in any proceeding other than a proceeding by KDHE to enforce this Order, and Respondent expressly denies any liability, fault or responsibility with respect to said Site.
6. The Findings of Fact and Conclusions of Law made by KDHE as set forth below are not admitted by Respondent. However, solely for the purposes of this Order, and subject to the provisions of Paragraph 5 above, Respondent consents that said Findings of Fact and

Conclusions of Law shall govern and control its obligations, rights and duties under this Order.

7. While the Respondent to this Order does not admit liability for the contamination at the Site and the surrounding environment, nevertheless it agrees to enter into this Order to undertake the activities contained in the approved Work Plan and Scope of Work as described below.

#### DEFINITIONS

8. Terms used in this Order, if defined in state statutes or the associated regulations, shall have the meanings assigned to them in the statute or the regulations. To the extent not inconsistent with the meanings assigned to them in statute or regulation, the terms listed below if used in this Order, or in attached or incorporated documents shall have the following meanings.
  - a. "CAD" shall mean Corrective Action Decision, issued by KDHE selecting the remedy to be implemented to address contamination at the site, the scope of which being defined herein.
  - b. "CAP/CA" shall mean Corrective Action Plan/Corrective Action, the scope of which being defined herein.
  - c. "CI/CAS" shall mean Comprehensive Investigation /Corrective Action Study, the scope of which being defined herein.
  - d. "Day" shall mean a calendar day unless expressly stated to be a working day.
  - e. "IM" shall mean Interim Measure, the scope of which being defined herein.

- f. "RSK Manual" shall mean the KDHE Risk-Based Standards for Kansas Manual 5th Version (October 2010) and subsequent updates. The manual describes the process for establishing chemical-specific and site-specific clean-up goals for soil, groundwater and indoor air, and provides reference to additional KDHE policies for clean-up goals involving surface water and sediment that are protective of human health and the environment.
- g. "Site" shall mean all areas and media from where hazardous substances and any other contamination or pollution connected with the former zinc smelting operations as identified in this Order have been released. As used herein, the term may refer to either the Cherokee-Lanyon #2 Site or the Girard Zinc Works Site (also known as the Cow Creek Smelter) individually, or to both sites collectively.
- h. "Working day" shall mean a day other than a Saturday, Sunday or State of Kansas holiday. In computing any period of time under this Order where the last day would fall on a Saturday, Sunday or holiday recognized by the State of Kansas the period shall run until the end of the next working day.

#### JURISDICTION

- 9. KDHE is a duly authorized agency of the State of Kansas, created by act of the legislature, pursuant to K.S.A. 75-5601, *et seq.*
- 10. The Secretary of KDHE (also referred to herein as the Secretary) has authority and responsibility to protect the public health and the environment; specifically, as it pertains to contamination and remediation of contamination of the waters and soils of the state,

under the authority of K.S.A. 65-161 through K.S.A.65-171z; relative to the safe and sanitary disposal of hazardous wastes, under the authority of K.S.A 65-3430, *et seq.*; and, in matters involving hazardous substances and the hazardous substance cleanups, under the authority of the Kansas Environmental Response Act (K.S.A. 65-3452a, *et seq.*).

11. More specifically, the Secretary has authority, pursuant to K.S.A. 65-164(d), to order a person, company or corporation that has or is polluting the waters of the state to treat the sewage or other polluting material to prevent the future pollution of waters of the state.
12. The Secretary has the authority pursuant to K.S.A. 65-3453(a)(1) to determine that the cleanup of a site polluted by a hazardous substance is necessary to protect the public health or the environment.
13. The Secretary has the authority pursuant to K.S.A. 65-3453(a)(3) to issue cleanup orders to persons responsible for the health or environmental hazard created by a hazardous substance. K.S.A. 65-3453(a)(6) authorizes the Secretary to enter into contracts or agreements with any person or company to conduct the necessary clean-up operations.
14. K.S.A. 65-3453(a)(4) authorizes the Secretary to recover moneys from persons responsible for the health or environmental hazard created by a hazardous substance.

#### FINDINGS OF FACT

15. **Site Description.** The Cherokee-Lanyon #2 Site is located in the southeast Quarter of the southwest Quarter of Section 19, Township 29 South, Range 24 East, approximately 0.5 miles southeast of the city of Girard, Crawford County, Kansas (Exhibit 1). The Cherokee-Lanyon #2 Site is bounded on the north by a former Atchison, Topeka and

Santa Fe Railroad easement that runs from northwest to southeast, and is bounded on the south by 610 Road. An intermittent branch of Second Cow Creek is located approximately 1,000 feet east of the Cherokee-Lanyon #2 Site. The Cherokee-Lanyon #2 Site is undeveloped and is currently being used as a grazing pasture for cattle.

