

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5

IN THE MATTER OF:)
)
) U.S. EPA Docket No.
ALLIED CHEMICAL & IRONTON COKE -) V-W-03-C-755
HONEYWELL COAL TAR FACILITY)
Lawrence County)
Ironton, Ohio)
EPA ID # OHD043730217)
)
)
)
RESPONDENT:)
)
Honeywell International Inc.)
)
Proceeding Under Sections 104, 122(a),) U.S. EPA Docket No.
and 122(d)(3) of the Comprehensive)
Environmental Response, Compensation,)
and Liability Act as amended)
(42 U.S.C Sections 9604, 9622(a),)
9622(d)(3)).)
_____)

**ADMINISTRATIVE ORDER ON CONSENT
FOR REMEDIAL INVESTIGATION/FEASIBILITY STUDY
ALLIED CHEMICAL & IRONTON COKE - HONEYWELL COAL TAR FACILITY
(Operable Unit No.3)**

I. INTRODUCTION

1. This Administrative Order on Consent ("AOC" or "Consent Order") is entered into voluntarily by the United States Environmental Protection Agency (EPA) and Honeywell International, Inc. The Consent Order concerns the preparation of, performance of, and reimbursement for all costs incurred by

EPA in connection with a remedial investigation and feasibility study (RI/FS) for the Honeywell Coal Tar Plant (Operable Unit 3 of the Allied Chemical and Ironton Coke Superfund Site) located in Lawrence County, Ironton, Ohio ("the Site")

II. JURISDICTION

2. This Consent Order is issued under the authority vested in the President of the United States by sections 104, 122(a) and 122(d)(3) of the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, 42 U.S.C. Sections 9604, 9622(a), 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 (1987), and further delegated to Regional Administrators on September 13, 1987, by EPA Delegation No. 14-14-C. The EPA Regional Administrator of Region 5 further delegated this authority to the EPA Region 5, Superfund Division Director on May 2, 1996 pursuant to the EPA Delegation No. 14-14-C.

3. A hazardous substance has been released or there is a threat of such a release into the environment at the Site, and the Superfund Division Director determines that it is necessary to undertake a remedial investigation and feasibility study (RI/FS) in order to protect the public health or welfare or

the environment. The Superfund Division Director further determines that the Respondents will undertake the RI/FS in a proper and timely manner.

4. The Respondent agrees to undertake all actions required by the terms and conditions of this Consent Order. In any action by EPA or the United States to enforce the terms of this Consent Order, Respondent consents to and agrees not to contest the authority or jurisdiction of the Regional Administrator or the Superfund Division Director to issue or enforce this Consent Order, and agrees not to contest the validity of this Order or its terms.

III. PARTIES BOUND

5. This Consent Order shall apply to and be binding upon EPA and shall be binding upon the Respondent, its agents, successors, assigns, officers, directors and principals. Respondent is jointly and severally responsible for carrying out all actions required of it by this Consent Order. The signatories to this Consent Order 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 Respondent or of the Facility or Site shall alter Respondent's responsibilities under this Consent Order.

6. The Respondent shall provide a copy of this Consent Order to any subsequent owners or successors before ownership rights or stock or assets in a corporate acquisition are transferred. Respondent shall provide a copy of this Consent Order to all contractors, laboratories, and consultants which are retained 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, whichever is later. Respondent shall condition any such contracts upon satisfactory compliance with this Consent Order. Notwithstanding the terms of any contract, Respondent is responsible for compliance with this Consent Order and for ensuring that its subsidiaries, employees, contractors, consultants, subcontractors, agents and attorneys comply with this Consent Order.

IV. STATEMENT OF PURPOSE

7. In entering into this Consent Order, the objectives of EPA and the Respondent 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 at or from the Site or Facility, by conducting a remedial

investigation; (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 at or from the Site or Facility, by conducting a feasibility study; and (c) to recover response and oversight costs incurred by EPA with respect to this Consent Order.

8. The activities conducted under this Consent Order are subject to approval by EPA and shall provide all appropriate necessary information to assess Site conditions and evaluate alternatives to the extent necessary to select a remedy that is consistent with CERCLA and the National Contingency Plan (NCP), 40 C.F.R. Part 300. Respondent shall conduct all activities under this Consent Order in compliance with CERCLA, the National Contingency Plan (NCP), 40 C.F.R. Part 300, and all applicable EPA guidance, policies, and procedures.

V. DEFINITIONS

9. Unless otherwise expressly provided herein, terms used in this Consent Order 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 Consent Order or in the

appendices attached hereto and incorporated hereunder, the following definitions shall apply:

ACERCLA@ shall mean the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, 42 U.S.C. '' 9601 et seq.

AConsent Order@ shall mean this Administrative Order by Consent and all appendices attached hereto.

