UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

10303361 IN THE MATTER OF: HORSESHOE BEND DUMP SITE Murray Ohio Manufacturing Company P.O. Box 1000 Hannon Drive Lawrenceburg, Tennessee 38464 U.S. EPA Docket No. 90-18-C The City of Lawrenceburg Lawrenceburg City Hall 232 West Gaines Street Lawrenceburg, Tennessee 38464 RESPONDENTS. Proceeding Under Sections 104 and 122(d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act as amended, (42 U.S.C. \$\$ 9604, 9622(d) (3)).

ADMINISTRATIVE ORDER ON CONSENT FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY

I. INTRODUCTION

1. This Administrative Order on Consent (Consent Order) is entered into voluntarily by the United States Environmental Protection Agency (EPA), by Murray Ohio Manufacturing Company, and the City of Lawrenceburg (Respondents). The Consent Order concerns the preparation of, performance of, and oversight costs for a remedial investigation and feasibility study (RI/FS) for the Horseshoe Bend Dump Site located in Lawrenceburg, Tennessee.

II. JURISDICTION

- 2. This Consent Order is issued under the authority vested in the President of the United States by sections 104 and 122(d) (3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Sections 9604, 9622(d)(3) (CERCLA). This authority was delegated to the Administrator of EPA on January 23, 1987, by Executive Order 12580, 52 Fed. Reg. 2926 (January 29, 1987), and further delegated to Regional Administrators, September 13, 1987 by EPA Delegation No. 14-14-C. This authority has been redelegated by the Regional Administrator to the Waste Management Division Director.
- 3. The Respondents agree to undertake all actions required by the terms and conditions of this Consent Order. In any action by EPA to enforce the terms of this Consent Order, the Respondents agree not to contest the authority or jurisdiction of the Waste Management Division Director to issue this Consent Order.

III. PARTIES BOUND

- 4. This Consent Order shall apply to and be binding upon EPA and the Respondents, their agents, successors, and assigns. Respondents are jointly and severally responsible for carrying out all actions required of them by this Consent Order. The Respondents certify that they are authorized to execute and legally bind the parties they represent to this Consent Order. No change in the ownership or corporate status of the Respondents shall alter their responsibilities under this Consent Order.
- 5. The Respondents shall provide a copy of this Consent Order to any subsequent owners or successors before ownership rights are transferred. The Respondents shall provide a copy of this Consent Order to all contractors sub-contractors, laboratories, and consultants which they retain to conduct any work performed under this Consent Order, within 14 days after the effective date of this Consent Order or the date of retaining their services. Notwithstanding the terms of any contract, Respondents are responsible for compliance with this Consent Order and for ensuring that their contractors and agents comply with this Consent Order.

IV. STATEMENT OF PURPOSE

6. In entering into this Consent Order, the mutual objectives of EPA and the Respondents are: (a) to determine the nature and extent of contamination and any threat to the public health, welfare, or the environment caused by the release or threatened release of hazardous

substances, pollutants or contaminants from the Site by conducting a remedial investigation; and (b) to determine and evaluate alternatives for remedial action (if any) to prevent, mitigate or otherwise respond to or remedy any release or threatened release of hazardous substances, pollutants, or contaminants from the Site by conducting a feasibility study.

7. The activities conducted under this Consent Order are subject to approval by EPA and shall provide all appropriate necessary information for the remedial investigation/feasibility study (RI/FS), and for a record of decision that is consistent with CERCLA Sections 104, 121 and 122, and the National Contingency Plan (NCP), 40 CFR Part 300 et seq. as amended.

V. FINDINGS OF FACT

- 8.a. The Horseshoe Bend Dump Site (the "Site") is contained in 12 acres on Horseshoe Bend, a sharp, narrow bend of Shoal Creek in Lawrence County, Tennessee approximately 1.5 miles southwest of Lawrenceburg. The actual disposal pits cover areas totalling approximately 2 acres. The Site consists of approximately 5 acres in the extreme northern tip of the bend. The Site has been owned by the City of Lawrenceburg (the "City") since 1907. Prior to about 1958, a hydroelectric plant owned by the City was operated on the Site. The Horseshoe Bend Dump was used as a municipal and industrial dump by the City and Murray Ohio Manufacturing Company (the "Company") during the period from about 1958 until 1963. Some of the wastes disposed of at the Site were transported from the Company's facility on Hannon Drive in Lawrenceburg, Tennessee.
- 8.b. The Murray Ohio Manufacturing Company is incorporated in the State of Ohio and operates a manufacturing plant for bicycles and power lawn mowers on Hannon Drive in Lawrenceburg, Tennessee. The Company produces paint wastes as a result of its operations. The Company disposed of the material at the Site by pouring process wastes into shallow, unlined pits. On occasion, damaged paint drums were also disposed at the Site. A total of three scrapped drums that still contained waste residues were found at the Site and removed in June, 1989. It is believed that the dump area consisted of at least three distinct disposal areas, all containing municipal waste and paint sludge.
- 8.c. In recent years, access to the area has been impeded by a landowner whose property is located adjacent to the Site and through which the access road to the Site passes.

