UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5

IN THE MATTER OF:

Allied Paper, Inc./Portage Creek/
Kalamazoo River Superfund Site
Allegan and Kalamazoo Counties, Michigan

Respondent:

Georgia-Pacific, LLC

Administrative Settlement
Agreement and Order
On Consent for Removal
Action

Docket No.

V-W-09-C-925

Proceeding Under Sections
104, 106(a), 107 and 122 of
the Comprehensive
Environmental Response,
Compensation, and Liability
Act, as amended, 42 U.S.C.
§§ 9604, 9606(a), 9607 and
9622

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I. JURISDICTION AND GENERAL PROVISIONS

1. This Administrative Settlement Agreement and Order on Consent ("Settlement Agreement") is entered into voluntarily by the United States Environmental Protection Agency ("EPA") and Georgia-Pacific, LLC ("Respondent"). This Settlement Agreement provides for the performance of a removal action at or in connection with the Plainwell Dam #2, as that term is defined below, of the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site in Allegan and Kalamazoo Counties, Michigan by Respondent and the reimbursement of response costs incurred by the United States for such a removal action.

2. This Settlement Agreement is issued under the authority vested in the President of the United States by Sections 104, 106(a), 107 and 122 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, 42 U.S.C. §§ 9604, 9606(a), 9607 and 9622, as amended ("CERCLA"). This authority has been delegated to the Administrator of the EPA by Executive Order No. 12580, January 23, 1987, 52 Fed. Reg. 2923, and further delegated to the Regional Administrators by EPA Delegation Nos. 14-14-A, 14-14-C and 14-14-D, and to the Director, Superfund Division, Region 5, by Regional Delegation Nos. 14-14-A, 14-14-C and 14-14-D.

3. EPA has notified the State of Michigan (the "State") of this action pursuant to Section 106(a) of CERCLA, 42 U.S.C. § 9606(a).

4. The Parties recognize that this Settlement Agreement has been negotiated in good faith and that the actions undertaken by Respondent in accordance with this Settlement Agreement do not constitute an admission of any liability. Respondent does not admit, and retains the right to controvert in any subsequent proceedings other than proceedings to implement or enforce this Settlement Agreement, the validity of the findings of facts, conclusions of law, and determinations in Sections IV and V of this Settlement Agreement. Respondent agrees to comply with and be bound by the terms of this Settlement Agreement and further agrees that it will not contest the basis or validity of this Settlement Agreement or its terms.

II. PARTIES BOUND

5. This Settlement Agreement applies to and is binding upon EPA, and upon Respondent and its successors and assigns. Any change in ownership or corporate status of the Respondent including, but not limited to, any transfer of assets or real or personal property shall not alter the Respondent's responsibilities under this Settlement Agreement.

6. Respondent shall ensure that its contractors, subcontractors, and representatives receive a copy of this Settlement Agreement and comply with this Settlement Agreement. Respondent shall be responsible for any noncompliance with this Settlement Agreement.

III. DEFINITIONS

7. Unless otherwise expressly provided herein, terms used in this Settlement Agreement which are defined in CERCLA or in regulations promulgated under CERCLA shall have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Settlement Agreement or in the appendices attached hereto and incorporated hereunder, the following definitions shall apply:

a. "Action Memorandum" shall mean the EPA Action Memorandum relating to Plainwell Dam #2 signed on 6/8/09, by the Regional Administrator, EPA Region 5, or his/her delegate, and all attachments thereto. The Action Memorandum is attached as Appendix 1.

b. "CERCLA" shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. §§ 9601, *et seq.*

c. "Day" shall mean a calendar day. In computing any period of time under this Settlement Agreement, where the last day would fall on a Saturday, Sunday, or federal holiday, the period shall run until the close of business of the next working day.

d. "Effective Date" shall be the effective date of this Settlement Agreement as provided in Section XXXI.

e. "EPA" shall mean the United States Environmental Protection Agency and any successor departments or agencies of the United States.

f. "Future Response Costs" shall mean all costs, including, but not limited to, direct and indirect costs, that the United States incurs in reviewing or developing plans, reports and other items pursuant to this Settlement Agreement, verifying the Work, or otherwise implementing, overseeing, or enforcing this Settlement Agreement, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs, the costs incurred pursuant to Paragraph 23 (costs and attorneys fees and any monies paid to secure access, including the amount of just compensation), Paragraph 33 (emergency response) and Paragraph 58 (work takeover). Future Response Costs shall also include all Interim Response Costs during the period from August 1, 2008 to the Effective Date.

g. "Georgia-Pacific or Respondent" shall mean Georgia-Pacific, LLC, and its successors and assigns. Georgia-Pacific is the current owner of two mill properties (Kalamazoo Mill and the Former Hawthorne Mill) and two landfills (Willow and A-Site Landfills), located in Kalamazoo Township, Michigan.

h. "Interest" shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. § 9507, compounded annually on October 1 of each year, in accordance with 42 U.S.C. § 9607(a). The applicable rate of interest shall be the rate in effect at the time the interest accrues. The rate of interest is subject to change on October 1 of each year.

i. "Interim Response Costs" shall mean all costs, including direct and indirect costs, a) paid by the United States in connection with Plainwell Dam #2 between August 1, 2008 and the Effective Date, or b) incurred prior to the Effective Date, but paid after that date.

j. "National Contingency Plan" or "NCP" shall mean the National Oil and Hazardous Substances Pollution Contingency Plan promulgated pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, codified at 40 C.F.R. Part 300, and any amendments thereto.

k. "Settlement Agreement" shall mean this Administrative Settlement Agreement and Order on Consent and all appendices attached hereto (listed in Section XXX). In the event of conflict between this Settlement Agreement and any appendix, this Settlement Agreement shall control.

l. "Paragraph" shall mean a portion of this Settlement Agreement identified by an Arabic numeral.

m. "Parties" shall mean EPA and Respondent.

n. "Plainwell Dam #2" shall mean the submerged sediments, river banks and floodplain soils of the Kalamazoo River system that extends approximately 3.5 miles upstream of the former Plainwell Dam in the Township of Gun Plain, T 1N, R 11 W, in portions of Sections 32 and 33 upstream to the Penn Central Railroad Bridge. Plainwell Dam #2 includes a series of four historical structures constructed to partially divert the Kalamazoo River through the Plainwell Mill Race.

o. "Polychlorinated biphenyls" or "PCBs" shall mean the toxic pollutant and hazardous substance designated under Sections 307(a)(1) and 311(b)(2)(A) of the Clean Water Act, 33 U.S.C. §§ 1317(a) and 1321(b)(2)(A). PCBs are also a CERCLA hazardous substance. 42 U.S.C. § 9601(14).

p. "RCRA" shall mean the Solid Waste Disposal Act, as amended, 42 U.S.C. §§ 6901, *et seq.* (also known as the Resource Conservation and Recovery Act).

q. "Respondent" shall mean Georgia-Pacific, LLC.

r. "Section" shall mean a portion of this Settlement Agreement identified by a Roman numeral.

s. "Site" shall mean the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site, located in Allegan and Kalamazoo Counties, Michigan, as depicted generally on the map attached as Appendix 2.

t. "Waste Material" shall mean 1) any "hazardous substance" under Section 101(14) of CERCLA, 42 U.S.C. § 9601(14); 2) any pollutant or contaminant

under Section 101(33) of CERCLA, 42 U.S.C. § 9601(33); and 3) any "solid waste" under Section 1004(27) of RCRA, 42 U.S.C. § 6903(27).

u. "Work" shall mean all activities Respondent is required to perform under this Settlement Agreement, except those required by Section XI (Record Retention).

v. "Work Plan" shall mean the document entitled Plainwell Dam #2 Time-Critical Removal Action Design Report, which will specify those activities to be performed by Respondent to implement the removal action, as set forth in Appendix 1 of this Settlement Agreement, and any modifications made thereto in accordance with this Settlement Agreement. The Work Plan requires submission of a final Health and Safety Plan and a final Security Plan.

IV. FINDINGS OF FACT

8. Based on available information, including the Administrative Record in this matter, EPA finds that:

a. On August 30, 1990 and pursuant to Section 105 of CERCLA, 42 U.S.C. § 9605, EPA placed the Site on the NPL by publication in the Federal Register, 55 *Fed. Reg.* 35502. The Site was listed after routine surface water and biota sampling at the mouth of the Kalamazoo River indicated that PCBs were discharging to Lake Michigan via the Kalamazoo River, and that these PCBs were widely bioavailable.

b. MDNR first issued a public health advisory regarding PCB contamination from the Site in 1977. The advisory remains in place today, and warns against eating carp, suckers, catfish and largemouth bass from these waters. The advisory warns nursing mothers, pregnant women, women who expect to bear children and children below the age of 15 not to eat certain species of fish from these waters.

c. Respondent is one of several companies, including Millennium Holdings, LLC (MHLLC) which, between the mid-1950s and early 1970s, engaged in the recycling of carbonless copy paper along the Kalamazoo River. Carbonless copy paper contained invisible spheres of PCB-carrying solvents. As a preparation step in the recycling process, Respondent de-inked its recyclable paper, which included, at various times, carbonless copy paper. The process of de-inking and/or pulping of carbonless copy paper released PCBs into the resulting waste streams.

d. Georgia-Pacific purchased the Kalamazoo Mill in 1967. Predecessors to Georgia-Pacific produced paper at the Kalamazoo Mill as early as 1899. As part of their papermaking processes at the Kalamazoo Mill, Georgia-Pacific and its predecessors at the Kalamazoo Mill recycled some waste paper, including carbonless copy paper.

e. Georgia-Pacific's predecessor at the Kalamazoo Mill installed a clarifier in 1954. Prior to the installation of the clarifier, wastewater was discharged directly into the Kalamazoo River upstream of the Plainwell Impoundment Area and the Plainwell Dam #2. Overflow from the clarifier went to the Kalamazoo River, while underflow was pumped to adjacent lagoons. Beginning in 1964, the clarifier's effluent was sent to the City of Kalamazoo wastewater treatment plant for secondary treatment. Supernatant from the lagoons was returned to the clarifier. In 1977, Georgia-Pacific updated its waste treatment system, and installed a new primary clarifier.

f. MHLLC is currently involved in bankruptcy proceedings and is not participating in this Settlement Agreement.

g. Georgia-Pacific ceased de-inking operations at the Kalamazoo Mill and closed the mill in 2000.

h. PCBs discharged in the wastes from Respondent's and MHLLC's papermaking operations have come to be located in sediments, river banks and floodplain soils of the Plainwell Dam #2.

i. PCBs have been detected in the submerged sediments of the Plainwell Dam #2 at concentrations ranging from non-detect to 100 parts per million ("ppm").

j. PCB concentrations in the river banks located at the Plainwell Dam #2 range from non-detect to 80.5 ppm.

k. PCB concentrations in the floodplain soils of the Plainwell Dam #2 range from non-detect to 60 ppm.

l. In 2007, Respondent and others entered into an administrative settlement to supplement the Remedial Investigation/Feasibility Study ("RI/FS") conducted as of that time, *inter alia*, the Kalamazoo River Operable Units 1 and 5 of the Site.

m. Subsequent to completion of the response actions required by this Settlement Agreement and the supplemental RI/FS activities, EPA will propose a final remedy for the first reach of the Kalamazoo River Operable Unit of the Site (*i.*e. Morrow Dam to Plainwell Dam). EPA's proposed plan for the first reach will identify any response actions that EPA determines are necessary to address unacceptable risks to human health and the environment presented by the presence of PCB-contaminated sediments, river banks and floodplain soils remaining within the Plainwell Dam #2 after completion of the removal action conducted pursuant to this Settlement Agreement.

V. CONCLUSIONS OF LAW AND DETERMINATIONS

9. Based on the Findings of Fact set forth above, and the Administrative Record supporting this removal action, EPA has determined that:

a. The Site is a "facility" as defined by Section 101(9) of CERCLA, 42 U.S.C. § 9601(9). Plainwell Dam #2 is a portion of the Site at which hazardous substances have come to be located, and from which hazardous substances have been released and threaten to be released.

b. The contamination found at the Plainwell Dam #2, as identified in the Findings of Fact above, includes a "hazardous substance" as defined by Section 101(14) of CERCLA, 42 U.S.C. § 9601(14).

c. Respondent is a "person" as defined by Section 101(21) of CERCLA, 42 U.S.C. § 9601(21).

d. Respondent is a responsible party under Section 107(a) of CERCLA, 42 U.S.C. § 9607(a), and is jointly and severally liable for performance of response actions and for response costs incurred at or in connection with the Plainwell Dam #2.

e. The conditions described in Section IV (Findings of Fact) above constitute an actual or threatened "release" of a hazardous substance from the facility as defined by Section 101(22) of CERCLA, 42 U.S.C. § 9601(22).

f. As set forth in the Action Memorandum, which is attached as Appendix 1 to this Settlement Agreement, the conditions present at the Plainwell Dam #2 constitute a threat to public health, welfare, or the environment based upon the factors set forth in Section 300.415(b)(2) of the NCP. These factors include, but are not limited to, the following:

i. actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, pollutants or contaminants. This factor is present at the Plainwell Dam #2 due to the presence of PCBs in Kalamazoo River fish in concentrations that create unacceptable health risks to both human and ecological receptors;

ii. high levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate. This factor is present at the Plainwell Dam #2 due to the existence of PCBs in high concentrations near the surface of the river banks, sediments and floodplain soils, that may migrate as a result of erosion and scouring from the Kalamazoo River;

iii. weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released. This factor is present at the Plainwell Dam #2 due to the potential for ice movement in late

winter to increase scouring of the river banks or river bottom. Additionally, heavy rains and flooding in spring and summer add to stream volume and velocity, and result in additional scouring of PCB-contaminated river banks, sediments and floodplain soils; and

iv. the unavailability of other appropriate federal or state response mechanisms to respond to the release. This factor is present because no other federal, state or local agency is prepared to address the PCB contamination in the Plainwell Dam #2 at this time.

g. The removal action required by this Settlement Agreement is necessary to protect the public health, welfare, or the environment and, if carried out in compliance with the terms of this Settlement Agreement, will be considered consistent with the NCP, as provided in Section 300.700(c)(3)(ii) of the NCP.

VI. SETTLEMENT AGREEMENT AND ORDER

Based upon the foregoing Findings of Fact, Conclusions of Law, Determinations, and the Administrative Record for this Site, it is hereby Ordered and Agreed that Respondent shall comply with all provisions of this Settlement Agreement, including, but not limited to, all attachments to this Settlement Agreement and all documents incorporated by reference into this Settlement Agreement.