16. The Girard Zinc Works Site is located in the southeast Quarter of the northwest Quarter of Section 29, Township 30 South, Range 24 East, approximately two (2) miles southeast of the city of Girard, Crawford County, Kansas (Exhibit 1). The Girard Zinc Works Site is currently undeveloped. The northern boundary of the Site is a former Atchison, Topeka and Santa Fe Railroad easement that runs northwest to southeast. The south is bounded by a former railroad spur and the east is bounded by a drainage way that intermittently discharges stormwater into Second Cow Creek located approximately 500 to 1,000 feet from the Girard Zinc Works Site as defined in the Focused Former Smelter Assessment.
17. **Business Information.** According to historical records: (a) Cambridge Iron and Steel Co. had been involved in the operation of Cherokee-Lanyon #2 and Girard Zinc Works as early as 1898; (b) American Sheet Steel Company was incorporated in March of 1900 and acquired control of Cambridge Iron and Steel Co.; (c) American Sheet Steel ceased operations at the smelter in December of 1900; and (d) in 1901 United States Steel Corporation, which was incorporated February 5, 1901, merged with seven (7) corporations, including American Sheet Steel Company.

18. **Site Ownership and Occupancy History.** The Cherokee-Lanyon#2 Site was previously used for reducing zinc sulfide ore to metallic zinc in the late 1800's and early 1900's. Sanborn fire insurance maps from 1902 indicate that there were eight (8) furnaces, eight (8) ore roasting kilns, an ore mill, an engine room, a clay mill, a drying house, a coke oven and other small structures such as a store. A pond is indicated to the west of the site on the map. No smelter structures remain at the Cherokee-Lanyon #2 Site, but brick, rock, slag, and retort fragments are visible in the vicinity of the former smelter operations and along the railroad easement.
19. The Girard Zinc Works Site (also known as the Cow Creek Smelter) was historically used to reduce zinc sulfide ore into metallic zinc from 1890 to 1902. A historical review of the site by KDHE and Burns & McDonnell Engineering Company, Inc. ("B & Mc") personnel indicates that there were four (4) furnaces, a blacksmith shop, a pottery room, a dry room for retorts, a brick retort kiln, a two story high flat roast kiln, a furnace building, a crusher and mining room, a water tank and a large boarding house, according to the Girard Press, January 24, 1889 and the 1902 Sanborn fire insurance map. There are currently no standing structures at the Girard Zinc Works Site, but foundations and fragments of slag, brick, rock and retorts remain.
20. Hereinafter, the Girard Zinc Works Site and the Cherokee-Lanyon #2 Site will be collectively referred to as the "Site."
21. **Environmental Investigations.** B & Mc performed modified Phase I Focused Smelter Assessments (FFSA) of the Site on behalf of KDHE in 2003 in order to identify whether

past smelting operations have negatively impacted the properties. B & Mc personnel inspected the Site and found evidence of past smelter operation activities. B & Mc concluded the potential existed for metals contamination of soil at the former smelter Site.

22. B & Mc performed Phase II FFSA investigations at the Site on behalf of KDHE in June 2004. Arsenic, cadmium, lead and zinc were detected above the RSK Manual goals for direct human exposure to soil in a residential setting. Based upon the findings, KDHE believes that the contamination of the soil at the Site is causing or may be causing pollution of the waters and/or soils of the State; or is or threatens to become a hazard to persons, public health or safety.
23. On May 1, 2007, Respondent and KDHE entered into a consent agreement in which Respondent agreed to conduct comprehensive investigations (CI) at the Site to determine the nature and extent of contamination and to develop a corrective action study (CAS) for KDHE approval. Respondent contracted ENTACT, LLC, to perform the comprehensive investigation/corrective action study (CI/CAS) in order to supplement the Phase I (2003) and Phase II (2004) FFSA's. CI/CAS Work Plans were approved by KDHE in November 2007, and CI activities were performed in December 2007 and January 2008.
24. During the CI activities performed at the Cherokee Lanyon #2 Site, lead, and to a lesser extent, cadmium and arsenic according to X-Ray Fluorescence (XRF) screening, were detected in soils exceeding the RSK residential goals. According to laboratory analysis of samples collected, lead concentrations ranged up to 1,200 milligrams per kilogram

(mg/kg), exceeding the RSK Manual goal of 400 mg/kg for human exposure to soil in a residential setting. Limited migration of lead, cadmium and arsenic in soils has occurred to the adjacent off-Site drainage ways bordering Highway 610.