- 8.d. The Site is located on relatively thin soils overlying the lower Fort Payne Formation.
- 9.a. In 1983, the Tennessee Department of Health and Environment (TDHE) inspected the site and observed objects appearing to be scrapped electrical capacitors on the ground. In 1986, TDHE found toluene and benzene in sediment samples taken from Shoal Creek.
- 9.b. Investigations in 1984 by personnel from the Company and Geraghty & Miller, the contractor hired by the Company, revealed the presence of heavy metals, including lead, total chromium, nickel, iron, and zinc in soil samples obtained from the Site.
- 9.c. Chromium, nickel, lead, zinc, benzene, and toluene are hazardous substances within the meaning of Section 101(14) of CERCLA, 42 U.S.C Section 9601 (14).
- 9.d. The Murray Ohio Manufacturing Company deposited hazardous substances on the Horseshoe Bend Disposal Site.
- 10.a. The Company generated the hazardous substances mentioned in 9.c. and arranged for them to be transported to the Site where they were deposited.
- 10.b. The City is the owner of the Site, operated it as a disposal Site for municipal and industrial waste, and allowed the Company to dispose of paint sludge in pits on the property.
- 10.c. In August 1984, pursuant to a request in June, 1984 by the State of Tennessee, Murray Ohio and the City submitted to the State a "Proposed Investigative Plan for the Horseshoe Bend Disposal Site in Lawrence County, Tennessee". Samples from Shoal Creek, an on-site groundwater seep, on-site soil, and the waste pits were taken and analyzed. The State did not order Respondents to implement that plan or to take any other remedial action. Nevertheless, Murray Ohio, with the help of the City and under the supervision of the Division of Superfund of the Tennessee Department of Health and Environment, removed approximately 6,000 cubic yards of mixed municipal waste and paint sludge from the Site.
- 10.d. There have been no prior response or enforcement actions at the Site authorized by EPA.
- 11.a. The Site may present a potential hazard to drinking water sources through contamination of ground water.
- 11.b. Downstream from the Site, Shoal Creek is utilized for recreation, fishing, and industrial process cooling water.

- 11.c. The Site is proposed for inclusion on the National Priorities List (NPL) as defined in Section 105 of CERCLA, 42 U.S.C. Section 9605. Murray Ohio has submitted comments to EPA in opposition to the proposal to list the Site.
- 11.d. The City obtains part of its municipal water supply from a large spring located about 0.9 mile northeast of the Site. This water also supplies the Fall River Utility District. Fifty-two private residences within three miles of the Site utilize groundwater for domestic purposes.

VI. CONCLUSIONS OF THE LAW

- 12. The Site is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. Section 9601(9).
 - 13. Wastes and constituents thereof at the Site are defined as "hazardous substances" in Section 101(14) of CERCLA, 42 U.S.C. Section 9601(14).
 - 14. The presence of hazardous substances at the Site and the past, present and/or potential migration of hazardous substances from the Site constitutes an actual and/or threatened "release" as defined in Section 191(22) of CERCLA, 42 U.S.C. Section 9601(22).
 - 15. Respondents are "persons" as defined in Section 101(21) of CERCLA, 42 U.S.C. Section 9601(21).
 - 16. The Respondents are "responsible parties" under Section 107(a) of CERCLA, 42 U.S.C. Section 9507(a).

VII. NOTICE TO THE STATE

17. EPA is notifying the State of Tennessee that this Consent Order is being issued by providing a copy to the State. EPA is notifying the State of Tennessee that this work will be performed by providing a copy of the work plan to the State.

VIII. WORK TO BE PERFORMED

18. All work performed pursuant to this Consent Order shall be conducted under the direction and supervision of a qualified professional engineer or a certified geologist with expertise in hazardous waste site clean up and investigation. EPA has approved of Respondents' current contractor. If this contractor is unable to carry out this work, within thirty (30) days before the continuation of the work outlined below, the Respondents shall notify EPA in writing regarding the identity of another engineer or geologist and of any contractors and/or subcontractors to be used in carrying out the terms of this Consent Order. EPA reserves the right to disapprove of any engineer, geologist, contractor and/or subcontractor selected for the RI/FS and shall specify the reason(s) for such disapproval. In the event of such disapproval, Respondents shall notify EPA within 30 calendar days of an alternate selection.

- 19. Respondents shall conduct activities and submit deliverables for the development of the RI/FS. All RI/FS work under this Consent Order shall be conducted in accordance with the attached RI/FS Statement of Work, CERCLA, the NCP, and EPA guidance for including, but not limited to, the *Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive #9355.3-01), the "Engineering Support Branch Standard Operating Procedures and Quality Assurance Manual* (April 1, 1986) and guidances referenced in the Statement of Work. Following the identification of each activity, a list of deliverables is provided. activities and deliverables described below shall be developed as provisions in the work plan and submitted to EPA as provided below. All work performed under this Consent Order shall be in accordance with the schedules herein, and proceed in accordance with the work plan as approved or modified by EPA; provided that if EPA expands the Work Plan to add additional work, then Respondents may, without penalty, decline to carry out the modification, in which case EPA may do so and may seek reimbursement for necessary costs from the Respondents. Disputes about work plan modifications and additional work shall be subject to the provisions of Section XVIII. For the purposes of this Order, day means calendar day unless otherwise noted in the Order.
- A. Task I: Scoping. The objectives of this RI/FS are a) to determine whether any harm or substantial threat of harm to the public health, welfare, or the environment exists from hazardous substances at the Horseshoe Bend Dump Site, and b) to identify appropriate remedial action alternatives (if any) consistent with the National Contingency Plan to respond to any such harm or threat of harm. EPA shall further define the Site objectives of the RI/FS and devise a general management plan for the Site. Respondents shall conduct the remainder of scoping activities. The initial components of scoping consist of collecting and analyzing existing data, including the results of any previous sampling; preparation of a description of the Site; and preliminary evaluations of all aspects of the RI/FS. Following these preliminary activities, Respondents shall provide EPA with the following deliverables and shall not proceed further until the work plan and sampling and analysis plan are approved by EPA.
- 1. Work Plan. Within the later of a) 90 days of the effective date of this Consent Order, or b) 60 days after receiving EPA's definition of RI/FS site objectives and general management plan, Respondents shall submit to EPA a complete RI/FS work plan. The work plan shall include a Site background summary, an outline of the risk assessment, and a detailed description of the tasks to be conducted during the RI/FS. It shall also include the methodology, information to be developed and deliverables for the activities to be performed during the RI/FS, as well as their corresponding schedules of completion. Moreover, the work plan must identify the personnel who will be responsible for the conduct of the work. If EPA disapproves the RI/FS work plan, in whole or in part, Respondents shall amend and submit to EPA a revised work plan, within 30 days of receiving EPA's notification of RI/FS work plan disapproval.