VII. DESIGNATION OF CONTRACTOR, PROJECT COORDINATOR, AND ON-SCENE COORDINATOR

10. Respondent proposes to use ARCADIS U.S. Inc. as the Supervising Contractor to perform the Work. Respondent shall also notify EPA of the name(s) and qualification(s) of any other contractor(s) or subcontractor(s) retained to perform the Work at least 5 days prior to commencement of such Work. EPA retains the right to disapprove any or all of the contractors and/or subcontractors retained by Respondent. If EPA disapproves of a selected contractor, Respondent shall retain a different contractor and shall notify EPA, of that contractor's name and qualifications within 3 days of EPA's disapproval. The contractor must demonstrate compliance with ANSI/ASQC E-4-1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), by submitting a copy of the proposed contractor's Quality Management Plan ("QMP") with the draft Work Plan. The QMP should be prepared consistent with "EPA Requirements for Quality Management Plans (QA/R-2)" (EPA/240/B0-1/002) or equivalent documentation as required by EPA.

11. The Respondent proposes to use Stephen Garbaciak Jr. as the Project Coordinator, who shall be responsible for administration of all actions by Respondent required by this Settlement Agreement.

Stephen Garbaciak Jr., PE
Vice President

ARCADIS U.S., Inc.
30 W. Monroe St., Suite 1710
Chicago, IL 60603
(312) 332-4937 x 12

To the greatest extent possible, the Project Coordinator shall be present on Site or readily available during Site work. EPA retains the right to disapprove of the designated Project Coordinator. If EPA disapproves of the designated Project Coordinator, Respondent shall retain a different Project Coordinator and shall notify EPA of that person's name, address, telephone number, and qualifications within 4 days following EPA's disapproval. Receipt by Respondent's Project Coordinator of any notice or communication from EPA relating to this Settlement Agreement shall constitute receipt by the Respondent.

12. a. EPA has designated Mike Ribordy of the Emergency Response Branch, Region 5 as its On-Scene Coordinator ("OSC").

b. Except as otherwise provided in this Settlement Agreement, Respondent shall direct all submissions required by this Settlement Agreement to:

i. Mike Ribordy
U.S. EPA, Region 5
77 W. Jackson Blvd.
Mail Code SE-5J
Chicago, IL 60604

ii. Leslie A. Kirby-Miles
U.S. EPA Region 5
Office of Regional Counsel
77 W. Jackson Blvd.
Mail Code C-14J
Chicago, IL 60604

iii. Richard Karl
U.S. EPA, Region 5
Superfund Division Director
77 W. Jackson Blvd.
Mail Code SE-5J
Chicago, IL 60604

13. EPA and Respondent shall have the right, subject to Paragraph 11, to change their respective designated OSC or Project Coordinator. Respondent shall notify EPA as early as possible before such a change is made, but in no case less than 24 hours before such a change. The initial notification may be made orally, but shall be promptly followed by a written notice.

VIII. WORK TO BE PERFORMED

14. Respondent shall perform, at a minimum, all actions necessary to implement the Work Plan. The actions to be implemented generally include, but are not limited to, the following:

a. excavation and/or dredging of submerged sediments, river banks and floodplain soils in the Plainwell Dam #2 in accordance with the performance standards and at the locations specified in the Action Memorandum and the Work Plan;

b. cut-back and stabilization of river banks;

c. Waste Material Disposal

i. All sediments and soils will be designated and segregated as TSCA and non-TSCA waste using the methodology to be approved by EPA in the Work Plan.

ii. All Waste Material with PCB concentrations equal to or greater than 50 mg/kg PCB, as identified on Figure 1, shall be transported off-Site to a chemical waste landfill (e.g. EQ-The Environmental Company Wayne County Landfill) that is in compliance with all state and federal regulatory requirements.

iii. All Waste Material with PCB concentrations less than 50 mg/kg shall be transported off-Site and disposed in an appropriately licensed and permitted commercial landfill (e.g. C & C Landfill Marshall, MI and Ottawa County Landfill, Inc. Coopersville, MI).

iv. Thirty days prior to any change in disposal location for either TSCA or non-TSCA Waste Material, Respondent shall notify EPA and the State in writing. At its unreviewable discretion, EPA may waive this notice requirement.

d. backfill and re-vegetation of excavated river banks and floodplain areas, as specified in the Work Plan; and

e. monitoring during the implementation of the Work, and appropriate monitoring and maintenance post-removal.

15. Work Plan and Implementation.

a. Within 5 days after the Effective Date, Respondent shall submit to EPA for approval a draft Work Plan for performing the removal action generally described in Paragraph 14 above. The draft Work Plan shall provide a description of, and an expeditious schedule for the actions required by this Settlement Agreement.

b. EPA may approve, disapprove, require revisions to, or modify the draft Work Plan in whole or in part. If EPA requires revisions, Respondent shall submit a revised draft Work Plan within 15 days of receipt of EPA's notification of the required revisions. Respondent shall implement the Work Plan as approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modification, the Work Plan, the schedule and any subsequent modification shall be incorporated into and become fully enforceable under this Settlement Agreement.

c. Respondent shall not commence any Work except in conformance with the terms of this Settlement Agreement, the approved Work Plan and its schedule. Respondent shall not commence implementation of the Work Plan developed hereunder until receiving written EPA approval pursuant to Paragraph 15(b).

16. Health and Safety Plan. Within 5 days after the Effective Date, Respondent shall submit for EPA review and comment a plan that ensures the protection of the public health and safety during performance of on-Site work under this Settlement Agreement. This plan shall be prepared in accordance with EPA's Standard Operating Safety Guide (PUB 9285.1-03, PB 92-963414, June 1992). In addition, the plan shall comply with all currently applicable Occupational Safety and Health Administration ("OSHA") regulations found at 29 C.F.R. Part 1910. If EPA determines that it is appropriate, the plan shall also include contingency planning. Respondent shall incorporate all changes to the plan recommended by EPA and shall implement the plan during the pendency of the removal action.

17. Quality Assurance and Sampling.

a. All sampling and analyses performed pursuant to this Settlement Agreement shall conform to EPA direction, approval, and guidance regarding sampling, quality assurance/quality control ("QA/QC"), data validation, and chain of custody procedures. Respondent shall ensure that the laboratory used to perform the analyses participates in a QA/QC program that complies with the appropriate EPA guidance. Respondent shall follow, as appropriate, "Changes in Quality Assurance Policies for Removal Programs" (OSWER Directive No. 9360.4-20FS, July 2006), "Applicability of Superfund Data Categories to the Removal Program" (OSWWER Directive 9360.4-21FS, July 2006), and "Systematic Planning Processes for the Removal Program" (OSWER Directive 9360.4-22FS, July 2006. Respondent shall only use laboratories that have a documented Quality System that complies with ANSI/ASQC E-4 1994, "Specifications and Guidelines for Quality Systems for Environmental Data Collection and Environmental Technology Programs" (American National Standard, January 5, 1995), and "EPA Requirements for Quality Management Plans (QA/R-2) (EPA/240/B-01/002, March 2001)," or equivalent documentation as determined by EPA. EPA may consider laboratories accredited under the National Environmental Laboratory Accreditation Program as meeting the Quality System requirements.

b. Upon request by EPA, Respondent shall have such a laboratory analyze samples submitted by EPA for QA monitoring. Respondent shall provide to EPA the

QA/QC procedures followed by all sampling teams and laboratories performing data collection and/or analysis.

c. Upon request by EPA, Respondent shall allow EPA or its authorized representatives to take split and/or duplicate samples. Respondent shall notify EPA not less than 3 days in advance of any sample collection activity, unless shorter notice is agreed to by EPA. EPA shall have the right to take any additional samples that it deems necessary. Upon request, EPA shall allow Respondent to take split or duplicate samples of any samples it takes as part of its oversight of Respondent's implementation of the Work.

18. Post-Removal Site Control. In accordance with the Work Plan schedule, or as otherwise directed by EPA, Respondent shall submit a proposal for post-removal site control consistent with Section 300.415(*l*) of the NCP and OSWER Directive No. 9360.2-02. Upon EPA approval, Respondent shall implement such controls and shall provide EPA with documentation of all post-removal site control arrangements.

19. Reporting.

a. Respondent shall submit a written progress report to EPA, concerning actions undertaken pursuant to this Settlement Agreement every 15th day of the month starting with the second month after the Effective Date until termination of this Settlement Agreement, unless otherwise directed in writing by the OSC. These reports shall describe all significant developments during the preceding period, including the actions performed and any problems encountered, analytical data received during the reporting period, and the developments anticipated during the next reporting period, including a schedule of actions to be performed, anticipated problems, and planned resolutions of past or anticipated problems.

b. Respondent shall submit to EPA 3 copies of all plans, reports or other submissions required by this Settlement Agreement or any approved work plan. Upon request by EPA, Respondent shall submit such documents in electronic form.

c. If Respondent owns or controls property at the Site where Work related to this Settlement Agreement will be performed, Respondent shall, at least 30 days prior to the conveyance of any interest in real property at the Site, give written notice to the transferee that the property is subject to this Settlement Agreement and written notice to EPA of the proposed conveyance, including the name and address of the transferee. Respondent further agrees to require that its successors comply with the immediately proceeding sentence and Sections IX (Site Access) and X (Access to Information).

20. Final Report. Within 60 days after completion of all Work required by this Settlement Agreement, Respondent shall submit for EPA review and approval a final report summarizing the actions taken to comply with this Settlement Agreement. The final report shall conform, at a minimum, with the requirements set forth in Section 300.165 of the NCP entitled "OSC Reports." The final report shall include a good faith

estimate of total costs or a statement of actual costs incurred in complying with the Settlement Agreement, a listing of quantities and types of materials removed off-Site or handled on-Site, a discussion of removal and disposal options considered for those materials, a listing of the ultimate destination(s) of those materials, a presentation of the analytical results of all sampling and analyses performed, and accompanying appendices containing all relevant documentation generated during the removal action (*e.g.*, manifests, invoices, bills, contracts, and permits). The final report shall also include the following certification signed by a person who supervised or directed the preparation of that report:

> "Under penalty of law, I certify that to the best of my knowledge, after appropriate inquiries of all relevant persons involved in the preparation of the report, the information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

21. Off-Site Shipments.

a. Respondent shall, prior to any off-Site shipment of Waste Material from Plainwell Dam #2 to an out-of-state waste management facility, provide written notification of such shipment of Waste Material to the appropriate state environmental official in the receiving facility's state and to the OSC. However, this notification requirement shall not apply to any off-Site shipments when the total volume of all such shipments will not exceed 10 cubic yards.

i. Respondent shall include in the written notification the following information: 1) the name and location of the facility to which the Waste Material is to be shipped; 2) the type and quantity of the Waste Material to be shipped; 3) the expected schedule for the shipment of the Waste Material; and 4) the method of transportation. Respondent shall notify the state in which the planned receiving facility is located of major changes in the shipment plan, such as a decision to ship the Waste Material to another facility within the same state, or to a facility in another state.

ii. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the removal action. Respondent shall provide the information required by Paragraph 21(a) and 21(b) as soon as practicable after the award of the contract and before the Waste Material is actually shipped.

b. Before shipping any hazardous substances, pollutants, or contaminants from Plainwell Dam #2 to an off-site location, Respondent shall obtain EPA's certification that the proposed receiving facility is operating in compliance with the requirements of CERCLA Section 121(d)(3), 42 U.S.C. § 9621(d)(3), and 40 C.F.R. § 300.440. Respondent shall only send hazardous substances, pollutants, or contaminants from Plainwell Dam #2 to an off-site facility that complies with the requirements of the statutory provision and regulation cited in the preceding sentence.

IX. SITE ACCESS

22. If the Site, or any other property where access is needed to implement this Settlement Agreement, is owned or controlled by the Respondent, Respondent shall, commencing on the Effective Date, provide EPA and its representatives, including contractors, with access at all reasonable times to the Site, or such other property, for the purpose of conducting any activity related to this Settlement Agreement.

23. Where any action under this Settlement Agreement is to be performed in areas owned by or in possession of someone other than Respondent, Respondent shall use its best efforts to obtain all necessary access agreements within 30 days after the Effective Date, or as otherwise specified in writing by the OSC. Respondent shall immediately notify EPA if, after using its best efforts, it is unable to obtain such agreements. For purposes of this Paragraph, "best efforts" includes the payment of reasonable sums of money in consideration of access. Respondent shall describe in writing its efforts to obtain access. EPA may then assist Respondent in gaining access, to the extent necessary to effectuate the response actions described herein, using such means as EPA deems appropriate. Respondent shall reimburse EPA for all costs and attorney's fees incurred by the United States in obtaining such access, in accordance with the procedures in Section XV (Payment of Response Costs).

24. Notwithstanding any provision of this Settlement Agreement, EPA retains all of its access authorities and rights, including enforcement authorities related thereto, under CERCLA, RCRA, and any other applicable statutes or regulations.

X. ACCESS TO INFORMATION

25. Respondent shall provide to EPA, upon request, copies of all documents and information within its possession or control or that of its contractors or agents relating to activities at the Site or to the implementation of this Settlement Agreement, including, but not limited to, sampling, analysis, chain of custody records, manifests, trucking logs, receipts, reports, sample traffic routing, correspondence, or other documents or information related to the Work. Respondent shall also make available to EPA, for purposes of investigation, information gathering, or testimony, its employees, agents, or representatives with knowledge of relevant facts concerning the performance of the Work.

26. Respondent may assert business confidentiality claims covering part or all of the documents or information submitted to EPA under this Settlement Agreement to the extent permitted by and in accordance with Section 104(e)(7) of CERCLA, 42 U.S.C. § 9604(e)(7), and 40 C.F.R. § 2.203(b). Documents or information determined to be confidential by EPA will be afforded the protection specified in 40 C.F.R. Part 2, Subpart B. If no claim of confidentiality accompanies documents or information when they are submitted to EPA, or if EPA has notified Respondent that the documents or information are not confidential under the standards of Section 104(e)(7) of CERCLA or 40 C.F.R.

Part 2, Subpart B, the public may be given access to such documents or information without further notice to Respondent.

27. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If the Respondent asserts such a privilege in lieu of providing documents, it shall provide EPA 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 contents 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 this Settlement Agreement shall be withheld on the grounds that they are privileged.

28. No claim of confidentiality shall be made with respect to any data, including, but not limited to, all sampling, analytical, monitoring, hydrogeologic, scientific, chemical, or engineering data, or any other documents or information evidencing conditions at or around the Site.

XI. RECORD RETENTION

29. Until 6 years after Respondent's receipt of EPA's notification pursuant to Section XXVIII (Notice of Completion of Work), Respondent shall preserve and retain all non-identical copies of records and documents (including records or documents in electronic form) now in its possession or control or which come into its possession or control that relate in any manner to the performance of the Work or the liability of any person under CERCLA with respect to the Site, regardless of any corporate retention policy to the contrary. Until 6 years after Respondent's receipt of EPA's notification pursuant to Section XXIX (Notice of Completion of Work), Respondent shall also instruct its contractors and agents to preserve all documents, records, and information of whatever kind, nature or description relating to performance of the Work.