ADay@ shall mean a calendar day unless expressly stated to be a working day. AWorking day@ shall mean a day other than a Saturday, Sunday, or Federal holiday. In computing any period of time under this Consent Order, 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.

AEffective Date@ shall mean the date on which this Consent Order is signed by the Director of the Superfund Division, EPA, Region 5.

AResponse Costs@ shall mean all costs, including, but not limited to, direct and indirect costs, not inconsistent with the NCP, that the United States incurs in reviewing, overseeing or developing the plans, technical memoranda, reports and other items pursuant to this Consent Order, conducting community relations, including the provision of technical assistance grants to community groups (if any), verifying the Work, or otherwise implementing, overseeing, or enforcing this Consent

Order, including but not limited to, payroll costs, contractor costs, travel costs, laboratory costs and the costs incurred to secure access.

AIInterest@ shall mean interest at the rate specified for interest on investments of the EPA Hazardous Substance Superfund established by 26 U.S.C. Section 9507, compounded annually on October 1, of each year, in accordance with 42 U.S.C. Section 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.

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

AParties@ shall mean EPA and Respondent.

ARespondent@ shall mean Honeywell International Inc., its employees, agents, successors, assigns and authorized representatives.

ASite@ or AFacility@ shall mean the facility as that term is defined at 42 U.S.C. Section 9601(9), which includes the area located at 3330 South Third Street, along the Ohio River between the Greenup lock and dam and the Gallipolis lock and dam, and includes the area encompassing the former Coke Plant and five

former lagoons ("Coke Plant Lagoon Area" or "CPLA"), the area known as the Goldcamp Disposal Area ("GDA"), and the former Tar Plant area (which is encompassed within the CPLA), and areas where hazardous substances, pollutants or contaminants have or may have come to be located from the CPLA, GDA, and Tar Plant. The GDA lies directly northwest of the Tar Plant area and covers approximately 11.5 acres and is bordered on the east by Third Street and on the southwest by the Ohio River, and is adjacent to other industrial/commercial properties primarily to the north and northwest. The CPLA is bounded on the east and south by Ice Creek and to the west by the Ohio River. To the north and northwest, the area is bordered by industries and residences.

AState@ shall mean the State of Ohio.

AStatement of Work@ or ASOW@ shall mean the statement of work for implementation of the Remedial Investigation and Feasibility Study as set forth in Attachment 1 to this Consent Order and any modifications made thereto as approved or modified by EPA in accordance with this Consent Order.

AWaste Material@ shall mean 1) any Ahazardous 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); 3) any Asolid waste@ under Section 1004(27) of RCRA, 42 U.S.C. ' 6903(27).

AWork@ shall mean all activities Respondents are required to perform under this Consent Order.

VI. FINDINGS OF FACT

10. The Allied Chemical (also known as AlliedSignal or Honeywell) and Ironton Coke facility is located in Ironton, Lawrence County, Ohio, and is bounded by Ice Creek and the Ohio River, and a mixture of industrial and residential properties. The Site consists of a coke plant which operated from 1920 to 1982 and five former lagoons which received process wastewater and hazardous solid waste from the former coke plant. These areas are the subject of a remedial action pursuant to a Unilateral Administrative Order (UAO) and Record of Decision (ROD) issued in 1991, and three subsequent amendments to the ROD. A 4-acre waste pit called the Goldcamp Disposal Area (GDA) is also part of the site, as well as a recently closed tar plant.

11. The Site has been divided into three (3) operable units: Operable Unit One is the GDA; Operable Unit Two is the Coke Plant / Lagoon Area (CPLA); and Operable Unit Three is the Tar Plant.

12. The GDA is an approximately 4-acre disposal pit which extends nearly 40 feet down from the ground surface. The GDA was a former sand and gravel pit used for the disposal of Tar Plant process chemical wastes during the period of 1945 to 1977. In 1977, AlliedSignal in consultation with the Ohio Environmental Protection Agency (OEPA) developed a plan for closure of the GDA. The closure, completed in 1980, included

removal of standing liquids and filling and capping of the site with clay. Based upon the results of hydrogeologic and water quality investigations, which indicated that groundwater contamination was migrating from the site, the OEPA requested inclusion of the site on the Superfund National Priorities List (NPL). The site was added to the NPL in 1983.

13. A remedial investigation and feasibility study ("RI/FS") was initiated by the United States Environmental Protection Agency ("USEPA"). On-going negotiations between USEPA, OEPA, and AlliedSignal resulted in AlliedSignal taking over implementation of the project in late 1983 and eventually signing an Administrative Order on Consent ("AOC") to conduct the RI/FS on April 13, 1984. The final RI was completed in July 1986. After completion of the RI, the site was divided into Operable Units One and Two, the GDA and the CPLA. The FS for the GDA was completed in August 1988. A Record of Decision ("ROD") for the GDA was signed by USEPA on September 29, 1988.