- 2. Sampling and Analysis Plan. Within the deadline for submitting the RI/FS work plan, Respondents shall submit to EPA the sampling and analysis plan (SAP). This plan shall consist of a field sampling plan (FSP) and a quality assurance project plan (QAPP).
 - a. The FSP will define in detail the sampling and data gathering activities, objectives, and information to be gathered, with locations and frequencies on the project.
 - b. The QAPP will describe the project objectives and organization, functional activities, quality assurance and quality control protocols, sampling procedures, sample custody, analytical procedures and detection levels, and data reduction, validation, and reporting.

If EPA disapproves of the sampling and analysis plan, in whole or in part, Respondent shall amend and submit to EPA a revised sampling and analysis plan, within 30 days of receiving EPA's notification of the disapproval.

- 3. <u>Site Health and Safety Plan.</u> Within the deadline for submitting the RI/FS work plan, Respondents shall submit to EPA the site health and safety plan. This plan shall be prepared in accordance with the Occupational Safety and Health Administration (OSHA) regulations applicable to Hazardous Waste Operations and Emergency Response, 29 CFR Part 1910.
- B. Task II. Community Relations Plan. EPA will prepare a community relations plan, in accordance with EPA guidance and 40 CFR Part 300.67.
- C. Task III: Site Characterization. The major activities of the Site characterization phase include implementation of the work plan and sampling and analysis plan and schedules therein through field investigations, sample analyses, and data evaluation. Respondents shall investigate and define Site physical characteristics, sources of contamination and the nature and extent of contamination, and shall evaluate site characteristics. Within 7 days of completion of field support activities, Respondents shall orally report to EPA that all necessary field support has been performed and summarize what has been done. Within 30 days of completion of the field sampling and analysis and validation of all field data, including any required resampling, Respondents shall submit a Site characterization summary to EPA.
- D. <u>Task IV: Baseline Risk Assessment.</u> Respondents shall evaluate, subject to EPA approval and in accordance with the work plan, actual and potential risks to human health and the environment. The major components of the risk assessment include contaminant identification, exposure assessment, toxicity assessment and risk characterization. Within 60 days of validation of all field data (including any required resampling), Respondent shall submit a baseline Risk Assessment (RA) report. The baseline RA report shall be incorporated into the RI report. The baseline RA report shall comprehensively describe the four components of the Risk Assessment and discuss sources of

uncertainty. If EPA disapproves of the baseline Risk Assessment report, in whole or in part, Respondent shall amend and submit to EPA a revised baseline Risk Assessment report, within 30 days of receiving EPA's notification of disapproval.

- E. <u>Draft Remedial Investigation Report (Task III of SOW)</u>. Within 30 days of EPA approval of the baseline Risk Assessment, Respondent shall submit a draft Remedial Investigation (RI) report which includes a summary of results of the field activities to characterize the site and nature and extent of contamination, the fate and transport of contaminants, and results of the baseline risk assessment. If EPA disapproves of the RI report in whole or in part, Respondents shall amend and submit to EPA a revised RI report within 30 days of receiving EPA's notification of disapproval.
- F. Task V: Development and Screening of Alternatives. The major components of the development and screening of alternatives include the development and evaluation of a range of appropriate waste management options. The range shall include options with varying amounts and types of treatment, containment, and a no action alternative. During the development and screening of alternatives, Respondents shall provide EPA with the following deliverables:
- 1. <u>Memorandum on Remedial Action Objectives</u>. Within 60 days of EPA approval/modification of the Draft RI report, Respondent shall submit a memorandum on remedial action objectives, which identifies and screens potential general response actions and candidate remedial technologies for EPA review and approval.
- 2.a. <u>Literature Survey and Treatability Testing Statement of Work.</u> If it is determined by EPA after review of the memorandum on remedial action objectives that data collected are not adequate for assessing the feasibility of remedial technologies that merit further assessment, within 45 days of notice in writing, Respondents shall submit: 1) a summary of EPA's findings, 2) information from a literature survey and an evaluation of whether the literature demonstrates whether treatment technologies will perform effectively; and 3) if the information is not adequate to evaluate technologies, an outline of the steps necessary to evaluate and initiate treatability testing. (Note: If the QAPP and FSP are not adequate for defining the activities in the treatability tests, a revision to the sampling and analysis plan shall be necessary.)
- 2.b. <u>Treatability Testing Work Plan.</u> Within 60 days of the identification of the need for Treatability Testing, Respondent shall submit a treatability testing work plan, including a schedule. If EPA disapproves of the treatability testing work plan, in whole or in part, Respondents shall amend and submit to EPA a revised treatability testing work plan, within 35 days of receiving EPA's notification of the disapproval.
- 2.c. <u>Treatability Study Sampling and Analysis Plan.</u> Within 35 days of the identification of the need for a separate or revised QAPP or FSP, Respondents shall submit a treatability study SAP. If EPA disapproves of the

treatability study SAP in whole or in part, Respondents shall amend and submit to EPA a revised treatability study SAP, within 35 days of receiving EPA's notification of the disapproval.