30. At the conclusion of this document retention period, Respondent shall notify EPA at least 90 days prior to the destruction of any such records or documents, and, upon request by EPA, Respondent shall deliver any such records or documents to EPA. Respondent may assert that certain documents, records and other information are privileged under the attorney-client privilege or any other privilege recognized by federal law. If Respondent asserts such a privilege, it shall provide EPA 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 this Settlement Agreement shall be withheld on the grounds that they are privileged.

31. Respondent hereby certifies that to the best of its knowledge and belief, after thorough inquiry, it has not altered, mutilated, discarded, destroyed or otherwise disposed of any records, documents or other information (other than identical copies) relating to its potential liability regarding the Site since notification of potential liability by EPA or MDEQ or the filing of suit against it regarding the Site and that it has fully complied with any and all EPA requests for information pursuant to Sections 104(e) and 122(e) of CERCLA, 42 U.S.C. §§ 9604(e) and 9622(e), and Section 3007 of RCRA, 42 U.S.C. § 6927.

XII. COMPLIANCE WITH OTHER LAWS

32. Respondent shall perform all actions required pursuant to this Settlement Agreement in accordance with all applicable local, state, and federal laws and regulations except as provided in Section 121(e) of CERCLA, 42 U.S.C. § 6921(e), and 40 C.F.R. §§ 300.400(e) and 300.415(j). In accordance with 40 C.F.R. § 300.415(j), all on-Site actions required pursuant to this Settlement Agreement shall, to the extent practicable, as determined by EPA, considering the exigencies of the situation, attain applicable or relevant and appropriate requirements ("ARARs") under federal environmental or state environmental or facility siting laws.

XIII. EMERGENCY RESPONSE AND NOTIFICATION OF RELEASES

33. In the event of any action or occurrence during performance of the Work which causes or threatens a release of Waste Material from the Site that constitutes an emergency situation or may present an immediate threat to public health or welfare or the environment, Respondent shall immediately take all appropriate action. Respondent shall take these actions in accordance with all applicable provisions of this Settlement Agreement, including, but not limited to, the Health and Safety Plan, in order to prevent, abate or minimize such release or endangerment caused or threatened by the release. Respondent shall also immediately notify the OSC or, in the event of his/her unavailability, the Regional Duty Officer at 312-353-2318, of the incident or Site conditions. In the event that Respondent fails to take appropriate response action as required by this Paragraph, and EPA takes such action instead, Respondent shall reimburse EPA all costs of the response action not inconsistent with the NCP pursuant to Section XV (Payment of Response Costs).

34. In addition, in the event of any release of a hazardous substance from the Site, Respondent shall immediately notify the OSC at (312)886-4592 and the National Response Center at (800) 424-8802. Respondent shall submit a written report to EPA within 7 days after each release, setting forth the events that occurred and the measures taken or to be taken to mitigate any release or endangerment caused or threatened by the release and to prevent the reoccurrence of such a release. This reporting requirement is in addition to, and not in lieu of, reporting under Section 103(c) of CERCLA, 42 U.S.C. § 9603(c), and Section 304 of the Emergency Planning and Community Right-To-Know Act of 1986, 42 U.S.C. § 11004, *et seq.*

XIV. AUTHORITY OF ON-SCENE COORDINATOR

35. The OSC shall be responsible for overseeing Respondent's implementation of this Settlement Agreement. The OSC shall have the authority vested in an OSC by the NCP, including the authority to halt, conduct, or direct any Work required by this Settlement Agreement, or to direct any other removal action undertaken at the Site. Absence of the OSC from the Site shall not be cause for stoppage of work unless specifically directed by the OSC.

XV. PAYMENT OF RESPONSE COSTS

36. Payments of Future Response Costs.

a. Respondent shall pay EPA all Future Response Costs not inconsistent with the NCP. On a periodic basis, EPA will send Respondent a bill requiring payment that includes an Itemized Cost Summary and, if applicable, a DOJ-prepared cost summary. Respondent shall make all payments within 30 calendar days of receipt of each bill requiring payment, except as otherwise provided in Paragraph 38 of this Settlement Agreement, according to the following procedures.

i. If the payment amount demanded in the bill is for $10,000 or greater, payment shall be made to EPA by Electronics Funds Transfer ("EFT") in accordance with current EFT procedures to be provided to Respondent by EPA Region 5. Payment shall be accompanied by a statement identifying the name and address of the party(ies) making payment, the Site name, EPA Region 5, the "Plainwell Dam #2 Time-Critical Removal Action" designation, the Site/Spill ID Number 059B, and the EPA docket number for this action.

ii. If the amount demanded in the bill is $10,000 or less, Respondent may in lieu of the procedures in Subparagraph 36.a.i make all payments required by this Paragraph by a certified or cashier's check or checks made payable to "EPA Hazardous Substance Superfund," referencing the name and address of the party(ies) making the payment, and the EPA Site/Spill ID Number 059B. Respondent shall send the check(s) to:

U.S. Environmental Protection Agency,
Superfund Payments
Cincinnati Finance Center
P.O. Box 97906
St. Louis, MO 63197-9000

e. At the time of payment, Respondent shall send notice that payment has been made to the Director, Superfund Division, EPA Region 5, 77 West Jackson Blvd., Chicago, Illinois, 60604-3590 and to Leslie A. Kirby-Miles,

Associate Regional Counsel, 77 West Jackson Boulevard, C-14J, Chicago, Illinois, 60604-3590.

f. The total amount to be paid by Respondent pursuant to Paragraph 36.a shall be deposited in the Kalamazoo River Special Account within the EPA Hazardous Substance Superfund to be retained and used to conduct or finance response actions at or in connection with the Site, or to be transferred by EPA to the EPA Hazardous Substance Superfund.

37. In the event that any payment for Future Response Costs is not made within 30 days of Respondent's receipt of a bill, Respondent shall pay Interest on the unpaid balance. The Interest on Future Response Costs shall begin to accrue on the date of the bill and shall continue to accrue until the date of payment. Payments of Interest made under this Paragraph shall be in addition to such other remedies or sanctions available to the United States by virtue of Respondent's failure to make timely payments under this Section, including but not limited to, payment of stipulated penalties pursuant to Section XVIII.

38. Respondent may contest payment of any Future Response Costs billed under Paragraph 36 if they determine that EPA has made a mathematical error or included a cost item that is not within the definition of Future Response Costs, or if they believe EPA incurred excess costs as a direct result of an EPA action that was inconsistent with a specific provision or provisions of the NCP. Such objection shall be made in writing within 30 days of receipt of the bill and must be sent to the OSC. Any such objection shall specifically identify the contested Future Response Costs and the basis for objection. In the event of an objection, Respondent shall within the 30-day period pay all uncontested Future Response Costs to EPA in the manner described in Paragraph 36. Simultaneously, Respondent shall establish an interest bearing escrow account in a federally-insured bank duly chartered in the State of Michigan and remit to that escrow account funds equivalent to the amount of the contested Future Response Costs. Respondent shall send to the OSC a copy of the transmittal letter and check paying the uncontested Future Response Costs, and a copy of the correspondence that establishes and funds the escrow account, including, but not limited to, information containing the identity of the bank and bank account under which the escrow account is established as well as a bank statement showing the initial balance of the escrow account. Simultaneously with establishment of the escrow account, Respondent shall initiate the Dispute Resolution procedures in Section XVI. If EPA prevails in the dispute, within 5 days of the resolution of the dispute, Respondent shall pay the sums due (with accrued interest) for which it did not prevail to EPA in the manner described in Paragraph 36. Respondent shall be disbursed any balance of the escrow account. The dispute resolution procedures set forth in this Paragraph in conjunction with the procedures set forth in Section XVI (Dispute Resolution) shall be the exclusive mechanisms for resolving disputes regarding Respondent's obligation to reimburse EPA for its Future Response Costs.

39. Disbursement of Special Account Funds

a. Creation of Plainwell Dam #2 Disbursement Special Account and Agreement to Disburse Funds to Respondent. Within 30 days after the Effective Date, EPA shall establish a new special account, the Plainwell Dam #2 Special Account, within the EPA Hazardous Substance Superfund and shall transfer $2 million from the Kalamazoo River Special Account to the Plainwell Dam #2 Disbursement Special Account. Subject to the terms and conditions set forth in this Paragraph, EPA agrees to make the funds in the Plainwell Dam #2 Disbursement Special Account, including Interest Earned on the funds in the Plainwell Dam #2 Disbursement Special Account, available for disbursement to Respondent as partial reimbursement for performance of the Work under this Settlement Agreement. EPA shall disburse funds from the Plainwell Dam #2 Disbursement Special Account to Respondent in accordance with the procedures and milestones for phased disbursement set forth in this Paragraph.

b. Timing, Amount and Method of Disbursing Funds from the Plainwell Dam #2 Disbursement Special Account. Within 60 days of EPA's receipt of a Cost Summary and Certification, as defined by Subparagraph 39.c.i. or, if EPA has requested additional information under Subparagraph 39.c.i. or a revised Cost Summary and Certification under Subparagraph 39.c.ii, within 60 days of receipt of the additional information or revised Cost Summary and Certification, and subject to the conditions set forth in this Section, EPA shall disburse the funds from the Plainwell Dam #2 Disbursement Special Account at the completion of the following milestones, and in the amounts set forth below:

	Disbursement of Funds
1. EPA written notice that all Work associated with mobilization has been completed	$100,000 of the funds in the Plainwell Dam #2 Disbursement Special Account
2. EPA written notice that all Work associated with the first year of construction has been completed successfully	$1,000,000 of the funds in the Plainwell Dam #2 Disbursement Special Account
3. EPA Notice of Completion of the Work	$900,000 from the Plainwell Dam #2 Disbursement Special Account

EPA shall disburse the funds from the Plainwell Dam #2 Disbursement Special Account to Respondent by electronic funds transfer per the following instructions:

Bank Name: **JP Morgan Chase**
Bank City & State: **Chicago, IL**
ABA Routing Number: **021-000-021**
Swift: **CHASU33**
Account Name: **Georgia-Pacific Financial Management LLC**
Account Number: **59-50945**

c. Requests for Disbursement of Special Account Funds. Within 30 days of issuance of EPA's written confirmation that a milestone of the Work, as defined in Subparagraph 39.b, has been satisfactorily completed, Respondent shall submit to EPA, as provided in Paragraph 12.b., a Cost Summary and Certification, as defined in Subparagraph 39.c.i, covering the Work performed pursuant to this Settlement Agreement up to the date of completion of that milestone. Respondent shall not include in any submission costs included in a previous Cost Summary and Certification following completion of an earlier milestone of the Work if those costs have been previously reimbursed pursuant to Subparagraph 39.b.

i. Each Cost Summary and Certification shall include a complete and accurate written cost summary and certification of the necessary costs incurred and paid by Respondent for the Work covered by the particular submission, excluding costs not eligible for disbursement under Subparagraph 39.d. Each Cost Summary and Certification shall contain the following certification statement signed by the Chief Financial Officer of Georgia-Pacific:

> To the best of my knowledge, after thorough investigation and review of Respondent's documentation of costs incurred and paid for Work performed pursuant to this Settlement Agreement [**insert, as appropriate**, "up to the date of completion of milestone 1," "between the date of completion of milestone 1 and the date of completion of milestone 2," "between the date of completion of milestone 2 and the date of completion of the milestone 3,"] I certify that the information contained in or accompanying this submittal is true, accurate, and complete. I am aware that there are significant penalties for knowingly submitting false information, including the possibility of fine and imprisonment.

The Chief Financial Officer shall also provide EPA a list of the documents that he or she reviewed in support of the Cost Summary and Certification. Upon request by EPA, Respondent shall submit to EPA any additional information that EPA deems necessary for its review and approval of a Cost Summary and Certification.

ii. If EPA finds that a Cost Summary and Certification includes a mathematical accounting error, costs excluded under Subparagraph 39.d, costs that are inadequately documented, or costs submitted in a prior Cost Summary and Certification, it will notify Respondent and provide an opportunity to cure the deficiency by submitting a revised Cost Summary and Certification. If Respondent fails to cure the deficiency within 14 days after being notified of, and given the opportunity to cure, the deficiency, EPA will recalculate Respondent's costs eligible for disbursement for that submission, and disburse the corrected amount to Respondent in accordance with the procedures in Subparagraph 39.b. Respondent may dispute EPA's recalculation under this Subparagraph

pursuant to Section XVI (Dispute Resolution). In no event shall Respondent be disbursed funds from the Plainwell Dam #2 Disbursement Special Account in excess of amounts properly documented in a Cost Summary and Certification accepted or modified by EPA.

d. Costs Excluded from Disbursement. The following costs are excluded from, and shall not be sought by Respondent for, disbursement from the Plainwell Dam #2 Disbursement Special Account: (a) Future Response Costs for the Plainwell Dam #2; (b) any other payments made by Respondent to the United States pursuant to this Settlement Agreement, including, but not limited to, any interest or stipulated penalties paid pursuant to Section XVIII; (c) attorneys' fees and costs, except for reasonable attorneys' fees and costs necessarily related to obtaining access as required by Section IX; (d) costs of any response activities Respondent performs that are not required under, or approved by EPA pursuant to, this Settlement Agreement; (e) costs related to Respondent's litigation, settlement, development of potential contribution claims or identification of other potentially responsible parties; (f) internal costs of Respondent, including but not limited to, salaries, travel, or in-kind services, except for those costs that represent the work of employees of Respondent directly performing the Work; (g) any costs incurred by Respondent prior to the Effective Date, except for those costs that represent work performed to develop the Work Plan; or (h) any costs incurred by Respondent pursuant to Section XVI (Dispute Resolution) or Paragraph 38.

e. Termination of Disbursements from the Special Account. EPA's obligation to disburse funds from the Plainwell Dam #2 Disbursement Special Account under this Settlement Agreement shall terminate upon EPA's determination that Respondent: (a) has knowingly submitted a materially false or misleading Cost Summary and Certification; (b) has submitted a materially inaccurate or incomplete Cost Summary and Certification, and has failed to correct the materially inaccurate or incomplete Cost Summary and Certification within 14 days after being notified of, and given the opportunity to cure, the deficiency; or (c) failed to submit a Cost Summary and Certification as required by Subparagraph 39.c within 30 days (or such longer period as EPA agrees) after being notified that EPA intends to terminate its obligation to make disbursements pursuant to this Paragraph because of Respondent's failure to submit the Cost Summary and Certification as required by Subparagraph 39.c. EPA's obligation to disburse funds from the Plainwell Dam #2 Disbursement Special Account shall also terminate upon EPA's assumption of performance of any portion of the Work pursuant to Paragraph 58, when such assumption of performance of the Work is not challenged by Respondent or, if challenged, is upheld under Section XVI (Dispute Resolution). Respondent may dispute EPA's termination of special account disbursements under Section XVI (Dispute Resolution).

f. Recapture of Special Account Disbursements. Upon termination of disbursements from the Plainwell Dam #2 Disbursement Special Account under Subparagraph 39.e, if EPA has previously disbursed funds from the Plainwell Dam #2 Disbursement Special Account for activities specifically related to the reason for termination (*e.g.*, discovery of a materially false or misleading submission after disbursement of funds based on that submission), EPA shall submit a bill to Respondent

for those amounts already disbursed from the Plainwell Dam #2 Disbursement Special Account specifically related to the reason for termination, plus Interest on that amount covering the period from the date of disbursement of the funds by EPA to the date of repayment of the funds by Respondent. Within 14 days of receipt of EPA's bill, Respondent shall reimburse the Hazardous Substance Superfund for the total amount billed by a certified or cashier's check or checks made payable to "U.S. EPA Hazardous Substance Superfund," referencing the name and address of the party making payment, EPA Site/Spill Identification Number 059B, the "Plainwell Dam #2 Removal Action," and the EPA docket number for this action. Respondent shall send the check(s) to:

U.S. Environmental Protection Agency,
Superfund Payments
Cincinnati Finance Center
P.O. Box 97906
St. Louis, MO 63197-9000

At the time of payment, Respondent shall send notice that payment has been made to

EPA and to the Regional Financial Management Officer, in accordance with Paragraph 36.b. Upon receipt of payment, EPA may deposit all or any portion thereof in the Kalamazoo River Special Account or the Hazardous Substance Superfund. The determination of where to deposit or how to use the funds is at the sole discretion of EPA and shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement Agreement or in any other forum. Respondent may dispute EPA's determination as to recapture of funds pursuant to Section XVI (Dispute Resolution).

g. Balance of Special Account Funds. After EPA issues its written Notice of Completion of Work pursuant to this Settlement Agreement, and after EPA completes all disbursement to Respondent in accordance with this Section, if any funds remain in the Plainwell Dam #2 Disbursement Special Account, EPA may transfer such funds to the Hazardous Substance Superfund or to the Kalamazoo River Special Account, to be retained and used to conduct or finance response actions at or in connection with the Site. Any transfer of funds to the Kalamazoo River Special Account or the Hazardous Substance Superfund is at EPA's sole discretion and shall not be subject to challenge by Respondent pursuant to the dispute resolution provisions of this Settlement Agreement or in any other forum.