14. The remedial design and remedial action ("RD/RA") for the GDA was performed under a Unilateral Administrative Order ("UAO") issued to AlliedSignal and AMCAST Industrial. The effective date of the UAO was March 9, 1989.

15. The GDA RA included construction of a RCRA subtitle C-compliant cap over the waste and a slurry wall around the waste pit. A pumping well network was also constructed to maintain an inward hydraulic gradient inside the slurry wall and contain contamination inside the slurry wall. Groundwater

pumped from the wells is treated at an on-site water treatment facility. A monitoring well network was established to monitor the effectiveness of the containment system and track a non-aqueous phase liquid plume in the groundwater that exists outside the slurry wall.

16. The coke plant once contained the site administration building, a coke battery with associated processing facilities, storage tanks, piping, and a network of railroad lines used for transporting coal and coke. Various areas containing contaminated soils and coal/coke fines were identified in the coke plant area. The lagoon area is a marshy area where waste was periodically dumped. In 1970, five lagoons were constructed in the area for the purpose of treating these wastes. Process wastewater, stormwater runoff, and some waste sludge were discharged to Lagoons 1, 2, 3, and 4. Solid waste, including decanter tank tar sludge, was deposited in Lagoon 5.

17. In 1984, USEPA, OEPA, and AlliedSignal signed a Consent Order for AlliedSignal's implementation of Site-wide RI/FS. The RI was completed in July 1986 and the FS was completed in July 1990. A second Consent Order between USEPA and AlliedSignal was signed in 1987. This Consent Order required AlliedSignal to dismantle and decontaminate processing facilities associated with the Coke Plant. A ROD was signed for the CPLA on December 28, 1990. The RD/RA for the CPLA is through a UAO, signed on July 1, 1991, issued to AlliedSignal. Three subsequent ROD amendments dated July 31, 1995, September

4, 1997, and September 30, 1998, modified the original 1990 ROD.

18. Respondent Honeywell has been in compliance with the UAOs and AOCs listed above.

19. Previous RI/FS work, documented in RI/FS reports, RODs, and the administrative records, as well as in work conducted pursuant to RD/RA in site soils and groundwater have also demonstrated contamination by hazardous substances in the Tar Plant area. The 4-acre GDA contained Tar Plant residue waste, including semi-volatile organic compounds (VOCs) such as coal tars, VOCs, and metals. Groundwater at the site is contaminated with semi-VOCs, VOCs, metals, and cyanide. The former Ironton Iron industrial facility, now demolished, downgradient of the GDA, was provided with an alternative drinking water supply due to VOC contamination. The CPLA area and groundwater was also demonstrated to be contaminated with semi-VOCs, VOCs, metals, and cyanide. Accessible areas at the Tar Plant, during its operation, were shown to have at least 2,000 cubic yards of similarly contaminated soil.

20. The GDA remedy included installation of a slurry wall 2,000 feet in length and 90 feet in depth, a cap, groundwater extraction and treatment. Construction at the GDA was completed in September, 1995. The CPLA remedy included demolition of the coke plant, off-site disposal of low level contaminated soil, bioremediation within the lagoon area with subsequent wetland development, incineration of one lagoon, and ground water extraction and treatment. Demolition of the Coke Plant is

completed and over 100,000 cubic yards of soil or coal has been excavated for disposal or recycling. A ROD amendment in July 1997 revised the remedy from bioremediation to off-site disposal and this work was completed in 1998. A third ROD amendment replaced incineration with recycling, treatment, or disposal and use of some of the material as an alternative fuel. This third ROD amendment also changed in-situ bioremediation to spot excavation and treatment and subsequent wetland development in the lagoon area. Work began in October 1998 and was completed in December 2001.

21. AlliedSignal, now known as Honeywell International Inc., operated the Tar Plant. This Tar Plant produced a variety of products from coal tar such as pitch, creosote, naphthalene, anthracene, and carbolic oil for five decades. This facility was part of the commercial roofing tar business of Honeywell Specialty Materials. Honeywell made a corporate decision to no longer operate at the Ironton, Ohio Facility. The Tar Plant was therefore closed on December 31, 2000. After the cessation of operations at the Plant, a decontamination and demolition of the Tar Plant following applicable local, state, and federal regulations was executed, in accordance with the Site Management Plan, dated March 15, 2001.