25. During the CI activities performed at the Girard Zinc Works Smelter Site, lead, cadmium, arsenic, and zinc were present in surface soils above the RSK Manual goals for human exposure to soil in a residential setting. According to laboratory analysis, lead and zinc concentrations ranged up to 8,800 mg/kg and 120,000 mg/kg in surface soils, respectively. Cadmium and arsenic were measured as high as 120 and 56 mg/kg in soils, respectively. These results exceed their respective RSK Manual goals for direct human exposure to soil in a residential setting. Lead and cadmium concentrations in subsurface soils (up to 4 feet deep) ranged up to 65 mg/kg and 1,200 mg/kg, respectively, above the RSK Manual goals for a residential setting. Zinc concentrations were detected in one location in Second Cow Creek at (510 mg/kg) in sediment above probable effects concentration (PEC) of 459 mg/kg. Cadmium and zinc were detected in shallow groundwater in 2008 at 0.0075 mg/L and 13 mg/L, respectively, above the RSK goals for groundwater of 0.005 mg/L for cadmium and 5 mg/L for zinc, but were not detected above RSK residential criteria in follow-up sampling in 2010.
26. The Respondent submitted CAS for the Sites, approved by KDHE on November 17, 2009. In the CAS Reports, alternatives for addressing metal contamination were evaluated.

27. On September 7, 2010, KDHE issued final corrective action decisions (CADs), attached hereto marked Exhibit 2 and incorporated herein, which documents the selected remedial action for the Site.

#### CONCLUSIONS OF LAW

28. Respondent is a "person", "company", "corporation", "institution" or "municipality" within the purview of, K.S.A. 65-164 through K.S.A. 65-171z and K.S.A. 65-3452a, *et seq.*
29. The Site constitutes a site within the meaning of K.S.A. 65-3453.
30. The presence of the contaminants identified in the soil and groundwater underlying and surrounding the Site constitute "pollution" as defined by K.S.A. 65-171d.
31. Contaminants identified in the soil and/or in the groundwater underlying and surrounding the Site are "hazardous substances" as defined by K.S.A. 65-3452a.
32. The facts set forth above constitute:
- a. The pollution of the land or waters of the state or the threat of pollution of the land or waters of the state in violation of K.S.A. 65-164(d);
  - b. A health or environmental hazard or a potential threat to health and the environment created by a hazardous substance requiring cleanup pursuant to K.S.A. 65-3453.
33. Respondent is a person or company with which the Secretary is authorized to enter into a contract or agreement to conduct the necessary clean-up operations. The environmental contamination identified at the Site is causing or threatens to cause pollution of the soil

and waters of the state; or is, or threatens to become, a hazard to persons, public health or safety.

### ORDER

34. The Secretary hereby orders and the Respondent agrees to conduct the activities identified and be bound by the terms set forth herein.
- a. All activity contemplated or performed pursuant to this Order shall be conducted subject to the approval of KDHE in accordance with the terms of this Order and consistent with the standards, specification and schedules approved by KDHE as contained in the exhibits to this Order.
  - b. Failure to comply with any of the terms and conditions of this Order or incorporated exhibits shall be considered a violation of this Order and may subject the Respondent to such administrative actions and penalty provisions as set forth in this Order or otherwise authorized by law.
  - c. All communications, notifications and requests required under this Order shall be made in writing. For the purposes of this Order, fax transmissions will be considered as being in writing; e-mail transmissions shall not be considered in writing.
  - d. Unless otherwise directed by KDHE, Respondent shall provide to KDHE one hard copy plus one electronic copy of each deliverable required pursuant to this Order.
  - e. All documents submitted to KDHE pursuant to this Order are subject to KDHE

approval and shall be considered draft documents until accepted as final by KDHE.

- f. Any documents, reports, plans, specifications, schedules and/or attachments required by this Order, upon acceptance by KDHE, shall be deemed incorporated into this Order by reference.

35. **Exhibits Incorporated.** The following documents, as required, are or shall be incorporated herein by reference:

- a. Exhibit 1: Location Maps and/or Photographs.
- b. Exhibit 2: Corrective Action Decisions (CAD).
- c. Exhibit 3: Corrective Action Plan/Corrective Action (CAP/CA) Scope of Work (SOW).
- d. Exhibit 4: CAP/CA Work Plan (incorporated herein upon KDHE approval and all subsequent approved revisions).
- e. Exhibit 5: Project Deliverable and Milestone Schedule.
- f. Exhibit 6: CAP/CA Schedule (incorporated herein upon KDHE approval and all subsequent approved revisions).
- g. Exhibit 7: Field Activities Notification Form.

36. **KDHE Requested Modifications to Documents.** KDHE may ask the Respondent to make specific modifications to any document required by this Order. If the Respondent does not make modifications acceptable to KDHE, KDHE, shall send Respondent a Notice of Disapproval delineating the modifications that need to be made and provide an

expected timeframe for Respondent to make the modifications. KDHE may make such modifications as it determines to be necessary. KDHE will notify Respondent in writing and specify the basis for its determination that modifications are necessary. Within thirty (30) days after receipt of such determination, Respondent shall have the opportunity to meet or confer with KDHE to discuss the modifications. Costs incurred by KDHE in making such modifications shall be charged to the Respondent as oversight costs.