XVI. DISPUTE RESOLUTION

40. Unless otherwise expressly provided for in this Settlement Agreement, the dispute resolution procedures of this Section shall be the exclusive mechanism for resolving disputes arising under this Settlement Agreement. The Parties shall attempt to resolve any disagreements concerning this Settlement Agreement expeditiously and informally.

41. If Respondent objects to any EPA action taken pursuant to this Settlement Agreement (not relating to billings for Future Response Costs), it shall notify EPA in

writing of its objection(s) within 10 days of such action, unless the objection(s) has/have been resolved informally. If the objection relates to billings for Future Response Costs, Respondent's time for objections will be 45 calendar days. In either event, this written notice shall include a statement of the issues in dispute, the relevant facts upon which the dispute is based; all factual data, analysis or opinion supporting Respondent's position, and all supporting documentation on which such party relies. EPA shall provide its Statement of Position, including supporting documentation, no later than 10 calendar days after receipt of the written notice of dispute (or 30 days in the case of a dispute about Future Response Costs). In the event that EPA determines that these 10-day time periods for exchange of written documents will cause a delay in the work, they may be shortened upon, and in accordance with, notice by EPA. The time periods for exchange of written documents relating to disputes over billings for Future Response Costs may be extended at the sole discretion of EPA. An administrative record of any dispute under this Section shall be maintained by EPA. The record shall include the Respondent's written notification of such dispute, and EPA's Statement of Position.

42. Any agreement reached by the parties pursuant to this Section shall be in writing and shall, upon signature by the parties, be incorporated into and become an enforceable part of this Settlement Agreement. If the Parties are unable to reach an agreement within the negotiation period, the Director of the Superfund Division, EPA Region 5 will issue a written decision on the dispute to Respondent. EPA's decision shall be incorporated into and become an enforceable part of this Settlement Agreement. Respondent's obligations under this Settlement Agreement shall not be tolled by submission of any objection for dispute resolution under this Section. Following resolution of the dispute, as provided by this Section, Respondent shall fulfill the requirement that was the subject of the dispute in accordance with the agreement reached or with EPA's decision, whichever occurs.

XVII. FORCE MAJEURE

43. Respondent agrees to perform all requirements of this Settlement Agreement within the time limits established under this Settlement Agreement, unless the performance is delayed by a *force majeure*. For purposes of this Settlement Agreement, a *force majeure* is defined as any event arising from causes beyond the control of Respondent, or of any entity controlled by Respondent, including but not limited to its contractors and subcontractors, which delays or prevents performance of any obligation under this Settlement Agreement despite Respondent's best efforts to fulfill the obligation. *Force majeure* does not include financial inability to complete the Work, or increased cost of performance.

44. If any event occurs or has occurred that may delay the performance of any obligation under this Settlement Agreement, whether or not caused by a *force majeure* event, Respondent shall notify EPA orally within 24 hours of when Respondent first knew that the event might cause a delay. Within 7 days thereafter, Respondent shall provide to EPA in writing an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementation of any measures to be taken to prevent or

mitigate the delay or the effect of the delay; Respondent's rationale for attributing such delay to a *force majeure* event if it intends to assert such a claim; and a statement as to whether, in the opinion of Respondent, such event may cause or contribute to an endangerment to public health, welfare or the environment. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of *force majeure* for that event for the period of time of such failure to comply and for any additional delay caused by such failure. Respondent shall have the burden of demonstrating by a preponderance of the evidence that the event is a *force majeure* that the delay is warranted under the circumstances, and that best efforts were exercised to avoid and mitigate the effects of the delay.

45. If EPA agrees that the delay or anticipated delay is attributable to a *force majeure* event, the time for performance of the obligations under this Settlement Agreement that are affected by the *force majeure* event will be extended by EPA for such time as is necessary to complete those obligations. An extension of the time for performance of the obligations affected by the *force majeure* event shall not, of itself, extend the time for performance of any other obligation. If EPA does not agree that the delay or anticipated delay has been or will be caused by a *force majeure* event, EPA will notify Respondent in writing of its decision. If EPA agrees that the delay is attributable to a *force majeure* event, EPA will notify Respondent in writing of the length of the extension, if any, for performance of the obligations affected by the *force majeure* event.

XVIII. STIPULATED PENALTIES

46. Respondent shall be liable to EPA for stipulated penalties in the amounts set forth in Paragraphs 47 and 48 for failure to comply with the requirements of this Settlement Agreement specified below, unless excused under Section XVII (*Force Majeure*). "Compliance" by Respondent shall include completion of the activities under this Settlement Agreement or any work plan or other plan approved under this Settlement Agreement identified below in accordance with all applicable requirements of law, this Settlement Agreement, the Work Plan and any plans or other documents approved by EPA pursuant to this Settlement Agreement and within the specified time schedules established by and approved under this Settlement Agreement or the Work Plan.

47. Stipulated Penalty Amounts - Work.

a. The following stipulated penalties shall accrue per violation per day for any noncompliance identified in Paragraph 47.b.; failure to pay Future Response; or for any noncompliance with any "major milestone," defined as a due date for a submission or task expressly designated as a major milestone in the Work Plan:

Penalty Per Violation Per Day	Period of Noncompliance
$ 750	1st through 14th day
$ 1000	15th through 30th day
$ 1,500	31st day and beyond

b. Compliance Milestones:

i. Failure to pay Future Response Costs as provided in Paragraph 37.
ii. Failure to provide Financial Assurance as provided in Section XXVI
iii. Failure to provide Insurance as provided in Section XXV
iv. Failure to use best efforts to obtain Access as provided in Section IX
v. Failure to meet any scheduled deadline in the Work Plan
vi. Failure to complete any planning document required by this Settlement Agreement or the Work Plan (*e.g.* QAPP, QMP, etc.)

48. Stipulated Penalty Amounts - Reports. The following stipulated penalties shall accrue per violation per day for failure to submit timely or adequate reports pursuant to Paragraphs 19 and 20:

Penalty Per Violation Per Day	Period of Noncompliance
$ 100	1st through 14th day
$ 250	15th through 30th day
$ 500	31st day and beyond

49. All penalties shall begin to accrue on the day after the complete performance is due or the day a violation occurs, and shall continue to accrue through the final day of the correction of the noncompliance or completion of the activity. However, stipulated penalties shall not accrue: 1) with respect to a deficient submission under Section VIII (Work to be Performed), during the period, if any, beginning on the 21st day after EPA's receipt of such submission until the date that EPA notifies Respondent of any deficiency; and 2) with respect to a decision by the Director of the Superfund Division, Region 5, under Paragraph 42 of Section XVI (Dispute Resolution), during the period, if any, beginning on the 14th day after EPA submits its written statement of position until the date that the Director of the Superfund Division issues a final decision regarding such dispute. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Settlement Agreement.

50. Following EPA's determination that Respondent has failed to comply with a requirement of this Settlement Agreement, EPA may give Respondent written notification of the failure and describe the noncompliance. EPA may send Respondent a written demand for payment of the penalties. However, penalties shall accrue as provided in the preceding Paragraph regardless of whether EPA has notified Respondent of a violation. EPA may exercise its discretion not to seek penalties.

51. All penalties accruing under this Section shall be due and payable to EPA within 30 days of Respondent's receipt from EPA of a demand for payment of the penalties, unless Respondent invokes the dispute resolution procedures under Section XVI (Dispute Resolution). Payments made to EPA under this Section shall be made payable to "U.S. EPA Hazardous Substances Superfund," shall be either paid electronically as provided in Section XV or by check mailed to U.S. Environmental Protection Agency, Superfund Payments, Cincinnati Finance Center, PO Box 979076, St.

Louis, MO 63197-9000. Payments shall indicate that the payment is for stipulated penalties, and shall reference the EPA Site/Spill ID Number 059B, the EPA Docket Number, and the name and address of the party(ies) making payment. Copies of check(s) paid pursuant to this Section, and any accompanying transmittal letter(s), shall be sent to EPA as provided in Paragraph 36.b.

52. The payment of penalties shall not alter in any way Respondent's obligation to complete performance of the Work required under this Settlement Agreement.

53. Penalties shall continue to accrue during any dispute resolution period, but need not be paid until 20 days after the dispute is resolved by agreement or by receipt of EPA's decision.

54. If Respondent fails to pay stipulated penalties when due, EPA may institute proceedings to collect the penalties, as well as Interest. Respondent shall pay Interest on the unpaid balance, which shall begin to accrue on the date of demand made pursuant to Paragraph 50. Nothing in this Settlement Agreement shall be construed as prohibiting, altering, or in any way limiting the ability of EPA to seek any other remedies or sanctions available by virtue of Respondent's violation of this Settlement Agreement or of the statutes and regulations upon which it is based, including, but not limited to, penalties pursuant to Sections 106(b) and 122(*l*) of CERCLA, 42 U.S.C. §§ 9606(b) and 9622(*l*), and punitive damages pursuant to Section 107(c)(3) of CERCLA, 42 U.S.C. § 9607(c)(3), provided, however, that EPA shall not seek civil penalties pursuant to Section 106(b) or 122(*l*) of CERCLA or punitive damages pursuant to Section 107(c)(3) of CERCLA for any violation for which a stipulated penalty is provided herein, except in the case of a willful violation of this Settlement Agreement or in the event that EPA assumes performance of a portion or all of the Work pursuant to Section XX, Paragraph 65. Should Respondent violate this Settlement Agreement or any portion hereof, EPA may carry out the required actions unilaterally, pursuant to Section 104 of CERCLA, 42 U.S.C. § 9604, and/or may seek judicial enforcement of this Settlement Agreement pursuant to Section 106 of CERCLA, 42 U.S.C. § 9606. Notwithstanding any other provision of this Section, EPA may, in its unreviewable discretion, waive any portion of stipulated penalties that have accrued pursuant to this Settlement Agreement.

XIX. UNITED STATES' COVENANT NOT TO SUE

55. In consideration of the actions that will be performed and the payments that will be made by Respondent under the terms of this Settlement Agreement, and except as otherwise specifically provided in this Settlement Agreement, EPA covenants not to sue or to take administrative action against Respondent pursuant to Sections 106 and 107(a) of CERCLA, 42 U.S.C. §§ 9606 and 9607(a), for the Work and for Future Response Costs. This covenant not to sue shall take effect upon the Effective Date and is conditioned upon the complete and satisfactory performance by Respondent of all obligations under this Settlement Agreement, including, but not limited to, payment of Future Response Costs pursuant to Section XV. This covenant not to sue extends only to Respondent and does not extend to any other person.

XX. RESERVATIONS OF RIGHTS

56. Except as specifically provided in this Settlement Agreement, nothing herein shall limit the power and authority of EPA or the United States to take, direct, or order all actions necessary to protect public health, welfare, or the environment or to prevent, abate, or 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 EPA from seeking legal or equitable relief to enforce the terms of this Settlement Agreement. EPA also reserves the right to take any other legal or equitable action as it deems appropriate and necessary, or to require the Respondent in the future to perform additional activities pursuant to CERCLA or any other applicable law.

57. The covenant not to sue set forth in Paragraph 55 above does not pertain to any matters other than those expressly identified therein. EPA reserves, and this Settlement Agreement 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 Settlement Agreement;

b. liability for costs not included within the definition of Future Response Costs;

c. liability for performance of response action other than the Work;

d. criminal liability;

e. liability for damages for injury to, destruction of, or loss of natural resources, and for the costs of any natural resource damage assessments;

f. liability arising from the past, present, or future disposal, release or threat of release of Waste Materials outside of Plainwell Dam #2; and

g. liability for costs incurred or to be incurred by the Agency for Toxic Substances and Disease Registry related to the Site.

58. Work Takeover. In the event EPA determines that Respondent has ceased implementation of any portion of the Work, is seriously or repeatedly deficient or late in its performance of the Work, or is implementing the Work in a manner which may cause an endangerment to human health or the environment, EPA may assume the performance of all or any portion of the Work as EPA determines necessary. Respondent may invoke the procedures set forth in Section XVI (Dispute Resolution) to dispute EPA's determination that takeover of the Work is warranted under this Paragraph. Costs incurred by the United States in performing the Work pursuant to this Paragraph shall be

considered Future Response Costs that Respondent shall pay pursuant to Section XV (Payment of Response Costs). Notwithstanding any other provision of this Settlement Agreement, EPA retains all authority and reserves all rights to take any and all response actions authorized by law.

XXI. COVENANT NOT TO SUE BY RESPONDENT

59. Respondent covenants not to sue and agrees not to assert any claims or causes of action against the United States or its contractors or employees, with respect to the Work, Future Response Costs, and this Settlement Agreement, including, but not limited to:

a. any direct or indirect claim for reimbursement from the Hazardous Substance Superfund established by 26 U.S.C. § 9507, based on Sections 106(b)(2), 107, 111, 112, or 113 of CERCLA, 42 U.S.C. §§ 9606(b)(2), 9607, 9611, 9612, or 9613, or any other provision of law;

b. any claim arising out of response actions at or in connection with the Site, including any claim under the United States Constitution, the Tucker Act, 28 U.S.C. § 1491, the Equal Access to Justice Act, 28 U.S.C. § 2412, as amended, or at common law; or

c. any claim against the United States pursuant to Sections 107 and 113 of CERCLA, 42 U.S.C. §§ 9607 and 9613, relating to the Site.