22. The Tar Plant (also known as the Honeywell Coal Tar Refinery and Operable Unit Three), occupies approximately 25 acres. It is situated on the Ohio River and is equipped with dock facilities. Ashland, Kentucky is located due

south of the property on the other side of the Ohio River. The site contained one hundred and twenty four (124) above ground storage and process tanks varying in size from several hundred gallons to one half-million gallons. The tanks have stored a variety of coal tar derivatives and chemicals used in the production of coal tar derivatives. Some of these are naphthalene, refined coal tar, light carbolic oil residue (LCOR), carbolate, intermediate naphthalene oil, caustics, coal tar pitch, carbolic oil, creosote, and coal tar. The site also contained a boiler house, several stills used to process coal tar, and all associated steam, process, and feed lines. There were also numerous miscellaneous buildings used for storage, maintenance operations, offices, lockers and showers, and laboratory. There were also four (4) transformers on site that contain or are contaminated with polychlorinated bi-phenyls (PCBs). The tar plant also has a series of trenches that were designed to catch stormwater run-off and spills from plant operations. The Site Management Plan divides the approximate 25-acre plant into 34 areas:

Area 1 - 90-Day Hazardous Waste Dumpster Storage and Parking

Area 2 - Anthracene Plant

Area 3 - Miscellaneous Buildings

Area 4 - Railroad Track No. 7

Area 5 - Miscellaneous Buildings and Electrical Sub Stations

Area 6 - Warehouse

Area 7 - Tank 1851

Area 8 - Boiler House

Area 9 - Stockroom and Machine Shop

Area 10 - Engineering Storage and Yard Storage

Area 11 - Laboratory

Area 12 - Offices and Locker Room

Area 13 - Naphthalene Receivers and Furnace Area

Areas 14, 15, and 16 - Naphthalene and Tar Heater Pump & Equipment Building

Areas 17 & 18 - Number 44-47 Pitch Receivers and Number 36-43 Tar Heater Receivers

Areas 19, 20, and 21 - North Tank Farm

Area 22 - Pitch melter and Solid Pitch Handling Area

Area 23 - Number 1 and 2 Tank

Area 24 - Rod Pitch

Area 25 - Number 4 Railroad Track and Tank 1853

Area 26 - Number 1 and 2 Railroad Tracks

Areas 27, 28, 29, 30, and 31 - South Tank Farm

Area 32 - East Area

Area 33 - River Area

Area 34 - Parking Lot

23. The Tar Plant contains areas in which the soils are contaminated with organic hazardous substances as a result of spillage. Previous studies assessed at least 2,000 cubic yards of contaminated soils and associated contaminated groundwater. The full extent of contamination beneath the Tar Plant area is currently unknown. Because of the former manufacturing and the

on-going decommissioning and demolition work at the facility, an investigation of the subsurface in this area was technically impractical. However, based on the limited sampling during OU2 work, soil and groundwater are thought to be contaminated with hazardous substances such as: cyanide, benzene, naphthalene, and other base-neutral extractable compounds, including polynuclear aromatic hydrocarbons ("PAH's") such as anthracene, phenanthrene, chrysene and benzo(a)anthracene, each of which presents a potential human health hazard.

24. EPA, pursuant to Section 105 of CERCLA, 42 U.S.C. Section 9605, placed the facility on the National Priorities List ("NPL"), which is set forth at 40 CFR Part 300, Appendix B, by publication in the Federal Register on September 8, 1983, 48 Fed. Reg. 40658 (September 8, 1983), making it eligible for study and clean up under the Federal Superfund remedial program.

VII. CONCLUSIONS OF LAW AND DETERMINATIONS

25. Honeywell International, Inc. is a "present owner and/or operator" of the Facility within the meaning of Section 107(a)(1) of CERCLA, 42 U.S.C. Section 9607(a)(1). Honeywell International, Inc. is also a "previous owner and/or operator" of the Facility, who "owned" and/or "operated" the Facility at the time of disposal of hazardous substances at the Facility, within the meaning of Section 107(a)(2) of CERCLA, 42 U.S.C. Section 9607(a)(2).

26. The Site is a "facility" as defined in section 101(9) of CERCLA, 42 U.S.C. Section 9601(9).

27. Wastes and constituents thereof at the Site and disposed of at the Site, identified in paragraph 23 are "hazardous substances" as defined in section 101(14) of CERCLA, 42 U.S.C. Section 9601(14), or constitute "any pollutant or contaminant" that may present an imminent and substantial danger to public health or welfare under section 104(a)(1) of CERCLA.

28. The presence of hazardous substances at the Site or the past, present or potential migration of hazardous substances currently located at or emanating from the Site, constitute actual and/or threatened "releases" as defined in section 101(22) of CERCLA, 42 U.S.C. Section 9601(22).

29. Respondent is a "person" as defined in section 101(21) of CERCLA, 42 U.S.C. Section 9601(21).

30. Respondent is a responsible party under sections 104, 107 and 122 of CERCLA, 42 U.S.C. Sections 9604, 9607 and 9622.

31. The actions required by this Consent Order are necessary to protect the public health or welfare or the environment, or in the public interest, 42 U.S.C. Section 9622(a), are consistent with CERCLA and the NCP, 42 U.S.C. Sections 9604(a)(1), 9622(a), and will expedite effective remedial action and minimize litigation, 42 U.S.C. Section 9622(a).