- 2.d. <u>Treatability Evaluation Report</u>. Within 30 days of completion of any treatability testing, Respondents shall submit a report. The report shall evaluate the technology's effectiveness, implementability, and actual results as compared with predicted results.
- 3. Memorandum on Initial Screening of Alternatives. Within 45 days of the later of a) EPA approval/modification of the RI Report or b) EPA approval of any required treatability evaluation report, Respondent shall submit a memorandum summarizing the initial screening of alternatives. Reasons for eliminating alternatives during the preliminary screening process must be specified.
- 4. <u>Final Screening Results Memorandum.</u> Within 30 days of EPA approval of the memorandum on initial screening of alternatives, Respondents shall submit a memorandum summarizing refined remedial action objectives and the final result of the screening process. The memorandum shall also specify action-specific ARARs for each alternative considered.
- G. Task VI: Detailed Analysis of Alternatives And Draft Feasibility Study Report. Respondents shall conduct a detailed analysis of alternatives, including 1) an analysis of each option against the nine evaluation criteria (or those established in the NCP, as amended) and 2) a comparative analysis of all options with respect to each other. Within 90 days of EPA approval of the final screening results memorandum to EPA, Respondents shall submit a draft FS report. Respondents shall refer to Table 6-5 of the RI/FS guidance for report content and format. If EPA disapproves of the draft FS report in whole or in part, Respondents shall amend and submit to EPA a revised FS report within 45 days of receiving EPA's notification of disapproval. The report as amended by EPA and the administrative record shall provide the basis for the proposed plan under CERCLA Sections 113(k) and 117(a) by EPA and shall document the development and analysis of remedial alternatives.
- 20. Documents including reports, approvals, disapprovals, and other correspondance, which must be submitted under this Consent Order, shall be sent by certified mail to the following addressee or to any other addressee which the Respondents and EPA designate in writing:
 - (a) Documents (7 copies) to be submitted to EPA should be sent to:

Mary B. Hutson Superfund Project Coordinator US EPA, Region IV 345 Courtland Street, NE Atlanta, GA 30365 (b) Documents to be submitted to the Respondents should be sent to:

John P. McCullars, Manager Environmental Affairs The Murray Ohio Manufacturing Co. P.O. Box 1000 Hannon Drive Lawrenceburg, TN 38464

Richard E. Schwartz, Esquire Crowell & Moring 1001 Pennsylvania Ave, N.W. Washington, D.C. 20004-2505

Ed Morse
Geraghty & Miller
255 South Tulane Avenue
Oak Ridge, Tennessee 37830

Honorable Ivan Johnson, Mayor Lawrenceburg City Hall 232 West Gaines Street Lawrenceburg, Tennessee 38464

If the document is a bound report, seven complete copies of the report should be sent to EPA. One copy should be left unbound.

- 21. If at any time during the RI/FS process, Respondents identify a need for additional data, a memorandum documenting the need for additional data shall be submitted to the EPA Project Coordinator within 20 days of identification.
- 22. Respondents shall make presentations at, and participate in, meetings at the reasonable request of EPA during the initiation, conduct, and completion of the RI/FS. In addition to discussion of the technical aspects of the RI/FS, topics will include anticipated problems or new issues.
- 23. EPA reserves the right to comment on all deliverables. If EPA issues a notification of disapproval for a deliverable, EPA shall specify the deficiencies in writing. When directed by EPA to do so, Respondents shall incorporate and integrate all information and comments supplied by EPA into the final RI/FS report.
- 24. If EPA amends or disapproves any report, plan, or other submission under this section and the Respondents disagree with the amendment or disapproval, Respondents shall have the right to invoke the dispute resolution provisions in Section XVIII.
- 25. In the event that Respondents amend and revise a report upon receipt of EPA disapproval, if there is subsequent EPA disapproval of the revised report, EPA retains the right to: allow Respondents an additional opportunity to submit an acceptable report; or in lieu of Respondents, perform its own additional studies, complete the RI/FS (or any portion of the RI/FS) under CERCLA and the NCP, and seek reimbursement from the Respondents for its costs; or seek any other appropriate relief.

- 26. In the event that EPA takes over some of the tasks, but not the preparation of the RI/FS, Respondents shall incorporate and integrate information supplied by EPA into the final RI/FS report.
- 27. For each deliverable listed in paragraphs 51 and 52 of this Order, Respondents shall not proceed with the RI/FS without receipt of EPA approval. Failure of EPA to expressly approve or disapprove of Respondents' submissions within the specific time period(s), shall not be construed as approval by EPA. Whether or not EPA gives express approval to Respondents' deliverables, Respondents are responsible for preparing deliverables acceptable to EPA.

IX. QUALITY ASSURANCE

- 28. Respondents shall use quality assurance, quality control, and chain of custody procedures described in the "EPA NEIC Policies and Procedures Manual," May 1978, revised November 1984, EPA-330/9-78-001-R and "Interim Guidelines and Specifications for Preparing Quality Assurance Project Plans", December 1980, QAMS005/80 and the "EPA-Region IV Engineering Support Branch Standard Operating Proceedures and Quality Assurance Manual" by the U.S. EPA Region IV Environmental Services Division, April 1, 1986 while conducting all sample collection and analysis activities required by this Consent Order. These guidelines shall be provided to the Respondents by EPA. Respondents shall consult with EPA in planning for, and prior to, all sampling and analysis as detailed in the RI/FS work plan. To provide quality assurance and maintain quality control, the Respondents shall:
- 29.a. Use a laboratory which has a documented Quality Assurance Program that complies with EPA guidance document QAMS005/80.
- 29.b. Ensure that EPA Personnel and/or EPA authorized representatives are allowed access to the laboratory and personnel utilized by the Respondents for analyses.
- 29.c. Ensure that the laboratory used by the Respondents for analyses, performs according to a method or methods deemed satisfactory to EPA and submits all protocols to be used for analyses to EPA at least 10 days before beginning analysis.

X. MODIFICATION OF THE WORK PLAN

30. In the event of unanticipated or changed circumstances at the Site, Respondents shall notify the EPA Project Coordinator (or a designated alternate) by telephone within 24 hours of discovery of the new or changed circumstances. In the event that EPA determines that the new or changed circumstances warrant changes in the work plan, EPA shall modify the work plan accordingly. In this event Respondents shall comply with any changes in methods or procedures, but may, without penalty, decline to perform additional work, in which case EPA may do so and may seek reimbursement from the Respondents. Disputes about modifications to the work plan and additional work shall be subject to the provisions of Section XVIII.