These covenants not to sue shall not apply in the event the United States brings a cause of action or issues an order pursuant to the reservations set forth in Paragraphs 57 (b), (c), and (e) - (g), but only to the extent that Respondent's claims arise from the same response action, response costs, or damages that the United States is seeking pursuant to the applicable reservation.

60. Nothing in this Settlement Agreement shall be deemed to constitute approval or preauthorization of a claim within the meaning of Section 111 of CERCLA, 42 U.S.C. § 9611, or 40 C.F.R. § 300.700(d).

XXII. OTHER CLAIMS

61. By issuance of this Settlement Agreement, the United States and EPA assume no liability for injuries or damages to persons or property resulting from any acts or omissions of Respondent. The United States or EPA shall not be deemed a party to any contract entered into by Respondent or its directors, officers, employees, agents, successors, representatives, assigns, contractors, or consultants in carrying out actions pursuant to this Settlement Agreement.

62. Except as expressly provided in Section XIX (Covenant Not to Sue), nothing in this Settlement Agreement constitutes a satisfaction of or release from any claim or

cause of action against Respondent or any person not a party to this Settlement Agreement, for any liability such person may have under CERCLA, other statutes, or common law, including but not limited to any claims of the United States for costs, damages and interest under Sections 106 and 107 of CERCLA, 42 U.S.C. §§ 9606 and 9607.

63. No action or decision by EPA pursuant to this Settlement Agreement shall give rise to any right to judicial review, except as set forth in Section 113(h) of CERCLA, 42 U.S.C. § 9613(h).

XXIII. CONTRIBUTION

64. a. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 122(h)(4), and that the Respondent is entitled , as of the Effective Date, to protection from contribution actions or claims as provided by Sections 113(f)(2) and 122(h)(4) of CERCLA, 42 U.S.C. §§ 9613(f)(2) and 122(h)(4), or as may be otherwise provided by law for "matters addressed" in this Settlement Agreement. The "matters addressed" in this Settlement Agreement are the Work, and Future Response Costs.

b. The Parties agree that this Settlement Agreement constitutes an administrative settlement for purposes of Section 113(f)(3)(B) of CERCLA, 42 U.S.C. § 9613(f)(3)(B), pursuant to which the Respondent has, as of the Effective Date, resolved its liability to the United States for the Work and the Future Response Costs.

65. Nothing in this Settlement Agreement shall be construed to create any rights in, or grant any cause of action to, any person not a Party to this Settlement Agreement. Each Party expressly reserves any and all rights (including but not limited to, pursuant to 113 of CERCLA, 42 U.S.C. § 9613), defenses, claims, demands, and causes of action which each Party may have with respect to any matter, transaction, or occurrence relating in any way to the Site against any person not a Party hereto. Nothing in this Settlement Agreement diminishes the right of the United States, pursuant to Section 113(f)(2) and (3) of CERCLA, 42 U.S.C. § 9613(f)(2)-(3), to pursue any such persons to obtain additional response costs or response action and to enter into settlements that give rise to contribution protection pursuant to Section 113(f)(2).

66. Respondent shall, with respect to any suit or claim brought by it for matters related to this Settlement Agreement, notify EPA in writing no later than 60 days prior to the initiation of such suit or claim.

67. Respondent shall, with respect to any suit or claim brought against it for matters related to this Settlement Agreement, notify EPA in writing within 10 days of service of the complaint on Respondent. In addition, Respondent shall notify EPA within 10 days of service or receipt of any Motion for Summary Judgment and within 10 days of receipt of any order from a court setting a case for trial.

XXIV. INDEMNIFICATION

68. Respondent shall indemnify, save and hold harmless the United States, its officials, agents, contractors, subcontractors, employees and representatives from any and all claims or causes of action arising from, or on account of, negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, or subcontractors, in carrying out actions pursuant to this Settlement Agreement. In addition, Respondent agrees to pay the United States all costs incurred by the United States, including but not limited to attorneys fees and other expenses of litigation and settlement, arising from or on account of claims made against the United States based on negligent or other wrongful acts or omissions of Respondent, its officers, directors, employees, agents, contractors, subcontractors and any persons acting on its behalf or under its control, in carrying out activities pursuant to this Settlement Agreement. The United States shall not be held out as a party to any contract entered into by or on behalf of Respondent in carrying out activities pursuant to this Settlement Agreement. Neither Respondent nor any such contractor shall be considered an agent of the United States. The Federal Tort Claims Act (28 U.S.C. §§ 2671, 2680) provides coverage for injury or loss of property, or injury or death caused by the negligent or wrongful act or omission of an employee of EPA while acting within the scope of his or her employment, under circumstances where EPA, if a private person, would be liable to the claimant in accordance with the law of the place where the act or omission occurred.

69. The United States shall give Respondent notice of any claim for which the United States plans to seek indemnification pursuant to this Section and shall consult with Respondent prior to settling such claim.

70. Respondent waives all claims against the United States for damages or reimbursement or for set-off of any payments made or to be made to the United States, arising from or on account of any contract, agreement, or arrangement between the Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays. In addition, Respondent shall indemnify and hold harmless the United States with respect to any and all claims for damages or reimbursement arising from or on account of any contract, agreement, or arrangement between Respondent and any person for performance of Work on or relating to the Site, including, but not limited to, claims on account of construction delays.

XXV. INSURANCE

71. At least 7 days prior to commencing any on-Site work under this Settlement Agreement, Respondent shall secure, and shall maintain for the duration of this Settlement Agreement, comprehensive general liability insurance and automobile insurance with limits of $2 million dollars, combined single limit. Within the same time period, Respondent shall provide EPA with certificates of such insurance and a copy of each insurance policy. In addition, for the duration of the Settlement Agreement, Respondent shall satisfy, or shall ensure that its contractors or subcontractors satisfy, all

applicable laws and regulations regarding the provision of worker's compensation insurance for all persons performing the Work on behalf of Respondent in furtherance of this Settlement Agreement. If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering some or all of the same risks but in an equal or lesser amount, then Respondent need provide only that portion of the insurance described above which is not maintained by such contractor or subcontractor.

XXVI. FINANCIAL ASSURANCE

72. Within 30 days of the Effective Date, Respondent shall establish and maintain financial security in the amount of $8 million dollars in one or more of the following forms:

a. A surety bond unconditionally guaranteeing payment and/or performance of the Work;

b. One or more irrevocable letters of credit, payable to or at the direction of EPA, issued by financial institutions(s) acceptable in all respects to EPA;

c. A trust fund administered by a trustee acceptable in all respects to EPA;

d. A policy of insurance issued by an insurance carrier acceptable in all respects to EPA, which ensures that payment an/or performance of the Work;

e. A written guarantee to pay for or perform the Work provided by one or more parent companies of Respondent, or by one or more unrelated companies that have a substantial business relationship with the Respondent; including a demonstration that any such guarantor company satisfies the financial test requirements of 40 C.F.R. Part 264.143(f); and/or

f. A demonstration of sufficient financial resources to pay for the Work made by Respondent, which shall consist of a demonstration that any such Respondent satisfies the requirements of 40 C.F.R. Part 264.143(f).

73. Any and all financial assurance instruments provided pursuant to this Section shall be in form and substance satisfactory to EPA, determined in EPA's sole discretion. In the event that EPA determines at any time that the financial assurances provided pursuant to this Section (including, without limitation, the instrument(s) evidencing such assurances) are inadequate, Respondents shall, within 30 days of receipt of notice of EPA's determination, obtain and present to EPA for approval one of the other forms of financial assurance listed in Paragraph 72, above. In addition, if at any time EPA notifies Respondents that the anticipated cost of completing the Work has increased, then, within 30 days of such notification, Respondents shall obtain and present to EPA for approval a revised form of financial assurance (otherwise acceptable under this Section) that reflects such cost increase. Respondent's inability to demonstrate financial ability to complete

the Work shall in no way excuse performance of any activities required under this Settlement Agreement.

74. If Respondent seek to ensure completion of the Work through a guarantee pursuant to Subparagraph 72(e) or 72(f) of this Settlement Agreement, Respondent shall (i) demonstrate to EPA's satisfaction that the guarantor satisfies the requirements of 40 C.F.R. Part 264.143(f); and (ii) resubmit sworn statements conveying the information required by 40 C.F.R. Part 264.143(f) annually, on the anniversary of the Effective Date or such other date as agreed by EPA, to EPA. For the purposes of this Settlement Agreement, wherever 40 C.F.R. Part 264.143(f) references "sum of current closure and post-closure costs estimates and the current plugging and abandonment costs estimates," the dollar amount to be used in the relevant financial test calculations shall be the current cost estimate of $8 million for the Work at the Site plus any other RCRA, CERCLA, TSCA, or other federal environmental obligations financially assured by the Respondent or guarantor to EPA by means of passing a financial test.

75. a. If, after the Effective Date, Respondent can show that the estimated cost to complete the remaining Work has diminished below the amount set forth in Paragraph 72 of this Section, Respondent may, on any anniversary date of the Effective Date, or at any other time agreed to by the Parties, reduce the amount of the financial security provided under this Section to the estimated cost of the remaining Work to be performed. Respondent shall submit a proposal for such reduction to EPA, in accordance with the requirements of this Section, and may reduce the amount of the security after receiving written approval from EPA. In the event of a dispute, Respondent may seek dispute resolution pursuant to Section XVI (Dispute Resolution). Respondent may reduce the amount of security in accordance with EPA's written decision resolving the dispute.

b. Respondent may change the form of financial assurance provided under this Section at any time, upon notice to and prior written approval by EPA, provided that EPA determines that the new form of assurance meets the requirements of this Section. In the event of a dispute, Respondent may change the form of the financial assurance only in accordance with the written decision resolving the dispute.

XXVII. MODIFICATIONS

76. The OSC may make modifications to any plan or schedule in writing or by oral direction. Any oral modification will be memorialized in writing by EPA promptly, but shall have as its effective date the date of the OSC 's oral direction. Any other requirements of this Settlement Agreement may be modified in writing by mutual agreement of the parties.

77. If Respondent seeks permission to deviate from any approved work plan or schedule, Respondent's Project Coordinator shall submit a written request to EPA for approval outlining the proposed modification and its basis. Respondent may not proceed with the requested deviation until receiving oral or written approval from the OSC pursuant to Paragraph 76.

78. No informal advice, guidance, suggestion, or comment by the OSC or other EPA representatives, regarding reports, plans, specifications, schedules, or any other writing submitted by Respondent shall relieve Respondent of its obligation to obtain any formal approval required by this Settlement Agreement, or to comply with all requirements of this Settlement Agreement, unless it is formally modified.

XXVIII. ADDITIONAL REMOVAL ACTION

79. If EPA determines that additional removal actions not included in the Work Plan are necessary to protect public health, welfare, or the environment, EPA will notify Respondent of that determination. Unless otherwise stated by EPA, within 30 days of receipt of notice from EPA that additional removal actions are necessary to protect public health, welfare, or the environment, Respondent shall submit for approval by EPA a Work Plan for the additional removal actions. The plan shall conform to the applicable requirements of Section VIII (Work to Be Performed) of this Settlement Agreement. Upon EPA's approval of the plan pursuant to Section VIII, Respondents shall implement the plan for additional removal actions in accordance with the provisions and schedule contained therein. This Section does not alter or diminish the OSC's authority to make oral modifications to any plan or schedule pursuant to Section XXVII (Modifications).

XXIX. NOTICE OF COMPLETION OF WORK

80. When EPA, after EPA's review of the Final Report, determines that all Work has been fully performed in accordance with this Settlement Agreement, with the exception of any continuing obligations required by this Settlement Agreement, including post-removal site controls, payment of Future Response Costs and record retention, EPA will provide written notice to Respondent. If EPA determines that any such Work has not been completed in accordance with this Settlement Agreement, EPA will notify Respondent, provide a list of the deficiencies, and require that Respondent modify the Work Plan if appropriate in order to correct such deficiencies. Respondent shall implement the modified and approved Work Plan and shall submit a modified Final Report in accordance with the EPA notice. Failure by Respondent to implement the approved modified Work Plan shall be a violation of this Settlement Agreement.

XXX. SEVERABILITY/INTEGRATION/APPENDICES

81. If a court issues an order that invalidates any provision of this Settlement Agreement or finds that Respondent has sufficient cause not to comply with one or more provisions of this Settlement Agreement, Respondent shall remain bound to comply with all provisions of this Settlement Agreement not invalidated or determined to be subject to a sufficient cause defense by the court's order.

82. This Settlement Agreement and its appendices constitute the final, complete and exclusive agreement and understanding among the Parties with respect to the settlement embodied in this Settlement Agreement. The parties acknowledge that there

are no representations, agreements or understandings relating to the settlement other than those expressly contained in this Settlement Agreement. The following appendices are attached to and incorporated into this Settlement Agreement:

Appendix 1: Action Memorandum issued by EPA on 6/8/09
Appendix 2: Map generally depicting the Site
Figure 1: Classification of Soil and Sediment Removal Areas at Plainwell Dam #2 by PCB Concentration

XXXI. EFFECTIVE DATE

83. This Settlement Agreement shall be effective upon signature of the Director, Superfund Division, U.S. EPA.

The undersigned representative of Respondent certifies that it is fully authorized to enter into the terms and conditions of this Settlement Agreement and to bind the party it represents to this document.

Agreed this 2 day of JUNE, 2009.

For Respondent, Georgia-Pacific, LLC

JMD By

Title CEO

It is so ORDERED and Agreed this 8th day of June, 2009.

BY: _____
for Richard C. Karl, Director
Superfund Division
U.S. Environmental Protection Agency
Region 5

Appendix 1

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
SE-5J

MEMORANDUM

DATE: JUN 03 2009

SUBJECT: ENFORCEMENT ACTION MEMORANDUM: Determination of an Imminent and Substantial Threat to Public Health and the Environment at Plainwell Dam #2 of the Allied Paper/Portage Creek/Kalamazoo River Superfund Site, Allegan County, Michigan (Site ID# 059B)

FROM: Michael Ribordy, On-Scene Coordinator
Emergency Response Branch 2 - Section 3

THRU: Linda M. Nachowicz, Chief
Emergency Response Branch 2

TO: Richard C. Karl, Director
Superfund Division

I. PURPOSE

The purpose of this Action Memorandum is to document the determination of an imminent and substantial threat to public health and the environment at "Plainwell Dam #2," an area of contamination within Area 1 of the Kalamazoo River Operable Unit (OU) of the Allied Paper/Portage Creek/Kalamazoo River Superfund Site (sometimes referred to as the "Site" or the "Kalamazoo River Site"). The Site, which is located in Allegan and Kalamazoo Counties, Michigan, is pervasively contaminated with polychlorinated biphenyl (PCB), primarily as the result of waste practices associated with the de-inking of carbonless copy paper. The Site was listed on the NPL on August 30, 1990.