37. **Inadequate Performance – Notice of Disapproval.** In the event that KDHE finds that a document submitted or work performed pursuant to this Order is inadequate, it will issue a Notice of Disapproval to the Respondent. The Notice of Disapproval delineates the deficiencies in the document or work, describes the necessary modifications to address the deficiencies and provides an expected timeframe to correct the deficiencies. Failure to revise, correct or otherwise respond to the Notice of Disapproval shall be deemed a violation of this Order.
38. **Work Takeover – Notice.** If Respondent fails to revise, correct or otherwise respond to KDHE's Notice of Disapproval in accordance with the schedule specified in the Notice of Disapproval, or if KDHE determines that Respondent 1) has ceased implementation of any portion of the work, 2) is seriously or repeatedly deficient or late in its performance of the work, or 3) is implementing the work in a manner which may cause an endangerment to human health or the environment, KDHE may assume or arrange for a contractor or contractors to assume the performance of all or any portions of the work as KDHE determines necessary. If KDHE determines that such a work takeover is

necessary, it will send Respondent a Notice of Work Takeover specifying a date upon which KDHE may assume or arrange for a contractor or contractors to assume the performance of all or any portions of the work. In the event of work takeover, Respondent shall pay for all costs incurred by KDHE and any contractor who performs work pursuant to this paragraph.

39. **Task Specific Schedules.** All work plans required pursuant to this Order shall establish task specific dates and timeframes for related implementation, construction and reporting activities. Each schedule shall specifically include the Respondent's proposed milestone dates for start and completion of implementation as well as construction activities and submittal of a draft report. All requests for schedule extensions must be submitted in advance by Respondent to KDHE for approval.
40. **Kansas Licensure Requirement.** All work performed pursuant to this Order shall be under the direction and supervision of a professional engineer or geologist licensed in the State of Kansas with expertise in environmental site investigations and remediation. Within sixty (60) days of the effective date of this Order, Respondent shall notify KDHE of the name, title, license number and qualification of the engineer or geologist, and of the contractors to be used in carrying out the terms of this Order. Respondent shall notify KDHE of any changes of name, title, license number and qualifications of the engineer, geologist and general contractor within thirty (30) days of the occurrence of such change.

#### **REQUIRED TASKS**

41. **CAP/CA Work Plan and CAP/CA Schedule.**

- a. Submission of Draft CAP/CA Work Plan and CAP/CA Schedule. Respondent shall submit for KDHE approval a draft CAP/CA Work Plan and CAP/CA Schedule which is consistent with the CAD and the CAP/CA SOW (Exhibit 3). The draft CAP/CA Work Plan and CAP/CA Schedule shall facilitate, to the extent possible, commencement of substantial continuous physical on-site corrective action within 12 months of issuance of the CAD. KDHE will provide comments on the draft CAP/CA Work Plan.
  - b. Submission of Final CAP/CA Work Plan and CAP/CA Schedule. Respondent shall submit for final approval a revised Work Plan that addresses KDHE's comments. Upon KDHE approval, the CAP/CA Work Plan and CAP/CA Schedule shall become incorporated by reference into this Order as Exhibits 4 and 6, respectively.
  - c. Implementation. Respondent shall implement the tasks detailed in the CAP/CA Work Plan/Design and CAP/CA Schedule in accordance with the KDHE-approved CAP/CA Schedule, Exhibit 6.
42. **Additional Tasks May Be Required.** KDHE, in conducting its oversight activities, may determine that tasks may be required that are in addition to those specified in the approved CAP/CA work plans or associated documents/reports, may be required. If such tasks are required, they shall to be completed as specified by KDHE and within the time frames established by KDHE. KDHE will notify Respondent in writing and specify the basis for its determination that additional tasks are necessary. Within thirty (30) days

after receipt of such determination, Respondent shall have the opportunity to meet or confer with KDHE to discuss the additional tasks.

43. **Wells Required by Order.** Any wells installed on property that are owned by the Respondent for the purposes of this Order shall be deemed the property of Respondent. For any well installed by KDHE for investigation purposes prior to the effective date of this Order, Respondent shall propose which of those wells will be retained for purposes of this Order. The wells retained, upon KDHE approval, shall become the property of Respondent. If any wells are installed on property not owned by Respondent, Respondent shall be responsible for such wells subject to obtaining access to the property and in accord with the provisions of this Order. Prior to termination of this Order, all wells for which Respondent is responsible shall be closed in compliance with KDHE regulations and written notice shall be provided to the KDHE project coordinator as set forth in this Order unless otherwise approved by KDHE.
44. **Land-Use Controls:** Within sixty (60) days from KDHE's approval of the CAP/CA Work Plan, or as otherwise directed by KDHE, Respondent shall make an application to the Environmental Use Control Program for the purpose of entering into an Environmental Use Control Agreement, pursuant to K.S.A. 65-1,221 *et seq.*, that includes all restrictions set forth in the Final CAS and Final CAD in order to ensure the protectiveness of the remedial measures to be performed pursuant to this Order.
45. **Sample Collection.** At the request of KDHE, Respondent shall provide or allow KDHE or its authorized representatives to take split samples of all samples collected by

Respondent pursuant to this Order. Similarly, at the request of Respondent, KDHE shall allow Respondent or its authorized representatives to take split or duplicate samples of all samples collected by KDHE under this Order. KDHE shall notify Respondent at least seven (7) days before conducting any sampling under this Order, provided, however, that if seven (7) days notice of sample collection activity is not possible, KDHE and Respondent shall give such advance notice to enable each party to have a representative present during said sample collection activity.