31. EPA may determine that in addition to tasks completed under the initially approved work plan, other additional work may be necessary as part of an RI/FS. EPA may request that the Respondents perform these response actions in addition to those required by the approved work plan, including any approved modifications, if it determines that such actions are necessary and that Respondents can carry out such actions properly and promptly. Respondents may, without penalty, decline to perform the additional work, in which case EPA may do so and may seek reimbursement from the Respondents. Subject to the dispute resolution procedures outlined in paragraph 47 of this Consent Order, Respondents may agree to implement the additional tasks which EPA determines are necessary. If Respondents agree to implement additional work it shall be completed according to the standards, specifications, and schedule set forth by EPA in the modified work plan.

XI. OTHER APPLICABLE LAWS

32. Respondents shall comply with OSHA requirements and shall perform all work safely. Under section 121(e) of CERCLA, no local, state or federal permit shall be required for the portion of any removal action, including studies, or remedial action conducted entirely onsite, where such remedial action is selected and carried out in compliance with that provision of the statute. This Consent Order does not modify CERCLA Section 121(d) (3) or any regulations thereunder. All actions required to be taken under this Consent Order shall be undertaken in accordance with the requirements of all applicable local, state, and federal laws and implementing regulations unless an exemption from such requirements is specifically provided in this Consent Order.

XII. FINAL RI/FS, PROPOSED PLAN PUBLIC COMMENT, RECORD OF DECISION ADMINISTRATIVE RECORD

- 33. EPA retains the responsibility for the preparation and release to the public of the RI/FS report, proposed plan and record of decision in accordance with CERCLA and the NCP.
- 34. EPA shall notify the Respondents which preferred alternative and final plan are selected for the Site.
- 35. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondents may submit to EPA for the administrative record any documents that Respondents determine may be relevant to the selection of the remedial action which EPA may decide to include in the administrative record. EPA will inform Respondents of its decision regarding such submittals within 30 days of the submittal. Respondents must submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based and may submit other documents omitted by EPA that relate to the selection of remedial action. Respondents must additionally submit any previous studies conducted under state or local or other federal authorities relating to selection of the response action; all communications between Respondents and state, local or other federal authorities concerning selection of the response action; and all information about site characteristics or conditions relevant to selection of the remedy.

XIII. DESIGNATED PROJECT COORDINATORS

- 36. On or before the effective date of this Consent Order, EPA and the Respondents shall each designate a Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Order. To the maximum extent possible, communications between the Respondents and EPA shall be directed to the Project Coordinator by mail, with copies to such other persons as EPA, the state and Respondents may respectively designate. Communications include all documents, reports, approvals, and other correspondence submitted under this Consent Order.
- 37. EPA and the Respondents each have the right to change their respective Project Coordinator. The other party must be notified in writing at least 10 days prior to the change.
- 38. EPA's Project Coordinator shall have the authority to, <u>interallia</u>, halt, modify, conduct, or direct any tasks required by this Consent Order and/or undertake any response actions (or portions of response action) when conditions present or may present a threat to public health or welfare or the environment, as set forth in 40 C.F.R. Part 300.65(b) and the NCP. The absence of the EPA Project Coordinator from the area under study pursuant to this Consent Order shall not be cause for the stoppage or delay of work.
- 39. On or before the effective date of this Consent Order, EPA shall arrange for a qualified person to assist it in overseeing and reviewing the conduct of the RI/FS, as required by section 104(a) of CERCLA, 42 U.S.C. Section 9604(a).

XIV. PROGRESS REPORTS

40. In addition to the deliverables set forth in Section VIII of this Order, Respondents shall provide to EPA monthly progress reports which may consist of one to two page letter reports, by the lOth day of each month following the date of receipt of EPA approval of the RI/FS workplan. At a minimum, with respect to the preceding month, these progress reports shall: (1) describe the actions which have been taken to comply with this Consent Order, (2) include all validated results of sampling and tests and all other data received by the Respondents, (3) describe work planned for the next two months with schedules included, and (4) describe all problems and anticipated problems encountered, and solutions developed and implemented.

XV. ACCESS TO SITE NOT OWNED BY RESPONDENTS

41. If the Site, including a potentially expansive study area, is presently owned, whole or in part, by parties other than those bound by this Consent Order, the Respondents have obtained, or will use their best efforts to obtain, Site access agreements from the present owner(s) within 30 calendar days of the effective date of this Consent Order. Such agreements shall provide reasonable access for EPA, its contractors and oversight

officials; the state and its contractors; and the Respondents or their authorized representatives. If access agreements are not obtained within the time referenced above, and Respondents have used their best efforts, within 35 days of the effective date of the Consent Order, the Respondents shall notify EPA of its failure to obtain access and its efforts to obtain access. In the event the Respondents are unable to obtain the necessary access agreements and the Respondents have demonstrated to EPA's satisfaction that they have used their best efforts, EPA may assist the Respondents in obtaining such access. Furthermore, the Respondents agree to indemnify the U.S. Government as specified in paragraph 79. Respondent City of Lawrenceburg has been the beneficiary of an easement for access to the Site. Respondents will provide reasonable access to EPA, its contractors and oversight officials; the State and its contractors; and itself and oversight officials for the duration of this easement.

XVI. SAMPLING, ACCESS, AND DATA/ DOCUMENT AVAILABILITY

- 42. All results of sampling, tests, modeling or other data (including raw data), generated by Respondents, or on Respondents' behalf, for implementing this Consent Order, shall be submitted to EPA in monthly progress reports as described in Section XIV of this Consent Order. Similarly, EPA will make available to the Respondents the results of sampling, tests, or data similarly generated by EPA.
- 43. At EPA's request, the Respondents shall allow split or duplicate samples to be taken by EPA (and its authorized representatives), of any samples collected by the Respondents in implementing this Consent Order. The Respondents shall notify EPA at least 10 days in advance of collecting any sample.
- 44. EPA and/or any EPA authorized representative will have authority which includes, but is not limited to entering and freely moving about all property at the Site at all reasonable times for the purposes of inter alia: inspecting conditions, activities and the results of activities, records, operating logs, and contracts related to the Site; reviewing the progress of the Respondents in carrying out the terms of this Consent Order; conducting tests as EPA or the Project Coordinator deem necessary; using a camera, sound recording, or other documentary type equipment; and verifying the data submitted to EPA by the Respondents. The Respondents shall allow these persons to inspect and copy all records, files, photographs, documents, sampling and monitoring data, and other writings related to work undertaken in carrying out this Consent Order. Nothing within this paragraph shall be interpreted as limiting EPA's inspection authority under federal law. All parties with access to the Site under this paragraph shall comply with all approved health and safety plans. All EPA employees entering the Site shall identify themselves to the Respondents' contractor or representative.
- 45. The Respondents may assert a claim of business confidentiality covering part or all of the information requested by this Consent Order