VIII. NOTICE

32. In accordance with Section 121(f)(1)(F), EPA has notified the State of negotiations with potentially responsible parties regarding the implementation of the remedial investigation and feasibility study for the Site and provided an opportunity to participate in such negotiations. By providing a copy of this Consent Order to the State, EPA is notifying the State that this Order is being issued and that EPA is the lead agency for coordinating, overseeing, and enforcing the response action required by the Order.

IX. WORK TO BE PERFORMED

33. All work performed under this Consent Order shall be under the direction and supervision of qualified personnel. Within 30 days of the effective date of this Order, and before the work outlined below begins, the Respondent shall notify EPA in writing of the names, titles, and qualifications of the personnel, including contractors, consultants and laboratories to be used in carrying out such work. With respect to any proposed contractor expected to perform any of the tasks listed in paragraph 34, the Respondent shall demonstrate that the proposed contractor has a quality system which complies with ANSI/ASQC E4-1994, "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). The QMP should be prepared in accordance with "EPA Requirements for Quality Management Plans (QA/R-2)," (EPA/240/B-01/002, March 2001) or equivalent documentation as determined by EPA. The qualifications of the persons undertaking the work for Respondent shall be subject to EPA's review, for verification that such persons meet minimum technical background and experience requirements. This Order is contingent on Respondent's demonstration to EPA's satisfaction that Respondent is qualified to perform properly and promptly the actions set forth in this Consent Order. If EPA disapproves in writing of any person(s)' technical qualifications, Respondent shall notify EPA of the identity and qualifications of the replacement(s) within 45 days of the written notice. If EPA subsequently disapproves of the replacement(s), EPA reserves the right to terminate this Order and to conduct a complete RI/FS, and to seek reimbursement for costs and penalties from Respondent. During the course of the RI/FS, Respondent shall notify EPA in writing of any changes or additions in the personnel used to carry out such work, providing their names, titles, and qualifications. EPA shall have the same right to approve changes and additions to personnel as it has hereunder regarding the initial notification.

34. Respondent shall conduct activities and submit

deliverables as provided by the attached RI/FS Statement of Work, which is incorporated by reference, for the development of the RI/FS. All such work shall be conducted in accordance with CERCLA, the NCP, and EPA guidance including, but not limited to, the "Interim Final Guidance for Conducting Remedial Investigations and Feasibility Studies under CERCLA" (OSWER Directive # 9355.3-01), "Guidance for Data Usability in Risk Assessment" (OSWER Directive #9285.7-05) and guidance referenced therein, and guidance referenced in the Statement of Work, as may be amended or modified by EPA. The Work that Respondent is required to perform is identified in the list of tasks which follows. Each task is described in detail in the Statement of Work. All Work performed under this Consent Order shall be in accordance with the schedules herein, and in full accordance with the standards, specifications, and other requirements of the work plan and sampling and analysis plan, as initially approved or modified by EPA, and as may be amended or modified by EPA from time to time.

A. Task 1: RI/FS Planning Documents - RI/FS Work Plan/Field Sampling Plan and Quality Assurance Project Plans

- (1) Within 60 days of the effective date of this Consent Order, Respondent shall submit a Technical Letter Report.
- (2) Within 60 days of the approval of the Technical Letter Report, Respondent shall submit to EPA, with a

copy to OEPA, a complete set of RI/FS Planning Documents, including RI/FS Work Plan/Field Sampling Plan and Quality Assurance Project Plan (QAPP) as described in the attached Statement of Work. The RI/FS Work Plan/Field Sampling Plan shall consist of a summary of existing information on operations, sampling results and disposal at the Site, a field sampling plan and Schedule as described in the Statement of Work. The QAPP shall be in accordance with the Statement of Work and EPA guidances, including without limitation, "EPA Guidance for Quality Assurance Project Plans (QA/G-5)" (EPA/600/R-98/018, February 1998), and "EPA Requirements for Quality Assurance Project Plans (QA/R-5)" (EPA 240/B-01/003, March 2001).

(3) EPA, after reasonable opportunity for review and comment by the State, may: (a) approve, in whole or in part, (b) require revisions to, (c) modify in whole or in part, or (d) disapprove the RI/FS Work Plan/Field Sampling Plan and QAPP in whole or in part. If EPA requires revisions, Respondent shall submit a revised RI/FS Planning Document within 45 days of receipt of EPA's notification of the required revisions. Respondent shall implement the RI/FS Planning Documents including the RI/FS Work Plan/Field Sampling Plan and QAPP as

approved in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the RI/FS Work Plan/Field Sampling Plan and QAPP and any subsequent modifications to these documents shall be incorporated into and become fully enforceable under this Consent Order.