46. **Quality Assurance.**

- a. All samples analyzed pursuant to this Order shall be analyzed by a KDHE-approved laboratory using KDHE-approved laboratory methodologies.
- b. All sample collection and analysis shall be performed in compliance with the approved work plan(s), including scheduling of analyses, documentation of sample collection, handling and analysis.
- c. Laboratory analytical report forms shall be submitted to KDHE for all analytical work performed pursuant to this Order. Any deviation from the procedures and methods set forth in these documents must be approved by KDHE prior to use. Respondent shall notify KDHE within five (5) working days of notice or knowledge of a potential deviation from prescribed procedures or methods. Such notice shall provide information as to the nature of the deviation, if known, and outline a proposed investigation to determine whether the sample or results are representative or should not be considered valid. If the results cannot be validated

by evaluation of the quality assurance/quality control procedures, historical data and/or laboratory protocol, Respondent will resample if directed to do so by KDHE. Respondent shall notify KDHE at least seven (7) days before conducting re-sampling.

- d. Respondent shall use the quality assurance, quality control, and chain of custody procedures specified in the quality assurance project plans which are part of the work plan(s), for all sample collection and analysis performed pursuant to this Order, unless otherwise agreed to by KDHE.
- e. All contracts for field work shall provide that KDHE representatives are allowed access, for auditing and evaluation purposes, at reasonable times upon reasonable request, to all personnel utilized by Respondent for sample collection and analysis and other field work. Upon request by KDHE, the laboratories shall perform analysis of a reasonable number of known samples provided by KDHE to demonstrate the quality of the analytical data.

47. **Data/Document Availability.** Upon completion of quality assurance and quality control assessment of the data, Respondent shall make available to KDHE results of sampling or tests, or other data generated by or on its behalf with respect to the implementation of this Order. Respondent shall report the results of such sampling or testing, or other data in accordance with the task specific work plans and schedules identified in this Order or as otherwise directed by KDHE. Upon completion of quality assurance and quality control assessment of the data, KDHE shall make available to Respondent results of sampling

and tests, and other data obtained relative to this Order, unless it is otherwise prohibited by law.

**48. Progress Reporting.**

- a. Respondent shall provide KDHE with written quarterly progress reports, in accordance with the Project Deliverable and Milestone Schedule (Exhibit 5), commencing from the effective date of this Order and continuing until termination of this Order. At a minimum, these progress reports shall:
  - i. Describe the actions, progress and status of projects which have been taken toward achieving compliance with this Order, as well as the actions which are scheduled for the next quarter;
  - ii. Identify any requirements under this Order that were not timely completed and any problem areas and anticipated problem areas in complying with this Order;
  - iii. Include all results of sampling, tests, data and conclusions drawn from data generated pursuant to the work plan(s); and
  - iv. Provide updated schedule(s) as requested by, and subject to, KDHE approval.
- b. The KDHE project coordinator may direct the Respondent to submit monitoring reports separate from or combined with quarterly progress reports.

**49. Access.**

- a. KDHE and any of its agents or contractors shall be allowed and authorized by

Respondent to enter and freely move about all property at the Site for the purpose, among other things, of interviewing site personnel and contractors; inspecting records, operating logs, and contracts related to the activities set out in the work plan(s); reviewing the progress of Respondent in carrying out the terms of this Order; conducting such sampling and tests as KDHE deems necessary; using a camera, sound recording, or other documentary type equipment; and verifying the reports and data submitted to KDHE by Respondent. Respondent shall permit such persons to inspect and copy all records, files, photographs, documents, and other writings, including all sampling and monitoring data that pertain to work undertaken pursuant to this Order.

- b. To the extent that work required by the Work Plan(s) must be done on property not owned or controlled by Respondent, Respondent shall use its best efforts to obtain access agreements from the present owner(s) of such property within thirty (30) days of the date the need for access is known. Best efforts include, but are not limited to, reasonable payment of monies to the property owner. Any such access agreement shall be incorporated by reference into this Order. In the event that agreements for site access are not obtained within thirty (30) days of the date the need for access is known, Respondent shall notify KDHE regarding both the lack of and its failure to obtain such agreements within seven (7) days thereafter. In the event that KDHE obtains access for Respondent, all costs incurred by KDHE shall be reimbursed by Respondent. Upon KDHE's obtaining access for

Respondent, Respondent shall undertake approved work on such property. KDHE shall not be responsible for any injury or damage to persons or property caused by the negligent or willful acts or omissions of Respondent, its officers, employees, agents, successors, assigns, contractors or any other person acting on Respondent's behalf in carrying out any activities pursuant to the terms of this Order.