under 40 CFR Section 2.203(b). This assertion shall be substantiated according to 40 CFR Section 2, Subpart B, when the assertion is made. Analytical data shall not be claimed as confidential by the Respondents. Information determined to be confidential by EPA will be given the protection specified in 40 CFR Part 2, Subpart B. If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA without further notice to the Respondents. The Respondents reserve the right to withhold from EPA inspection those records which may be subject to the attorney work-product privilege, the attorney-client privilege or any other privilege. However, no sampling data, sampling data reports, books and logs or any other documents, reports, records, and information, which Respondents are required to generate pursuant to this Consent Order and the RI/FS Work Plan, may be withheld from EPA on the basis that they are subject to the attorney work-product privilege, the attorney-client privilege, or any other privilege.

XVII. RECORD PRESERVATION

46. EPA and the Respondents agree that all records and documents in their possession that relate in any way to the Site shall be preserved during the conduct of this Consent Order and for a minimum of six years after commencement of construction of any remedial action. The Respondents shall acquire and retain copies of all documents that relate to the Site and are in the possession of their employees, agents, accountants, contractors, or attorneys. After this six year period, the Respondents shall notify EPA at least 30 days before the documents are scheduled to be destroyed. If EPA requests that the documents should be saved, the Respondents shall, at no cost to EPA, give EPA the documents or copies of the documents. Additionally, if EPA requests that some or all documents be preserved for a longer period of time, Respondents shall comply with that request.

XVIII. DISPUTE RESOLUTION

- 47. Any disputes arising under this Consent Order shall be resolved as follows: If the Respondents object to any EPA notice of disapproval or decision made pursuant to this Consent Order, the Respondents shall notify EPA's Project Coordinator and the Director of Waste Management ("Director") of EPA Region IV in writing of their objections within 14 days after receipt of the decision. EPA and the Respondents then have an additional 14 days to reach agreement. If agreement cannot be reached on any issue within this 14 day period, the Director shall provide a written statement of its decision to Respondents.
- 48. Respondents are not relieved of their obligations to perform while a matter is pending in dispute resolution. Respondents shall continue the undisputed activities required by this Consent Order pending dispute resolution.
- 49. Nothing in this section precludes the parties from using any form of alternative dispute resolution when all parties to the dispute agree to it.

XIX. DELAY IN PERFORMANCE/STIPULATED PENALTIES

- 50.a. Except for extensions agreed to by the parties in writing, which consent to extension shall not be arbitrarily or capriciously withheld by EPA, and except for delays from events which constitute a force majeure, the Respondents shall be subject to stipulated penalties as set forth below. For each day that Respondents fail to complete a deliverable or meet a specified schedule in an acceptable manner and by the specified deliverable due date, Respondents shall be liable for stipulated penalties, as set forth in paragraphs 51, 52, and 53 of this Order. Penalties begin to accrue on the day that performance is due or a violation occurs, and extend through the period of correction. EPA will provide written notice that stipulated penalties are accruing for violations that are not based on untimeliness. Such penalties will not begin accruing until Respondents receive such notice. Payment shall be due within 30 days from the date of a demand letter by EPA.
- 50.b. If demand for payment is made, Respondents shall forward a check to:
 - U. S. Environmental Protection Agency, Region IV Superfund Accounting
 P.O. Box 100142
 Atlanta, Georgia 30384
 Attn.: Collection Officer for Superfund

Payment shall be made by certified or cashiers check. Checks should identify the name of the Site, the Site identification number, the account number, and this Consent Order. A copy of the check and/or transmittal letter shall be forwarded to the EPA Project Coordinator. Checks should be made payable to the Hazardous Substances Superfund. Interest shall begin to accrue on the unpaid balance at the end of the fifteenth day upon which payment is due.

- 50.c. The stipulated penalties set forth in this section do not preclude EPA from pursuing any other remedies or sanctions which are available to EPA by reason of the Respondents' failure to comply with any of the requirements of this Consent Order. EPA will notify Respondents of its determination to pursue other remedies or sanctions.
- 51. For the following major deliverables, stipulated penalties shall accrue in the amount of \$1,000 per day, per violation, for the first week of noncompliance; \$2000 per day, per violation, for the 8th through 14th day of noncompliance; and \$5000 per day, per violation, for the 15th day and beyond of noncompliance.
 - 1) An original and any revised work plan.
 - 2) An original and any revised sampling and analysis plan.
 - 3) An original and any revised baseline risk assessment chapter of the remedial investigation report.