B. Task 2: Community Relations Plan

EPA will update the Community Relations Plan, in accordance with EPA guidance and the NCP. Respondent shall provide information and support to EPA's community relations programs.

C. Task 3: Site Characterization/Remedial Investigation

(1) Following EPA approval or modification of the RI/FS Work Plan/Field Sampling Plan, Respondent shall conduct the Remedial Investigation according to the EPA approved RI/FS Work Plan/Field Sampling Plan and Schedule, and the attached Statement of Work. Respondent shall complete the Remedial Investigation within the deadlines established by the RI/FS Work Plan/Field Sampling Plan.

D. Task 4: Remedial Investigation Report

(1) In accordance with the approved schedule in the Final RI/FS Work Plan/Field Sampling Plan, Respondent shall submit a draft Remedial Investigation Report ("RI Report") consistent with the attached Statement of Work and RI/FS Work Plan/Field Sampling Plan. Respondents

shall also submit data to EPA electronically according to EPA Region 5 specifications. The RI Report shall also contain a baseline risk assessment. The major components of the baseline risk assessment shall include contaminant identification, exposure assessment, toxicity assessment and human health and ecological risk characterization. Respondents shall prepare the baseline risk assessment in accordance with EPA guidance including, at a minimum: Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part A), Interim Final (EPA-540-1-89-002), OSWER Directive 9285.7-01A; December 1, 1989; and Risk Assessment Guidance for Superfund (RAGS), Volume I - Human Health Evaluation Manual (Part D, Standardized Planning, Reporting, and Review of Superfund Risk Assessments), Interim, (EPA 540-R-97-033), OSWER 9285.7-01D, January, 1998.

(2) EPA, after reasonable opportunity for review and comment by the State, may: (a) approve, in whole or in part, (b) require revisions to, (c) modify in whole or in part, or (d) disapprove the draft Remedial Investigation Report in whole or in part. If U.S. EA requires revisions, Respondent shall submit a revised Remedial Investigation Report within 45 days of receipt of EPA's notification of the required revisions.

E. Task 5: Treatability Studies

(1) Within 30 days of a request by EPA, Respondent shall submit a Treatability Testing Work Plan and Sampling and Analysis Plan to EPA with a copy to the State for review and approval by EPA.

(2) EPA, after reasonable opportunity for review and comment by the State, may: (a) approve, in whole or in part, (b) require revisions to, (c) modify in whole or in part, or (d) disapprove the draft Treatability Testing Work Plan and Sampling and Analysis Plan in whole or in part. If EPA requires revisions, Respondent shall submit a revised Work Plan within 45 days of receipt of EPA's notification of the required revisions. Respondent shall implement the Treatability Testing Work Plan as approved or modified in writing by EPA in accordance with the schedule approved by EPA. Once approved, or approved with modifications, the Treatability Testing Work Plan, the schedule, and any subsequent modifications shall be incorporated into and become fully enforceable under this Consent Order.

F. Tasks 6 and 7: Development and Screening of Alternatives and Detailed Analysis of Alternatives (Feasibility Study Report)

(1) Remedial Action Objectives (RAO) Technical Memorandum. Respondent shall submit a RAO Technical Memorandum to EPA with a copy to the State for review and

approval by EPA within 30 days of submission of the Draft RI Report. The RAO Technical Memorandum shall specify contaminants and media of concern, potential exposure pathways and remediation goals. Remediation goals shall establish acceptable exposure levels that are protective of human health and the environment and shall be developed by considering those factors set forth in 40 C.F.R. 300.430(e)(2)(i).

(2) Alternatives Screening (AS) Technical Memorandum.

Within 45 calendar days after receipt of EPA's comments on the RAO Technical Memorandum, Respondent shall submit an AS Technical Memorandum to EPA with a copy to the State for review and approval by EPA based on the nature and extent of contamination and EPA's comments on the RAO Technical Memorandum. Respondent shall revise the Remedial Action objectives in accordance with EPA's comments and include the revised Remedial Action objectives within the AS Technical Memorandum. The AS Technical Memorandum shall identify and assess a limited number of alternatives appropriate for addressing the Remedial Action objectives.

(3) Comparative Analysis of Alternatives (CAA) Technical Memorandum.

Within 45 calendar days after receipt of EPA's comments on the AS Technical Memorandum, Respondent shall submit a CAA Technical Memorandum to EPA with a copy to the State

for review and approval by EPA. Respondents shall incorporate EPA's comments on the AS Technical Memorandum within the CAA Technical Memorandum. The CAA Technical Memorandum shall evaluate the alternatives using the short- and long-term aspects of effectiveness, implementability and cost as set forth in 40 C.F.R. 300.430(e)(7) to guide the development and screening of the remedial alternatives.