The Plainwell Dam #2 is located approximately 3.5 miles upstream of the former Plainwell Dam in the Township of Gun Plain, T 1N, R 11 W, in portions of Sections 32 and 33 upstream to the Penn Central Railroad Bridge. Plainwell Dam #2 includes a

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series of four historical structures constructed to partially divert the Kalamazoo River through the Plainwell mill race.

The response actions proposed in this Action Memorandum will mitigate threats to public health, welfare, and the environment presented by the presence of an uncontrolled release of PCBs, a hazardous substance, into the food chain of the Kalamazoo River from in-stream sediments, riverbank soils, and floodplain soils located within the Plainwell Dam #2. Due to the contaminated nature of the sediment, the continuing release of contamination into the food chain, and potential exposure to the public, this removal action will be classified as time-critical. The proposed response actions include dredging and/or excavation of sediment, riverbank soils and floodplain soil, containment, monitoring, water treatment, stabilization and off-Site disposal of excavated material in accordance with federal PCB regulations at 40 C.F.R. § 761.61. The response activities will require approximately 200 on-Site working days to complete, and will result in the removal of approximately 12,000 cubic yards of waste material, containing approximately 89% of the PCBs in the Plainwell Dam #2.

Subsequent to completion of the removal action and through the Superfund remedial process, Region 5 will complete its evaluation of the risks to human health and the environment presented by the presence of PCBs within the first reach of the Kalamazoo River OU of the Site (which includes the Plainwell Dam #2). This evaluation will consider data collected and analyses performed as part of the removal action described in this Action Memorandum. U.S. EPA will then issue a Record of Decision (ROD) for the entire first reach of the Kalamazoo River OU (*i.e.* Morrow Dam to the Plainwell Dam or Area 1) and, as part of that ROD, will determine whether additional response actions are necessary within the Plainwell Dam #2 to address risks to human health and the environment not addressed through the time-critical removal process.

One of the potentially responsible parties (PRPs) for the Site, Georgia-Pacific Corporation (GP), is prepared to conduct the time-critical removal action described in this Action Memorandum. GP is the owner of a now-inoperable papermaking facility at the Site. GP (or its predecessors-in-interest) engaged in the de-inking of carbonless copy paper, and discharged wastes containing high concentrations of PCB into the Kalamazoo River upstream of the Plainwell Dam #2.

II. SITE CONDITIONS AND BACKGROUND

CERCLIS ID # MID006007306

A. Physical Location and Description

The Kalamazoo River Site includes approximately 80 miles of the Kalamazoo River between Morrow Dam and Lake Michigan, adjacent floodplains and wetlands, and four paper waste disposal areas and several former paper mill properties (to the extent they contribute PCB to the Kalamazoo River system). The Site lies within the Great Lakes

Basin in the Kalamazoo River watershed of Michigan's Lower Peninsula. The watershed drains 2,020 square miles of southwest Michigan. It reaches 162 miles into south-central Michigan, and ranges in width from 11 to 29 miles.

The main channel of the Kalamazoo River flows northwest for 123 miles before ultimately emptying into Lake Michigan near Saugatuk, Michigan. The river contributes 42 pounds of PCB annually to Lake Michigan.

Site topography is influenced largely by past glacial activity. The area is relatively flat with gentle rolling plains. In general, the land surface slopes gently westward toward Lake Michigan. Ground and terminal moraines, eskers, and drumlins provide the only significant relief over the region. Low elevation areas are typically wetlands or bodies of open water, such as kettle lakes. Drainage patterns center around the former meltwater drainageway, which is now, at its lowest points, occupied by the Kalamazoo River. The river itself drops 540 feet in elevation from its headwaters to its mouth, producing a slow to moderate stream gradient.

Plainwell Dam #2 is located on the Kalamazoo River approximately 3.5 miles upstream of the former Plainwell Dam in the city of Plainwell and Gun Plain Township, Allegan County. Plainwell Dam #2 includes a series of four historical structures constructed to partially divert the Kalamazoo River through the Plainwell mill race. The mill race and the Kalamazoo River encircle the City of Plainwell, giving Plainwell its identity as the "Island City." State and local officials have expressed intentions to leave the Plainwell Dam #2 structures in place to continue to provide flow through the mill race and preserve the character of the city.

The remnant structures—a waste gate structure, a right diversion structure, a left diversion structure, and a head gate structure —were initially constructed in 1856 by the Plainwell Water Power Company. Earthen embankments, approximately 2,520 feet in total length, are also present to connect two diversion structures. These right and left diversion structures consist of concrete spillway gate bays and a concrete spillway, respectively (no gates remain in the right diversion structure). An earthen embankment connects the left abutment of the left diversion structure and the head gate structure. The diversion structures direct water from the main stem of the river into a mill race/power canal that was once used to generate water power for a flour mill, the City of Plainwell, and several other businesses. The head gate and waste gate structures in the power canal were formerly used to regulate the head and discharge through the powerhouse. The head gate structure consists of a concrete spillway with no control devices. The waste gate structure consisted of two sluice ways for which the gates are no longer in place.

Plainwell Dam #2 did not significantly alter the shape or surface area of the river, nor did it create lake-like impoundments as in the case of downstream former dams. It did serve to alter flooding characteristics of the river to some degree upstream of the dam. According to the Michigan Department of Environmental Quality (MDEQ), the Plainwell Dam #2 and associated structures were partially removed in the early 1980s. The

waste gate structure's lift gate and stoplog guides were still present in 1980, and at that time there were no active operational procedures in place other than to permanently leave all discharge control structures adjusted so that they would permit maximum discharge capacity.

In 1979, Plainwell Dam #2 was classified as a small size dam with high hazard potential in accordance with the National Dam Safety Program Criteria. Following the partial removal of the dam and associated structures in the 1980s, the dam was reclassified as a low hazard potential. The primary continuing purpose of the remaining structures is to maintain flow through the mill race/power canal, which along with the Kalamazoo River, encircles the city of Plainwell.

B. Environmental Justice Analysis

To meet Region 5's Environmental Justice (EJ) concern criteria, the area within 1 mile of a site must have a population that is at least twice the state's average low-income percentage and/or twice the state minority percentage. Among all Michigan residents, the low-income percentage is 29% and the minority percentage is 21%. U.S. EPA's EJ analysis of the population within 1 mile of the Plainwell Dam #2 determined that the low-income percentage is 24% and the minority percentage is 6%. Therefore, the Plainwell Dam #2 does not meet the Region's EJ criteria based on demographics, as identified in "Region 5 Interim Guidelines for Identifying and Addressing a Potential EJ Case, June 1998."

C. Site Assessments

The Administrative Record for the Kalamazoo River Site contains numerous reports which summarize the investigations conducted to date. Detailed information from the reports most relevant to this time-critical removal action is set forth here:

1. Remedial Investigation/Feasibility Study (RI/FS)

Between 1990 and 2000, several PRPs for the Site (including GP) conducted a Site-wide RI/FS pursuant to an administrative agreement with the State of Michigan. The RI field work included an assessment of the physical characteristics of the riverbanks within the three former impoundments. The PRPs concluded, primarily through visual observation, that the riverbanks were a source of ongoing loading of exposed sediments (and therefore PCB) to the river. The PRPs also identified, again primarily through visual observation, some of the mechanisms involved in such loading. The cohesive nature of the exposed sediments allows significant portions of the impoundments' riverbanks to remain in vertical-to-near-vertical repose. The fine-grained exposed sediments, however, generally overlie non-cohesive sandy sediments or soils. As a result, the faces of the banks are susceptible to erosion through direct contact with the river at higher river stages, and to undercutting by erosion of the underlying non-cohesive sediments or soils. Undercutting progresses until the overlying sediments fail by slumping or calving as blocks that fall into the river. The remnants of such blocks

could be observed along the toe of the banks in certain areas. Although the assessment pertains to the entire Kalamazoo River OU and not solely to the Plainwell Dam #2, the risk analysis is relevant to Region 5's determination of imminent and substantial endangerment in this Action Memorandum.

2. USGS Study.

In 2005, USGS, in cooperation with U.S. EPA and MDEQ, conducted an additional study of the channel characteristics of the Kalamazoo River. This study concluded that the erosion of the "toe" of the bank widens the River's stream, and results in steeper bank bangles. Once the bank undercut exceeds its critical bank angle, the inability of the sediments to support themselves results in bank failure.

3. PRP-Supplemental Remedial Investigation/Feasibility Study

Beginning in 2007 and continuing through 2008, investigations in Area 1 of the Kalamazoo River OU, including Plainwell Dam #2, were conducted as part of the Supplemental Remedial Investigation/Feasibility Study (SRI/FS). Phase 1 of that work involved the delineation of frequently inundated areas of the floodplain upstream of Plainwell Dam #2. Phase 2 of the investigation involved the sampling of Plainwell Dam #2. Results of the Phase 2 investigation of Plainwell Dam #2 found elevated levels of PCBs in bank and floodplain soils and, to a limited extent, in in-stream sediment. Samples were collected at 94 locations from a uniform grid in the floodplain, including in-stream islands. A total of 302 individual samples were collected from the floodplain, and total PCB concentrations ranged from non-detect to 60 milligrams per kilogram (mg/kg). Bank soil samples were collected from 78 locations. A total of 265 samples were analyzed for PCBs, with total PCB concentrations ranging from non-detect to 45 mg/kg. Sediment samples were collected from 60 locations, resulting in 267 samples analyzed for PCBs. PCB concentrations in sediment ranged from non-detect to 100 mg/kg. A summary of the investigation results is presented in the Plainwell No. 2 Conceptual Design Report.

MDEQ Plainwell Dam #2 Sampling

On December 10 and 11, 2008, MDEQ collected 30 sediment cores and 18 bank cores. A total of 50 individual sediment and 25 soil samples were analyzed for PCBs. Total PCB concentrations in sediment ranged from non-detect to 80.2 mg/kg. Total PCB concentrations in soil ranged from non-detect to 80.5 mg/kg.

D. Risk Assessments

1. Human Health Risk Assessments.

The Michigan Department of Natural Resources first issued a public health advisory regarding PCB contamination in the Kalamazoo River in 1977. This advisory remains in place today and warns against eating a variety of fish species from the river.

In December 1991, working under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR), the Michigan Department of Public Health (MDPH) prepared a Public Health Assessment (PHA) for the Kalamazoo River Site. The PHA indicated that the Site was a public health hazard because of the probable exposure to hazardous substances at concentrations that might result in adverse health effects. Potential human exposure pathways of concern included incidental ingestion, inhalation of contaminated soils, and ingestion of contaminated biota.

In April 2003, MDNR completed work on the human health risk assessment for the Site. Although the human health risk assessment's data and analysis pertain to the entire Kalamazoo River OU and not solely to the Plainwell Dam #2, the risk analysis is relevant to Region 5's determination of imminent and substantial endangerment in this Action Memorandum. The primary human health risks identified in the assessment are summarized here:

- Cancer risks and noncarcinogenic Hazard Quotients (HQ) exceed U.S. EPA and/or MDEQ acceptable risk limits[1] (cumulative carcinogenic risk greater than 10^{-4}, and the non-carcinogenic hazard quotient is greater than 1) for both sport and subsistence fishermen. Carcinogenic risk from the consumption of fish ranges from 9.0×10^{-5} to 1.7×10^{-3} depending on the river segment being evaluated. Noncarcinogenic HQs for the consumption of fish range from 1.7 to 80 for reproductive effects and 5.3 to 280 for immunological effects.

- Cancer risks for recreational users on the floodplain soil in the vicinity of the Plainwell Dam #2 exceed MDEQ's threshold based on maximum PCB exposure concentrations.

- HQs for recreational users on the floodplain soil in the vicinity of the Plainwell Dam #2 exceed the U.S. EPA and MDEQ threshold of 1 for reproductive effects based on maximum PCB exposure concentrations.

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[1] MDEQ has established a cancer risk target value of 1 in 100,000 (10^{-5}). Where cumulative cancer risks exceed this threshold, MDEQ risk managers may determine that some action to reduce exposure and risk may be necessary. The MDEQ risk target falls in the middle of U.S. EPA's risk range of 1 in 1,000,000 (10^{-6}) to 1 in 10,000 (10^{-4}). U.S. EPA generally considers risks within this range "acceptable," but considerations such as size of affected population may indicate that some action to reduce risk is appropriate. Above this range, U.S. EPA risk managers will ordinarily determine that such action is necessary. Both MDEQ and U.S. EPA have HQ thresholds of 1.

2. Ecological Risk Assessment

MDEQ finalized the Ecological Risk Assessment (ERA) for the Kalamazoo River in April 2003. Like the Human Health Risk Assessment, the ERA's data and analysis pertain to the entire Kalamazoo River OU. Nevertheless, the ERA's findings are also relevant to Region 5's determination of imminent and substantial endangerment at the Plainwell Dam #2. Accordingly, the primary findings from the ERA are explained here.

The ERA focused primarily on assessing population-level risks associated with PCB contamination in abiotic media and biota. Because of the potential for PCBs to accumulate in biological tissues and exert adverse effects in upper trophic level biota, the ERA specifically considered bioaccumulation, food chain effects, and adverse effects in upper trophic level organisms.

The ERA focused on assessing the risks from PCB exposures via direct contact with contaminated surface water, streambed sediment, floodplain (exposed) sediment, and surface soil, as well as ingestion of PCB-contaminated food items.

The ERA concluded that PCB contamination at the Site presents a high to moderate ecological risk for eight animal species. Table 5.3 of the study identifies the estimated risks for all representative species of concern, based on estimated PCB dose (birds and mammals) or on the Site-wide average PCB concentration (aquatic receptors).

More particularly, the ERA found that PCB contamination of surface water and streambed sediment (and floodplain soils that are frequently inundated or have the potential to erode into the river) is likely to adversely affect sensitive piscivorous predators such as mink through consumption of PCB-contaminated prey, especially fish. Other piscivorous predators, such as bald eagles, also appear to be at high risk based on the exposure assumptions presented in the ERA. Terrestrial and semi-aquatic biota may also be at risk from PCB-contaminated floodplain sediment and surface soil, depending on life history (e.g. foraging behavior, diet, mobility) and sensitivity to PCBs. Omnivorous birds (represented by the robin) that consume substantial numbers of soil invertebrates, such as earthworms, appear to be at moderate but still significant risk.

Finally, the United States Fish and Wildlife Service has identified two federally endangered species, two federally threatened species, and one federal candidate species that can be present in Allegan County. The Karner blue butterfly and the Indiana bat both are endangered. The bald eagle and Pitcher's thistle (a plant) are both threatened in this region. The eastern massasauga rattlesnake is the lone candidate species (BBL 2000b).