- 4) An original and any revised remedial investigation report.
- 5) An original and any revised treatability testing work plan.
- 5) An original and any revised treatability study sampling and analysis plan.
- 7) An original and any revised feasibility study report.
- 52. For the following interim deliverables, stipulated penalties shall accrue in the amount of \$250 per day, per violation, for the first week of noncompliance; \$500 per day, per violation, for the 8th through the 14th day of noncompliance; and \$1000 per day, per violation, for the 15th day and beyond of noncompliance.
 - 1) Preliminary site characterization summary.
 - 2) Literature survey and treatability testing statement of work.
 - 3) Treatability evaluation report.
 - 4) Memorandum on remedial action objectives.
 - 5) Memorandum on initial screening results of alternatives.
 - 6) Final screening results memorandum.
- 53.a. For the monthly progress reports, stipulated penalties shall accrue in the amount of \$100 per day, per violation, for the first through the 14th day of noncompliance; and \$200 per day, per violation, for the 15th day and beyond of noncompliance.
- 53.b. Should Respondents fail to comply with any payment or notification requirement, Respondents shall be liable to EPA for stipulated penalties in the amount of \$250 per violation for each day during which Respondents fail to comply with such requirement.
- 53.c. Should Respondents fail to mobilize or implement field activities prescribed in the RI/FS Work Plan within (10) business days of any date or time designated within the Work Plan, Respondents shall be liable to EPA for stipulated penalties in the amount of \$500 for each day of noncompliance.
- 54. In the event that Respondents are unable to submit deliverables within the time constraints in the Work Plan, EPA, in its discretion, may waive the foregoing stipulated penalties. In rendering such a determination, EPA will consider Respondents' good faith efforts to comply. EPA shall delay requirement of payment of 50 percent of the stipulated penalties until the work required by this Consent Order has been completed.

EPA shall, at that time, forgive payment of the remaining 50 percent of such imposed penalties if Respondents have met the final schedule date for completion of the work required by this Consent Order, as adjusted by appropriate extensions of the schedule. If Respondents do not meet the final schedule date for completion of the work, Respondents shall remit the remaining 50 percent of the stipulated penalties, wihin thirty (30) calendar days of demand by EPA.

55. Nothing herein shall prevent the simultaneous accrual of separate penalties for separate violations of this Consent Order, provided, however, a single act or omission may not provide a basis for more than one penalty, and subsequently scheduled dates will be adjusted such that repeated violations are not based on a prior single act or omission.

XX. FORCE MAJEURE

- 56. The Respondents shall notify EPA of any delay or anticipated delay in achieving compliance with any requirement of the Consent Order, caused by circumstances beyond the control of the Respondents that cannot be overcome by due diligence. When any event occurs or has occurred that may delay or prevent the performance of any obligation under this Consent Order, which Respondents believe is due to force majeure, Respondents shall notify by telephone the Project Coordinator, or, in her absence, the Director of the Hazardous Waste Management Division of EPA, Region IV, within 24 hours of the commencement of such event or awareness that such event will cause delay.
- 57. Oral notification shall be followed by written notification, made within seven business days of when Respondents knew or should have known of the event causing the delay or anticipated delay. The written notification shall fully describe the reasons for the delay; the reasons the delay is beyond the control of Respondents; the anticipated duration of the delay; actions taken or to be taken to prevent or mimimize the delay; a schedule for implementation of any measures to be taken to mitigate the effect of the delay; and a statement as to whether, in the opinion of the Respondents, such event may cause or contribute to an endangerment to public health, welfare or the environment. The Respondents shall adopt all reasonable measures to avoid or minimize any such delay.
- 58. Any delay that Respondents demonstrate results from circumstances beyond the control of the Respondents, and further demonstrate that cannot be overcome by due diligence on the part of Respondents, shall not be deemed to be a violation of their obligation under this Consent Order, and shall not make the Respondents liable for stipulated penalties set forth in Section XIX. To the extent a delay is attributable to force majeure, the schedule affected by the delay shall be extended for a period equal to the delay directly resulting from such circumstances. Upon an adequate showing by Respondents that the schedule was delayed by force majeure, EPA will modify the work plan schedule accordingly. Force majeure shall include, among other causes, natural disasters, national emergencies, abnormal adverse weather conditions, delays in obtaining access after timely good faith efforts to enter, and delays in obtaining approval by EPA or

other entities not attributable to Respondents. Normal inclement weather, increased costs of performance of the terms of this Order, changed economic circumstances, and the failure of Respondents to make timely and complete application for any required approval, shall not be considered circumstances entirely beyond the control of the Respondents.

- 59. Failure of the Respondents to comply with the notice requirements of paragraphs 56 and 57 is a waiver of the Respondents' right to invoke the benefits of paragraph 58.
- 60. If EPA and the Respondents cannot agree that any delay in compliance with the requirements of this Consent Order has been or will be caused by circumstances beyond the reasonable control of the Respondents, or on the duration of any delay necessitated by a force majeure event, the dispute shall be resolved according to the dispute resolution provisions in paragraph 47. The Respondents shall have the burden of proving by a preponderance of the evidence that the delay was caused by circumstances beyond their control, the necessity of the length of the delay, and that the Respondent took all reasonable measures to avoid or minimize delay.

XXI. REIMBURSEMENT OF OVERSIGHT COSTS

- of the Consent Order, EPA shall submit to the Respondents an accounting of all response and oversight costs incurred by the U. S. Government with respect to this Consent Order. Oversight costs shall include all direct and indirect costs of EPA's oversight arrangement for the RI/FS, including, but not limited to, time and travel costs of EPA personnel, associated indirect costs, contractor costs, compliance monitoring, including the collection and analysis of split samples, inspection of RI/FS activities, Site visits, interpretation of Consent Order provisions, discussions regarding disputes that may arise as a result of this Consent Order, review and approval or disapproval of reports, the costs of redoing any of Respondents' tasks, and any assessed interest.
- 62. EPA's certified Agency Financial Management System summary data (SPUR Reports) and any other necessary documents, shall serve as basis for payment demands. The Respondents shall, within 60 days of receipt of this accounting, remit a check for the amount of those costs, made payable to the Hazardous Substance Superfund. Interest shall begin to accrue on the unpaid balance from that date.
- 63. Checks should identify the name of the Site, the Site identification number, the account number, this Order, and be forwarded to:

U.S. Environmental Protection Agency Superfund Accounting P.O. Box 100142 Atlanta, GA 30384 64. Copies of the transmittal letter and check shall be sent simultaneously to the EPA Project Coordinator.