(4) Within 45 days after receiving EPA's comments on the CAA Technical Memorandum, Respondent shall submit a Draft Feasibility Study Report as described in the attached Statement of Work and consistent with RI/FS Guidance. The Draft Feasibility Study shall conduct a detailed analysis of the alternatives that represent viable approaches to remedial action and shall incorporate EPA's comments on the CAA Technical Memorandum. The detailed analysis shall consist of an assessment of individual alternatives against each of the nine evaluation criteria set forth in 40 C.F.R. 300.430(e)(9)(iii) and a comparative analysis that focuses upon the relative performance of each alternative against those criteria.

(5) EPA, after reasonable opportunity for review and comment by the State, may: (a) approve, in whole or in part, (b) require revisions to, (c) modify in whole or in part, or (d) disapprove the draft Feasibility Study Report in whole or in part. If EPA requires revisions,

Respondent shall submit a revised Feasibility Study Report within 45 days of receipt of EPA's notification of the required revisions.

G. Task 8: Progress Reports

Respondent shall provide to EPA monthly progress reports by no later than the 15th day of the following month. 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 during that month; (2) include hard copies and electronic copies (according to EPA Region 5 specifications) of all results of sampling and tests and all other data received by the Respondent; (3) describe work planned for the next two months with schedules relating such work to the overall project schedule for RI/FS completion; and (4) describe all problems encountered and any anticipated problems, any actual or anticipated delays, and solutions developed and implemented to address any actual or anticipated problems or delays.

35. EPA reserves the right to comment on, modify and direct changes for all deliverables. At EPA's discretion, Respondent must fully correct all deficiencies and incorporate and integrate all information and comments supplied by EPA and not inconsistent with the NCP either in subsequent or resubmitted deliverables.

36. Respondent shall not proceed further without written approval for the following deliverables: RI/FS work plan and schedule, draft remedial investigation report, and draft feasibility study report. While awaiting EPA approval on these deliverables, Respondent shall proceed with all other tasks and activities which may be conducted independently of these deliverables, in accordance with the schedule set forth in this Consent Order and the SOW.

37. Upon receipt of the draft FS report, EPA will evaluate, as necessary, the estimates of the risk to the public and environment that are expected to remain after a particular remedial alternative has been completed.

38. EPA reserves the right to stop Respondent from proceeding further, either temporarily or permanently, on any task, activity or deliverable at any point during the RI/FS.

39. In the event that Respondent amends or revises a report, plan or other submittal upon receipt of EPA comments, if EPA subsequently disapproves of the revised submittal, or if subsequent submittals do not fully reflect EPA's directions for changes, EPA retains the right to seek stipulated or statutory penalties; perform its own studies, complete the RI/FS or any portion of the RI/FS under CERCLA and the NCP, and seek reimbursement from the Respondent for its costs; and/or seek any other appropriate relief.

40. In the event that EPA takes over some of the tasks, but not the preparation of the RI/FS, Respondent shall incorporate

and integrate information supplied by EPA into the final RI/FS report.

41. Neither failure of EPA to expressly approve or disapprove of Respondent's submissions within a specified time period, nor the absence of comments, shall be construed as approval by EPA. Whether or not EPA gives express approval for Respondent's deliverables, Respondent is responsible for preparing deliverables acceptable to EPA.

42. Respondent shall, prior to any off-site shipment of hazardous substances from the Site to an out-of-state waste management facility, provide written notification to the appropriate state environmental official in the receiving state and to EPA's Designated Project Coordinator of such shipment of hazardous substances. However, the notification of shipments shall not apply to a) any such off-site shipments when the total volume of such shipments will not exceed 10 cubic yards; and b) wastes generated as part of the existing and ongoing groundwater treatment plant operations.

A. The notification shall be in writing, and shall include the following information, where available: (1) the name and location of the facility to which the hazardous substances are to be shipped; (2) the type and quantity of the hazardous substances to be shipped; (3) the expected schedule for the shipment of the hazardous substances; and (4) the method of transportation. Respondent shall notify the receiving state of major changes in the shipment plan,

such as a decision to ship the hazardous substances to another facility within the same state, or to a facility in another state.

B. The identity of the receiving facility and state will be determined by Respondent following the award of the contract for the remedial investigation and feasibility study.

Respondent shall provide all relevant information, including information under the categories noted in paragraph 31(a) above, on the off-site shipments, as soon as practical after the award of the contract and before the hazardous substances are actually shipped.

X. MODIFICATION OF THE WORK PLAN

43. If at any time during the RI/FS process, Respondent identifies a need for additional data, a memorandum documenting the need for additional data shall be submitted to the EPA Project Coordinator within 30 days of identification. EPA in its discretion will determine whether the additional data will be collected by Respondent and whether it will be incorporated into reports and deliverables.