The MDNR lists seven species as endangered or threatened (not including the federally-listed species) in or near the Site. Endangered species in this area include the zigzag bladderwort, wild American ginseng, and the log fern (plants), the creek

chubsucker (fish), prairie warbler (bird), ottoe skipper (insect), and the spotted turtle (reptile) (BBL 2000b).

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Conditions present at the Plainwell Dam #2 of the Kalamazoo River Site constitute a threat to public health, welfare or the environment based upon the factors set forth in 40 C.F.R. § 300.415(b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). These include, but may not be limited to, the following:

- Actual or potential exposure to nearby populations, animals, or the food chain from hazardous substances or pollutants or contaminants.

PCBs are a hazardous substance, as that term is defined by Section 101(14) of CERCLA. PCBs are also listed as a hazardous substance under Section 311(b)(2) of the Clean Water Act, as set forth in 40 C.F.R. § 116.4 Table A. The Toxic Substances Control Act (TSCA) states that "exposure of human beings or the environment to PCBs... may be significant, depending upon the quantity of PCBs,...the likelihood of exposure to humans and the environment...." U.S. EPA has determined that PCBs are a probable human carcinogen. These chemicals have the potential to biomagnify, which means that they have the potential to increase in concentration as they are transferred from one link in the food chain to another.

Plainwell Dam #2 has PCB levels up to 100 mg/kg for in-stream sediments, 80.5 mg/kg in top-of-bank soils and 60 mg/kg in floodplain soils. The ongoing, uncontrolled erosion of soils from the riverbanks is a significant source of PCB loading to the Kalamazoo River. The RI/FS determined PCB-containing waste paper residuals and soils slough off the banks, to be deposited in the river or transported downstream. In-stream sediments and bank soils are primary sources of an ongoing release of PCBs into the waters of the Kalamazoo River.

Although the 1977 MDPH advisory is still in effect, the fish consumption advisory is simply that – advisory. MDPH personnel have observed that the Kalamazoo River between Kalamazoo and Plainwell is becoming a popular fishery. It has been reported that anglers have been taking home fish in amounts that may be inconsistent with the consumption advisories issued by the MDPH. It was also reported that turtles have also been taken from the river for human consumption, which would provide for another potential human exposure pathway.

The most significant outcome of the ecological and human health risk assessments is the conclusion that fish consumption is the primary exposure pathway for receptors that may be at risk from PCB within media of the Kalamazoo River. Therefore, the key to reducing exposure and potential risks to important receptors (e.g. fish-eating birds, fish-

eating wildlife, and humans) is to reduce PCB concentrations in the fish tissue consumed by these receptors. The RI/FS concluded the greatest factor controlling PCB levels in fish is the bioavailability of PCB in surface sediments and the water column where fish and their prey come in contact with or ingest PCB.

- High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate;

Total PCB concentrations of up to 100 mg/kg have been found in the sediments, bank and floodplain soils of the Plainwell Dam #2. As explained above, the sediments, bank and floodplain soils that are located in-stream or near the river's edge are susceptible to erosion and scouring. During high water events, inundation of the floodplain soils and increases in river velocity create conditions that are likely to cause additional releases of PCB to the Kalamazoo River and, ultimately, Lake Michigan.

- Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

The Kalamazoo River is often subjected to extreme weather conditions in the winter and spring, which enhance the threat of a release of PCB. The breakup of ice in the late winter, and the movement of ice floes downstream, may cause scouring of the banks and river bottom. Likewise, heavy spring rains and/or summer storms increase stream volume and current velocity, which lead to increased scouring of the river bottom and banks. All of these forces cause an increase in the volume and extent of PCB contamination in the Kalamazoo River and Lake Michigan.

IV. ENDANGERMENT DETERMINATION

Given the conditions at the Plainwell Dam #2, the nature of the hazardous substance there, and the potential exposure pathways described above, the actual or threatened release of PCB from the Plainwell Dam #2, if not addressed by implementing the response actions selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

V. PROPOSED ACTIONS

A. Description of the Proposed Action

The preferred response action to mitigate threats associated with PCB-contaminated sediments in the Plainwell Dam #2 consists of removing contaminated submerged sediments, bank and floodplain soils. The administrative settlement agreement and order on consent to perform the work will specify all required response actions, which will include, but may not be limited to, the following tasks:

1) dredging and/or excavation of PCB contaminated sediments with elevated PCB concentrations in those areas specified in the U.S. EPA approved workplan;

2) cut-back and stabilization of riverbanks to mitigate exposures to PCB-contaminated banks and future erosion;

3) removal of PCB-contaminated floodplain soils in excess of 50 mg/kg PCB;

4) dewatering, as necessary, and disposal off-site of all PCB-contaminated sediment, bank and floodplain soils removed pursuant to ¶¶ 1-3 above. PCB contaminated material with PCB concentrations equal to or greater than 50 mg/kg shall be transported off-site to a chemical waste landfill that is in compliance with all state and federal regulatory requirements. PCB contaminated material with PCB concentrations less than 50 mg/kg shall be transported off-Site and disposed in an appropriately licensed and permitted commercial landfill in compliance with all state and local laws.

5) monitoring during implementation of the response action; and

6) the response action shall ensure that a stable river channel exists post-removal, re-vegetation with native plant species occurs, and that appropriate monitoring and maintenance is performed both during and after the response action.

The response action will be conducted in a manner not inconsistent with the NCP. The OSC has initiated planning for provision of post-removal site control consistent with the provisions of Section 300.415(l) of the NCP. Post removal control activities will be performed by one of the PRPs per the removal administrative order on consent.

The response actions described in this memorandum directly address actual or threatened releases of hazardous substances, pollutants, or contaminants at the Plainwell Dam #2 which may pose an imminent and substantial endangerment to public health, welfare and the environment. These response actions do not impose a burden on the affected property disproportionate to the extent to which that property contributes to the conditions being addressed.

These activities will require an estimated 200 on-site working days to complete.

B. Cleanup Standards

As noted above, subsequent to the completion of the proposed time-critical removal action, Region 5 will evaluate any residual risk to human health and the environment in an RI/FS for the first reach of the Kalamazoo River, which includes the Plainwell Dam #2. Remedial cleanup standards will be established in the FS and in the ROD for the entire first reach. For purposes of the proposed time-critical removal action, Region 5 has established the following cleanup standards:

- Designated in-stream sediments: The cleanup goal for sediment is ≤1 mg/kg PCB standard. Reasonable efforts will be made to reach this goal including excavating to a "neat line" representing an elevation where Supplemental RI/FS data from this area indicates PCB concentrations at or below the cleanup goal.

- PCB-contaminated soils within the Plainwell Dam #2 area and floodplain soils: The cleanup goal for these soils is 5 mg/kg.

The Design Report will specify other project requirements to be completed as part of this removal action.

C. Orderly Transition to Remedial Response

The NCP requires that, if U.S. EPA determines that a removal action will not fully address a release, and that subsequent remedial action may be necessary, then the Agency must ensure an orderly transition from removal to remedial response activities. 40 C.F.R. § 300.415(g). As noted above, subsequent to the removal action selected in this Action Memorandum, Region 5 will complete its evaluation, through the Superfund remedial process, of the risks to human health and the environment within the entire Area 1 of the Kalamazoo River OU (which includes the Plainwell Dam #2). Residual risks to human health and the environment remaining within Plainwell Dam #2 after completion of the removal action will be evaluated as part of that process. If U.S. EPA determines that additional response work is necessary in Plainwell Dam #2, such work will be required by the ROD.

D. Applicable or Relevant And Appropriate Requirements

All applicable or relevant and appropriate requirements (ARARs) of federal and state law will be complied with to the extent practicable. By letter dated May 21, 2009, Region 5 requested that MDEQ identify potential state ARARs for this response action. Any state ARARs identified in a timely manner for this removal action will be complied with to the extent practicable.

E. Compliance with the PCB Remediation Waste Rule

The PCB Remediation Waste Rule, 40 C.F.R. § 761.61 *et seq.*, promulgated pursuant to TSCA is an ARAR for the proposed removal action. U.S. EPA has evaluated the necessary information required for approving the method of risk-based disposal of PCB remediation waste and such information is in the administrative record. 40 C.F.R. § 761.61(a)(3) and § 761.61(c). Based on this evaluation and after consultation with the Region 5 TSCA program, the Region 5 Superfund Division Director has determined that the disposal method proposed in Paragraph 4 of Section V.A. of this Action Memorandum does not pose an unreasonable risk of injury to public health or the environment. By signature on this Action Memorandum, and pursuant to 40 C.F.R. §

761.61(c), the Region 5 Superfund Division Director approves the risk-based disposal of PCB-contaminated material in the manner described in Paragraph 4 of Section V.A.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Continued risk to public health and the environment will result if response action is delayed or not taken. Delayed action increases the likelihood that human and/or wildlife populations with access to the area will come into direct contact with PCB-contaminated sediments and floodplain soils.

VII. OUTSTANDING POLICY ISSUES

No outstanding policy issues have been identified in relation to Plainwell Dam #2.

IX. RECOMMENDATION

This decision document represents the selected response action for the Plainwell Dam #2 area of the Kalamazoo River Site. It was developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based upon the Administrative Record (Attachment 2) for the removal action, an index of which is attached to this Action Memorandum.

Conditions at the Plainwell Dam #2 meet the criteria of Section 300.415(b)(2) of the NCP for a removal action, and I recommend your approval of the proposed removal action. Region 5 expects that a potentially responsible party will perform all removal actions under the oversight of the OSC. You may indicate your decision by signing below.

APPROVE: _____ DATE: 6/8/09
Richard C. Karl,
for Director, Superfund Division

DISAPPROVE: _____ DATE: _____
Richard C. Karl,
Director, Superfund Division

Enforcement Addendum

Attachments:

Environmental Justice Analysis
Administrative Record Index

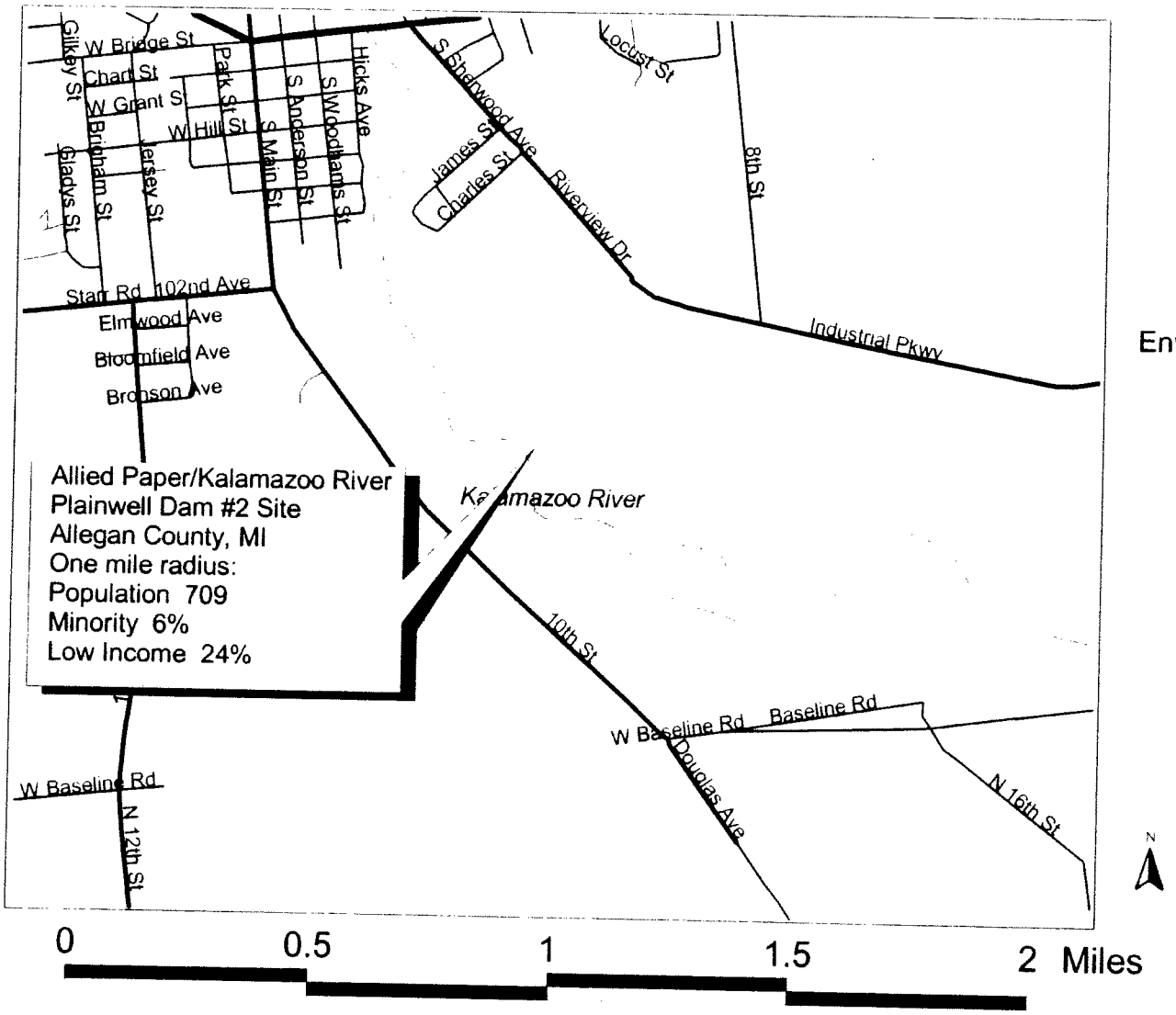
cc: D. Chung, U.S. EPA, 5203-G
M. Chezik, U.S. DOI, w/o Enf. Addendum
Steven E. Chester, Director, Michigan DEQ, w/o Enf. Addendum
Michael Cox, Michigan Attorney General, w/o Enf. Addendum

Attachment 1

EJ Analysis

Region 5 Superfund EJ Analysis

Allied Paper/Kalamazoo River
Plainwell Dam #2 Site



Allied Paper/Kalamazoo River
Plainwell Dam #2 Site
Allegan County, MI
One mile radius:
Population 709
Minority 6%
Low Income 24%

0 0.5 1 1.5 2 Miles

State of Michigan averages:
Minority: 21%
Low Income: 29%

U.S. EPA Region 5
Environmental Justice Case Criteria
for State of Michigan

Minority: 42% or greater

Low Income: 58% or greater

Date of Map 4/16/09

Source of Map Census 2000 Database/
ArcView 3.0

Attachment 2

Administrative Record Index

ATTACHMENT 2

U.S. ENVIRONMENTAL PROTECTION AGENCY
REMOVAL ACTION

ADMINISTRATIVE RECORD
FOR
ALLIED PAPER/PORTAGE CREEK/KALAMAZOO RIVER SITE
PLAINWELL DAM #2
KALAMAZOO, KALAMAZOO COUNTY, MICHIGAN