XXII. RESERVATIONS OF RIGHTS AND REIMBURSEMENT OF OTHER COSTS

- 65. EPA reserves the right to bring an action against the Respondent under section 107 of CERCLA for recovery of all past response costs incurred by the United States at the Site not reimbursed by the Respondents, any costs incurred in the event that EPA performs the RI/FS, as well as any future costs incurred by the United States in connection with response activities conducted under CERCLA at this Site.
- 66. Except as expressly provided in this Consent Order, each party reserves all rights and defenses it may have. Nothing in this Consent Order waives or modifies the government's authority to take action under Section 104 of CERCLA, except as relates to procedures to undertake an RI/FS. Nothing in this Consent Order shall prevent EPA from seeking legal or equitable relief to enforce the terms of this Consent Order, or for any violation of the law, including but not limited to the right to seek injunctive relief, stipulated penalties, statutory penalties, and/or punitive damages.
- 67. Following satisfaction of the requirements of this Consent Order, Respondents shall have resolved their liability to EPA for the performance of the RI/FS that is the subject of this Consent Order. The Respondents are not released from liability, if any, for any actions taken beyond the terms of this Consent Order including but not limited to removals, remedial design/remedial action (RD/RA), or activities arising pursuant to section 121(c) of CERCLA.

XXIII. DISCLAIMER

68. By signing this Consent Order and taking actions under this Order, the Respondents make no admission of law or fact, and do not acknowledge agreement with EPA's Findings of Fact and Conclusions of Law. Furthermore, the participation of the Respondents in this Consent Order shall not be considered an admission of liability for any purpose in any proceeding, and is not admissible in evidence against the Respondents in any judicial or administrative proceeding other than a proceeding by the U.S., including EPA, to enforce this Consent Order. Respondents retain their rights to assert claims against other potentially responsible parties at the Site. By consenting to this Order and complying with its terms Respondents do not waive any legal or administrative rights they may have except those expressly waived herein. The Respondents agree not to contest the validity or terms of this Consent Order in any action brought by EPA to enforce its terms.

XXIV. OTHER CLAIMS

- 69. In entering into this Consent Order, the Respondents waive any right to seek reimbursement under Section 106(b) of CERCLA with respect to all work performed pursuant to the Consent Order. Respondents also waive any right to present a claim under CERCLA Sections 111 or 112.
- 70. Nothing in this Consent Order shall constitute or be construed as a release from any claim, cause of action or demand in law or equity against any person, firm, partnership, subsidiary or corporation not a signatory to this Consent Order for any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release, or disposal of any hazardous substances, pollutants, or contaminants found at, taken to, or taken from the Site.
- 71. This Consent Order does not constitute any decision on preauthorization of funds under Section 111(a)(2) of CERCLA.
 - 72. Respondents shall bear their own costs and attorneys fees.

XXV. CERTIFICATION

- 73. All reports required pursuant to this Order will include a certification statement signed by Respondents or their responsible officials, as indicated below, assuring that the information contained in the report is true, accurate and complete.
- 74. Upon request by EPA, Respondents will submit to the Agency documents related to the implementation of this Order, establishing the performance of the work required herein. EPA staff will identify the documentation which constitutes the most useful evidence that the actions required by this Order have been undertaken.
- 75. For purposes of providing the appropriate certification on behalf of Murray Ohio the responsible official will be Mr. Joe Stanford, Vice President of Manufacturing, unless he is unavailable, in which case any officer of Murray Ohio may sign the certification.
- 76. For purposes of providing the appropriate certification on behalf of the City of Lawrenceburg, the responsible official will be the Honorable Ivan Johnson, Mayor of Lawrenceburg.
- 77. Any person that knowingly and willfully submits to EPA any report or document containing false or fraudulent information or that uses any false writing or document knowing the same contains false, ficticious or fraudulent statements or entries, shall be subject to the penalties provided in 18 U.S.C. Section 1001.

XXVI. INDEMNIFICATION

78. The Respondents agree to indemnify and hold the United States Government, its agencies, departments, agents, and employees, harmless from

any and all claims or causes of action arising from or on account of acts or omissions of Respondents, their employees, agents, servants, receivers, successors, assignees, or any persons acting under the control of Respondents, including but not limited to firms, corporations, subsidiaries and contractors, in carrying out activities under this Consent Order. The United States Government or any agency or authorized representative thereof shall not be held as a party to any contract entered into by Respondents in carrying out activities under this Consent Order.

XXVII. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

- 79. The effective date of this Consent Order shall be the date on which it is signed by EPA. All parties agree that this Consent Order will be offered for Respondents' signatures prior to being signed by the EPA Region IV Director of the Division of Waste Management.
- 80. This Consent Order may be amended by mutual agreement of EPA and the Respondents. Amendments shall be in writing and shall be effective when signed by the EPA Region IV Director of the Division of Waste Management. Deadlines under this Consent Order may be extended by written mutual agreement of the Respondents and any authorized representative of EPA.
- 81. Any deliverables, plans, technical memoranda, reports (other than progress reports), specifications, schedules and attachments required by this Consent Order are, upon approval by EPA, incorporated into this Order. The Statement of Work for PRP-Conducted Remedial Investigations and Feasibility Studies included as Addendum A is hereby incorporated into this Consent Order. Any non-compliance with such EPA approved reports, plans, specifications, schedules, and attachments shall be considered a failure to achieve the requirements of this Consent Order and may subject the Respondents to the penalties set forth in paragraphs 51, 52, and 53.
- 82. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, and any other writing submitted by the Respondents will be construed as relieving the Respondents of their obligation to obtain such formal approval as may be required by this Consent Order.

XXVIII. TERMINATION AND SATISFACTION

83. The provisions of this Consent Order shall be satisfied when EPA gives the Respondents written notice, which shall not be arbitrarily or capriciously withheld, that the Respondents have demonstrated, to EPA's satisfaction, that all of the terms of this Consent Order, including any

additional tasks which EPA has determined to be necessary, have been completed. This notice shall not, however, terminate Respondents' obligations to comply with Sections XVII and XXI of this Consent Order.

The City of Lawrenceburg

DATE: 3-30-90

Patrick M. Tobin, Director Division of Waste Management

U.S. Environmental Protection Agency