50. **Field Activities Notification.** Respondent shall provide KDHE at least seven (7) days advance written notification before conducting any investigation and/or remediation, or other ancillary activities related to such measures, whether conducted pursuant to the Order or to a request, requirement or order from any other federal, state or local regulatory authority where the resultant data or information would be used in part or in full to satisfy requirements of the Order. Failure to provide advance written notification may result in KDHE rejection of the data obtained or work conducted by the Respondent. Advance written notification is to be accomplished by completing the KDHE-BER Remedial Section Field Activities Notification Form on the KDHE website for each activity as distinguished by separate field mobilizations. If website access is not available, Respondent may provide required written notification by completing the form (Exhibit 7) and submitting to the designated KDHE project coordinator.
51. **Record Preservation.** Respondent shall preserve, during the pendency of this Order and for a minimum of six (6) years after its termination, all records and documents which have not previously been provided to KDHE in its possession or in the possession of

Respondent's employees, agents, consultants or contractors which relate in any way to this Order or to hazardous substance and hazardous waste management and disposal at the Site. During this period, Respondent shall make such records available to KDHE upon request for inspection or KDHE's retention, or shall provide copies of any such records to KDHE. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by state or federal law. If the Respondent asserts such a privilege, it shall provide KDHE with the following: (1) the title of the document, record, or information; (2) the date of the document, record, or information; (3) the name and title of the author of the document, record, or information; (4) the name and title of each addressee and recipient; (5) a description of the subject of the document, record, or information; and (6) the privilege asserted by Respondent. However, no documents, reports or other information created or generated pursuant to the requirements of the Order shall be withheld on the grounds that they are privileged.

#### **ADDITIONAL PROVISIONS**

52. **Other Claims and Parties.** KDHE and Respondent retain their respective rights to assert claims against other persons not parties to this Order. Nothing in this Order shall constitute or be construed as a release for any claim, cause of action or demand in law or equity against any person, firm, partnership, or corporation not a signatory to this Order for any liability arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, hazardous

wastes, pollutants, or contaminants found at, taken to, or taken from the facility or the Site.

53. **Contribution and Reservation Rights.** Upon completion of this Order, pursuant to the provisions of paragraph 69 of the Order, Respondent shall be deemed to have resolved its liability to KDHE for the performance of the tasks required pursuant to this Order. To the extent possible, this Order should be considered an administrative settlement insofar as the remedial investigation and action at this Site and as such, Respondent is entitled to protection from contribution actions or claims as provided by Section 113(f)(2) of CERCLA, 42 U.S.C. 9613 (f)(2) for those matters/remedial activities.
54. Except as specifically provided, nothing herein shall limit the power and authority of KDHE to take, direct, or order all actions necessary to protect health, welfare, or the environment or to prevent, abate, minimize an actual or threatened release of hazardous substances, pollutants or contaminants, or hazardous or solid waste on, at, or from the Site. Further, nothing herein shall prevent KDHE from seeking legal or equitable relief to enforce the terms of this Order, from taking other legal or equitable action as it deems appropriate and necessary, or from requiring Respondent in the future to perform additional activities pursuant to applicable law.
55. KDHE reserves, and this Order is without prejudice to, all rights against Respondent with respect to all other matters, including, but not limited to:
- a. Claims based on a failure by Respondent to meet a requirement of this Order;
  - b. Liability for costs not included and described in the Reimbursement of Costs

Section of the Order;

- c. Criminal liability;
  - d. Liability for damages for injury to, destruction of, or loss of natural resources incurred through the implementation of this Order;
  - e. Liability arising from the past, present, or future disposal, release or threat of release of hazardous substances and hazardous wastes.
56. **Other Applicable Laws.** All actions required to be taken pursuant to this Order shall be undertaken in accordance with all applicable local, state and federal laws and regulations.
57. **Project Coordinator.** Respondent shall, upon receipt of this Order, designate a project coordinator who shall be responsible for overseeing the implementation of this Order and shall provide said coordinator's name and contact information to KDHE. The KDHE project coordinator identified below will be KDHE's designated representative. To the maximum extent possible, all communications between Respondent and KDHE and all documents, reports, approvals, and other correspondence concerning the activities performed pursuant to the terms and conditions of this Order, shall be directed through the project coordinators. The parties agree to provide at least seven (7) days written notice prior to changing project coordinators. The absence of the KDHE project coordinator from the Site shall not be cause for the stoppage of work.