ORIGINAL
JUNE 8, 2009

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
1	12/23/91	ATSDR	U.S. EPA	Preliminary Health Assessment for the Allied Corp. Kalamazoo Plant **(SDMS ID: 167821)**	42
2	10/00/00	Blasland, Bouck & Lee, Inc.	U.S. EPA	Feasibility Study Report - Phase I for the Allied Paper/Portage Creek/Kalamazoo River Site **(DRAFT FOR STATE AND FEDERAL REVIEW) (SDMS ID: 249488)**	407
3	10/00/00	Blasland, Bouck & Lee, Inc.	U.S. EPA	Remedial Investigation Report - Phase I for the Allied Paper/Portage Creek/Kalamazoo River Site **(DRAFT FOR STATE AND FEDERAL REVIEW) (SDMS ID: 249490)**	653
4	02/01/02	Roy F. Weston, Inc.	U.S. EPA	Removal Assessment Report for the Allied Paper-Kalamazoo River Site **(SDMS ID: 205878)**	777
5	04/00/03	Camp, Dresser & McKee	U.S. EPA	Baseline Ecological Risk Assessment for the Allied Paper/Portage Creek/ Kalamazoo River Site (FINAL REVISED) **(SDMS ID: 249487)**	140
6	04/00/03	CH2M Hill	U.S. EPA	Remedial Investigation Report for the Allied Paper/Portage Creek/ Kalamazoo River Site **(U.S. EPA INTERNAL DRAFT) (SDMS ID: 249495)**	103
7	05/00/03	Camp, Dresser & McKee	U.S. EPA	Human Health Risk Assessment for the Allied Paper/ Portage Creek/Kalamazoo River Site (FINAL REVISED) **(SDMS ID: 249486)**	109

NO.	DATE	AUTHOR	RECIPIENT	TITLE/DESCRIPTION	PAGES
8	07/25/06	ATSDR	File	Health Consultation: ATSDR Response to Public Advisory Council for Kalamazoo River Area of Concern RAP Comments on the Public Health Assessment for the Allied Paper/Portage Creek/Kalamazoo River Site **(SDMS ID: 249492)**	18
9	02/14/07	Borries, S., U.S. EPA	Karl, R., U.S. EPA	Enforcement Action Memorandom: Determination of an Imminent and Substantial Threat to Public Health and the Environment at the Plainwell Impoundment Area of the Allied Paper/Portage Creek/ Kalamazoo River Site **(PORTIONS OF THIS DOCUMENT HAVE BEEN REDACTED) (SDMS ID: 290423)**	15
10	11/04/08	Erickson, M., ARCADIS	Saric, J., U.S. EPA	Conceptual Design Report for Bank Removal and Restoration Plainwell No. 2 Dam Area	
11	12/29/08	Camp, Dresser & McKee	U.S. EPA	Certificates of Analysis, Chain of Custody Records and Sediment Core Logs for the Plainwell Dam #2 Investigation	
12	05/21/09	Ribordy, M., U.S. EPA	Bucholtz, P., MDEQ	Letter re: Request for State ARARs for the Plainwell Dam #2 Site	
13	00/00/00	Ribordy, M., U.S. EPA	Karl, R., U.S. EPA	Enforcement Action Memorandum: Determination of an Imminent and Substantial Threat to Public Health and the Environment at Plainwell Dam #2 of the Allied Paper/Portage Creek/Kalamazoo River Superfund Site **(PENDING)**	

Appendix 2

APPENDIX 2

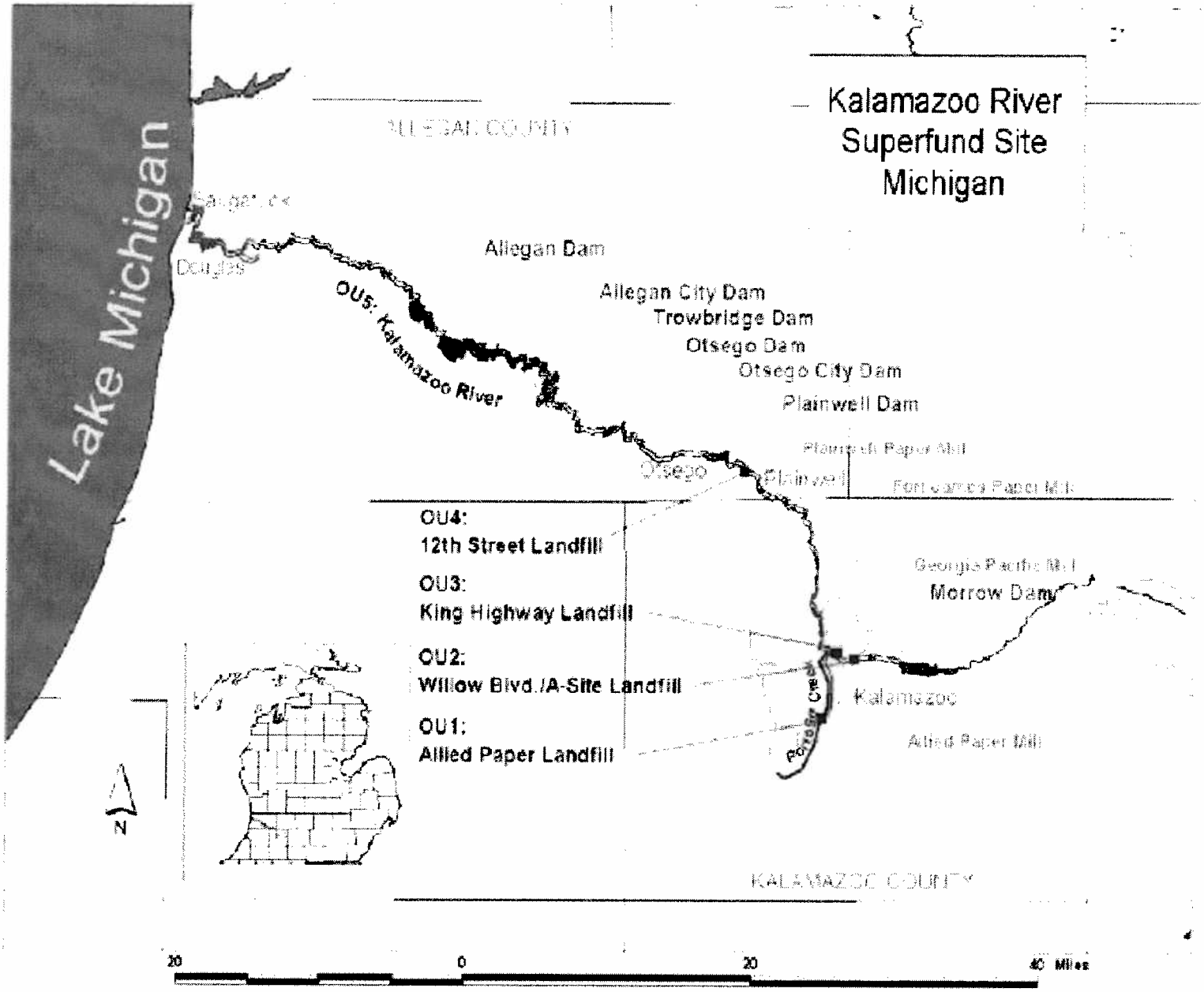
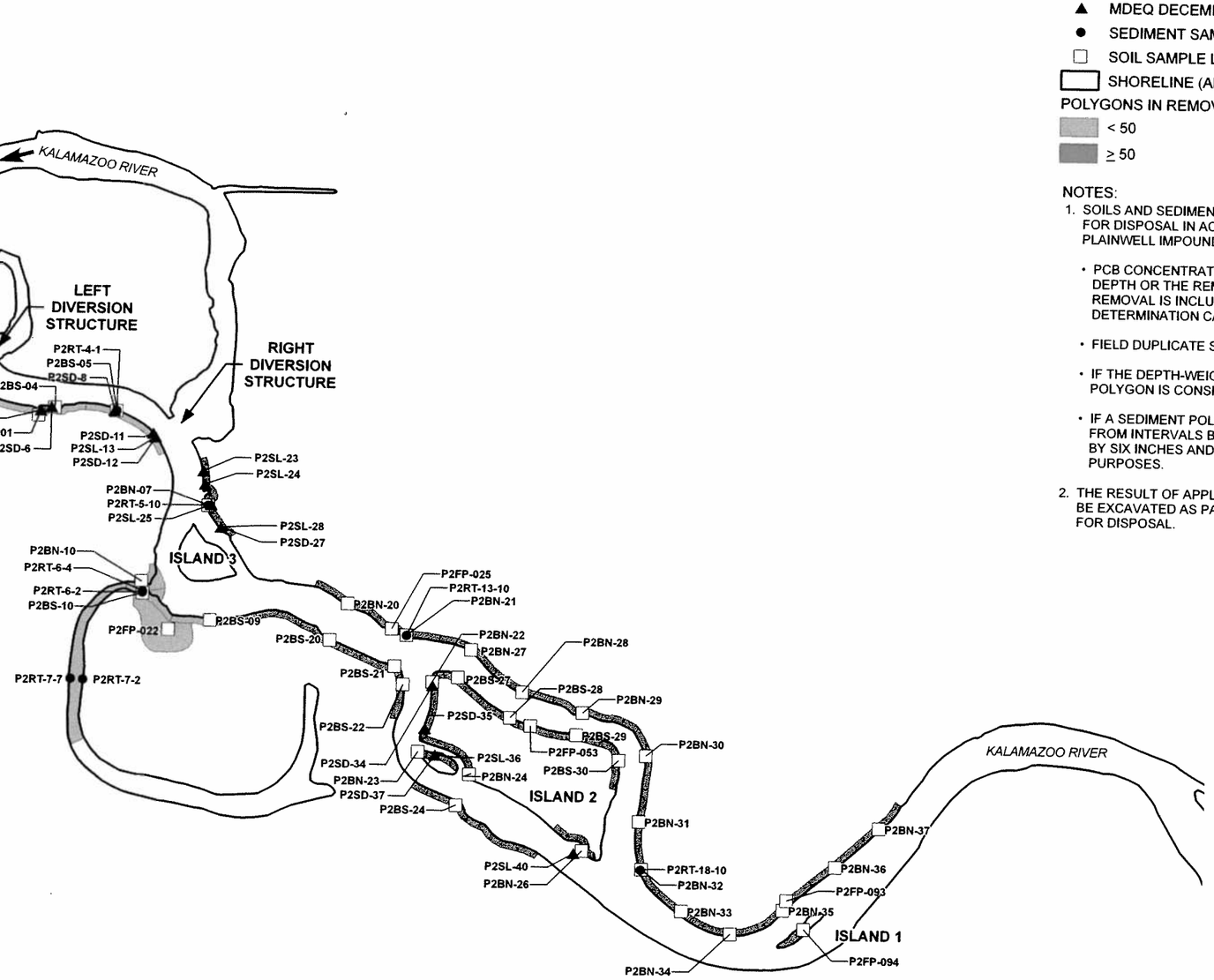

Kalamazoo River
Superfund Site
Michigan
Lake Michigan
ALLEGAN COUNTY
Douglas
Allegan Dam
Allegan City Dam
Trowbridge Dam
Otsego Dam
Otsego City Dam
Plainwell Dam
OU5: Kalamazoo River
Otsego
Plainwell
Plainwell Paper Mill
Fort James Paper Mill
OU4:
12th Street Landfill
OU3:
King Highway Landfill
OU2:
Willow Blvd./A-Site Landfill
OU1:
Allied Paper Landfill
Georgia Pacific Mill
Morrow Dam
Kalamazoo
Allied Paper Mill
KALAMAZOO COUNTY
N
20
0
20
40 Miles

Figure 1



LEGEND:

- ▲ MDEQ DECEMBER 2008 SAMPLE LOCATION (APPROXIMATE) IN REMOVAL POLYGON
- ● SEDIMENT SAMPLE LOCATION FROM ARCADIS 2008 INVESTIGATION IN REMOVAL POLYGON
- □ SOIL SAMPLE LOCATION FROM ARCADIS 2008 INVESTIGATION IN REMOVAL POLYGON
- SHORELINE (APPROXIMATE)

POLYGONS IN REMOVAL AREAS DEPTH-WEIGHTED PCB (mg/kg)

- < 50
- ≥ 50

NOTES:

1. SOILS AND SEDIMENT REMOVAL AREAS WERE CLASSIFIED AS EITHER TSCA OR NON-TSCA MATERIALS FOR DISPOSAL IN ACCORDANCE WITH THE METHODOLOGY APPROVED BY U.S.EPA FOR THE FORMER PLAINWELL IMPOUNDMENT TCRA. THE METHODOLOGY IS AS FOLLOWS:
   - PCB CONCENTRATIONS ARE DEPTH-WEIGHTED AVERAGED TO THE BOTTOM OF PCB DATA, A 30-INCH DEPTH OR THE REMOVAL DEPTH, WHICHEVER IS SHALLOWEST. (ONLY MATERIAL DESIGNATED FOR REMOVAL IS INCLUDED IN CALCULATION. MATERIAL BELOW REMOVAL DEPTH IS NOT INCLUDED IN TSCA DETERMINATION CALCULATIONS.)
   - FIELD DUPLICATE SAMPLES ARE AVERAGED PRIOR TO ALL OTHER CALCULATIONS.
   - IF THE DEPTH-WEIGHTED PCB CONCENTRATION IS GREATER THAN OR EQUAL TO 50 MG/KG, THAT REMOVAL POLYGON IS CONSIDERED TSCA MATERIAL.
   - IF A SEDIMENT POLYGON IS DETERMINED TO CONTAIN TSCA MATERIAL AND NO PCB DATA IS AVAILABLE FROM INTERVALS BENEATH THE REMOVAL DEPTH, THE REMOVAL DEPTH IN THE FIELD WILL BE INCREASED BY SIX INCHES AND THE ADDITIONAL MATERIAL WILL ALSO BE CONSIDERED TO BE TSCA FOR DISPOSAL PURPOSES.
2. THE RESULT OF APPLICATION OF THE METHODOLOGY IS THAT NONE OF THE REMOVAL AREAS TO BE EXCAVATED AS PART OF PLAINWELL NO. 2 DAM AREA TCRA ARE CLASSIFIED AS TSCA MATERIAL FOR DISPOSAL.

0 600 1,200 Feet

GRAPHIC SCALE

KALAMAZOO RIVER STUDY GROUP
ALLIED PAPER, INC./PORTAGE CREEK/
KALAMAZOO RIVER SUPERFUND SITE

CLASSIFICATION OF SOIL AND SEDIMENT REMOVAL AREAS BY PCB CONCENTRATIONS

FIGURE
1

SYR-90 MTK JCR KEW JCR
KRSG (64539.00500)
Q:\KRSG\MorrowDamToPlainwellDam\AdministrativeOrderOnConsent_AOC_Document\mxd\TSCAMaterial_v3.mxd - 5/22/2009 @ 12:23:35 PM