58. **Notification.** Unless otherwise specified, reports, notices or other submissions required under this Order shall be and shall be sent to the KDHE project coordinator:

Pamela Green  
Bureau of Environmental Remediation/KDHE  
Curtis State Office Building  
1000 SW Jackson, Suite 410  
Topeka, Kansas 66612-1367  
Office: 785-296-1935

All communications with the Respondent should be sent to the Respondent's Project Coordinator:

Jeffrey L. Rey  
Sr. Environmental Engineer  
United States Steel Corporation  
1 N. Broadway MS: HB-2  
Gary, Indiana 46402  
Phone: (219) 888 7323  
Cell: (219) 712 7986  
Fax: (219) 888 5627

59. **Service of Process, Return Receipt Delivery.** The Parties may be served personally or by return receipt delivery to the addresses provided below. "Return Receipt Delivery" shall include service effected by United States Postal Service certified mail or priority mail, or commercial courier services, evidenced by a written or electronic receipt showing to whom it was delivered, the address where delivered, date of delivery, and the person or entity effecting delivery.

- a. For the State of Kansas:

Office of Legal Services  
1000 SW Jackson, Suite 560  
Topeka, Kansas 66612-1368  
785-296-5334

A copy of all documents served shall be sent to the KDHE Project Coordinator,  
also.

b. For the Respondent:

Andrew G. Thiros, Esq.  
United States Steel Corporation  
600 Grant Street; Suite 1500  
Pittsburgh, Pennsylvania 15219-2800

60. **Reimbursement of Costs.**

a. Costs incurred by KDHE from the Effective Date of this Order (the date executed by the Secretary of KDHE) until the end of the next calendar quarter shall be billed forty-five (45) days following the end of the calendar quarter. Thereafter, KDHE shall bill Respondent for all costs incurred by KDHE during each calendar quarter forty-five (45) days following the end the calendar quarter. Payment of the invoice is due upon receipt. Respondent shall remit a check for the full amount of those costs made payable to the Kansas Department of Health and Environment. Failure to pay the total balance due within thirty (30) days of issuance of the invoice shall be considered a violation of the Order.

b. Payment for all costs assessed to Respondent shall be made to:

Kansas Department of Health and Environment  
Bureau of Environmental Remediation  
Attn: Administration  
1000 SW Jackson Street, Suite 410  
Topeka, Kansas 66612-1367

A copy of the check and transmittal letter shall be sent to the KDHE Project Coordinator specified herein.

61. **Mutual Agreement.** Each Party acknowledges that it has read all of the terms of this Order, has had an opportunity to consult with counsel of its own choosing or voluntarily waived such right and enters into this Order voluntarily and without duress.
62. **Dispute Resolution.** If Respondent disagrees, in whole or in part, with any decision by KDHE pursuant to any paragraph of this Order, Respondent shall notify KDHE within thirty (30) days of receipt of the decision. The parties shall then have an additional thirty (30) days to attempt to resolve the dispute. If an agreement is reached, the resolution shall be reduced to writing, signed by each Party and incorporated thereupon into this Order. If agreement is not reached, KDHE shall issue a final written decision on the dispute.
63. Respondent reserves its right to appeal any decision of the KDHE, which is not consistent with law or which is arbitrary or capricious concerning a dispute under this Order, to an administrative body with applicable jurisdiction and thereafter in compliance with the Kansas Administrative Procedures Act. The final decision or resolution of the applicable authority or court shall be incorporated as a part of this Order. For purposes of this Order, final order or decision shall mean an order or decision from which no appeal may be taken.
64. In the event that Respondent seeks dispute resolution concerning a date for performance of an act set out in the work plan, the date for performance of such act shall be extended for a period equal to the delay resulting from the invocation of the dispute resolution provision. However, such extension does not alter the schedule for performance of

completion of other tasks required by this Order unless also specifically altered by the amendment to this Order.

65. However, in the event that it is determined that dispute resolution was not sought in good faith, administrative penalties may be assessed at the rate of \$500.00 per day for each day of delay caused by such invocation of the dispute resolution provisions.
66. **Force Majeure.** Delays that result from causes not foreseeable and beyond the Respondent's control and which cannot be overcome by due diligence shall not be a violation of the Respondent's obligations under this Order. The Respondent shall notify KDHE orally as soon as possible, but not later than five (5) business days after the Respondent knows of any delay or anticipated delay in compliance with the requirements of this Order, and in writing no later than ten (10) business days after the oral notification of the delay. The written notice shall describe the nature of the delay, whether and why the delay was unforeseeable and beyond the control of the Respondent, the actions taken and/or that will be taken to mitigate, prevent and/or minimize further delay, and the anticipated length of the delay. The Respondent shall adopt all measures to avoid or minimize such delay. To the extent a delay is caused by circumstances beyond the control of the Respondent, or those resulting from delays caused by KDHE or any third party not under the control or employment of any of the signatories hereto, the schedule shall be extended for a period equal to the delay resulting from such circumstances. Such an extension does not alter the schedule for performance or completion of other tasks required by this Order which are unaffected by such unexpected delay events, unless also

specifically altered by amendment to this Order. Failure to comply with the notice provision of this section may be grounds for KDHE to deny the Respondent an extension of time for performance. Unexpected delay events do not include unanticipated or increased costs of performance, changed economic circumstances, or normal precipitation events (having due regard for seasonal fluctuations). If KDHE determines that the delay as stated in the Respondent's written notice to KDHE was not due to unexpected delay events, an administrative penalty may be assessed subject to the Dispute Resolution provisions set forth herein.

67. **Joint Drafting.** This Order shall be deemed to have been jointly drafted by the Parties, and in construing and interpreting this Order, no provision shall be construed and interpreted for or against either of the Parties because such provision or any other provision of the Order as a whole is purportedly prepared or requested by such Party.
68. **Choice of Law, Jurisdiction and Venue.** The laws of the State of Kansas shall govern the terms of this Order. In any judicial action to enforce provisions of this Order, jurisdiction and venue shall be proper in the District Court of Shawnee County, Kansas.
69. **Entire Agreement.** This Order contains the entire agreement between the Parties, and may only be modified in writing signed by the Parties or their duly appointed agents. All prior agreements and understandings between the Parties concerning the subject matter hereof are superseded by the terms of this Order.
70. **Successors and Assigns.** This Order shall be binding on and inure to the benefit of the Parties and their respective agents, employees, affiliates, successors and assigns. No

change in the ownership or corporate status of Respondent shall alter its responsibilities under this Order. Successors or assigns, if required by KDHE, shall execute an amendment or other writing attesting to the assumption of the terms, conditions and performance of the Order. An assignment shall not relieve the Respondent from the obligations to carry out the terms and conditions of this Order in the event the assignee fails to do so.


71. **Authority.** Each Party has full knowledge of and has consented to this Order, and represents and warrants that each person who executes this Order on its behalf is duly authorized to execute this Order on behalf of the respective Party and legally bind the Party represented to this Order.
72. **Amendment.** This Order may be amended by mutual consent of KDHE and Respondent, and any such amendment shall be in writing.
73. **Effective Date.** This Order and any amendment thereto shall become effective as of the date the Order or any amendment thereto is signed by the Secretary of KDHE.
74. **Termination.** The provisions of this Order shall terminate upon Respondent's receipt of written notice from KDHE that Respondent has demonstrated that the terms of this Order, including any additional tasks which KDHE has determined to be necessary, have been satisfactorily completed.

IN WITNESS WHEREOF, the Parties have affixed their signatures below:

UNITED STATES STEEL CORPORATION

KANSAS DEPARTMENT OF  
HEALTH AND ENVIRONMENT

By:

  
\_\_\_\_\_  
Signature

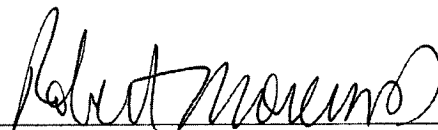
James D. Garraux

Name [Printed or Typed]

General Counsel & Senior  
Vice President - Corporate Affairs  
Title

12/21/10  
Date

By:

  
\_\_\_\_\_

Robert Moser, MD  
Acting Secretary

4/18/2011  
Date

**Exhibit 5**  
**Project Deliverable and Milestone<sup>1</sup> Schedule**

Deliverable/Milestone	Due Date
Draft Corrective Action Plan/Corrective Action (CAP/CA) Work Plan <sup>2,3</sup>	Due within 60 days after execution of the Consent Agreement and Final Order
Application to the Environmental Use Control Program	Due within 60 days of approval of the CAP/CA Work Plan
Commence implementation of CA	Per the CAP/CA Schedule established in KDHE-approved CAP/CA Work Plan
Operations & Maintenance Plan	Due within 60 days prior to the completion of CA
Certification of CA completion (or fully operational and functional) and reporting	Per the CAP/CA Schedule established in KDHE-approved CAP/CA Work Plan
Quarterly Progress Reports <sup>4</sup>	Due each quarter, 45 days after the end of each quarter or as otherwise agreed by KDHE
Monitoring Reports	Per the KDHE-approved schedule(s) or as otherwise directed by KDHE

<sup>1</sup> One hard copy plus one electronic copy of each deliverable shall be provided unless otherwise directed by KDHE; revised deliverable(s) shall be provided within 30 days of receipt of KDHE comments.

<sup>2</sup> In accordance with Scope of Work #BER-RS-023, incorporated herein as Exhibit 3, and including other associated documents as described in the CAP/CA Scope of Work.

<sup>3</sup> Use of generic term "CAP/CA Work Plan" intended to encompass/represent all possible required elements as described in the CAP/CA Scope of Work referenced above.

<sup>4</sup> As approved by the KDHE Project Coordinator, quarterly progress may be documented in other routine monitoring report submittals.