44. In the event of conditions posing an immediate threat to human health or welfare or the environment, Respondent shall notify EPA and the State immediately. In the event of unanticipated or changed circumstances at the Site, Respondent shall notify the EPA Project Coordinator by telephone within 24

hours of discovery of the unanticipated or changed circumstances. In addition to the authorities in the NCP, in the event that EPA determines that the immediate threat or the unanticipated or changed circumstances warrant changes in the work plan, EPA shall modify or amend the work plan in writing accordingly. Respondent shall perform the work plan as modified or amended.

45. EPA may determine that in addition to tasks defined in the initially approved work plan, other additional work may be necessary to accomplish the objectives of the RI/FS as set forth in the Statement of Work for this RI/FS. EPA may require that the Respondent perform these response actions in addition to those required by the initially approved work plan, including any approved modifications, if it determines that such actions are necessary for a complete RI/FS. EPA shall notify Respondent in writing describing the additional work requested. Respondent shall confirm its willingness to perform the additional work in writing to EPA within 7 working days of receipt of the EPA request or Respondent shall invoke dispute resolution. Subject to EPA resolution of any dispute, Respondent shall implement the additional tasks which EPA determines are necessary. The additional work shall be completed according to the standards, specifications, and schedule set forth or approved by EPA in a written modification to the work plan or written work plan supplement. EPA reserves the right to conduct the work itself at any point, to seek reimbursement from Respondent, and/or to seek any other appropriate relief.

XI. QUALITY ASSURANCE

46. Respondent shall assure that work performed, samples taken and analyses conducted conform to the requirements of the Statement of Work, the QAPP and guidance identified therein. Respondent shall assure that field personnel used by Respondent are properly trained in the use of field equipment and in chain of custody procedures. Respondent shall only use laboratories which have a documented quality system that complies with ANSI/ASQC E4-1994, "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 (NELAP) to meet the quality system requirements.

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

47. EPA retains the responsibility for the release to the public of the RI/FS report. EPA retains responsibility for the preparation and release to the public of the proposed plan and record of decision in accordance with CERCLA and the NCP.

48. EPA shall provide Respondent with the final RI/FS report, proposed plan and record of decision.

49. EPA will determine the contents of the administrative record file for selection of the remedial action. Respondent must submit to EPA documents developed during the course of the RI/FS upon which selection of the response action may be based. Respondent shall provide copies of plans, task memoranda for further action, quality assurance memoranda and audits, raw data, field notes, laboratory analytical reports and other reports. Respondent must additionally submit any previous studies conducted under state, local or other federal authorities relating to selection of the response action, and all communications between Respondent and state, local or other federal authorities concerning selection of the response action. At EPA's discretion, Respondent may establish a community information repository at or near the site, to house one copy of the administrative record.

XIII. MEETINGS

50. Respondent shall make presentations at, and participate in, meetings at the 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. Meetings will be scheduled at EPA's discretion.

XIV. SAMPLING, ACCESS, AND DATA AVAILABILITY/ADMISSIBILITY

51. All results of sampling, tests, modeling or other data (including raw data) generated by Respondent, or on Respondent's behalf, during implementation of this Consent Order, shall be submitted to EPA in the subsequent monthly progress report as described in Section IX of this Order. EPA will make available to the Respondent validated data generated by EPA unless it is exempt from disclosure by any federal or state law or regulation. Respondent shall also submit, in electronic form, all data and reports or other deliverables Respondent is required to submit pursuant to the provisions of this Order including sampling and analytical data.

52. Respondent will orally or through electronic mail notify EPA at least 15 days prior to conducting significant field events as described in the Statement of Work, work plan or sampling and analysis plan. At EPA's oral or written request, or

the request of EPA's oversight assistant, Respondent shall allow split or duplicate samples to be taken by EPA (and its authorized representatives) of any samples collected by the Respondent in implementing this Consent Order. All split samples of Respondent shall be analyzed by the methods identified in the QAPP.

53. At all reasonable times, EPA and its authorized representatives shall have the authority to enter and freely move about all property at the Site and off-site areas where Work, if any, is being performed, for the purposes of inspecting conditions, activities, the results of activities, records, operating logs, and contracts related to the site or Respondent and its contractor pursuant to this Order; reviewing the progress of the Respondent in carrying out the terms of this Consent Order; conducting tests as EPA or its authorized representatives deem necessary; using a camera, sound recording device or other documentary type equipment; and verifying the data submitted to EPA by the Respondent. The Respondent 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 herein shall be interpreted as limiting or affecting EPA's right of entry or inspection authority under federal law. All parties with access to the Site under this paragraph shall comply with all approved health and safety plans.

54. a. The Respondent may assert a claim of business confidentiality covering part or all of the information submitted to EPA pursuant to the terms of this Consent Order under 40 C.F.R. Section 2.203., provided such claim is allowed by section 104(e)(7) of CERCLA, 42 U.S.C. Section 9604(e)(7). This claim shall be asserted in the manner described by 40 C.F.R. Section 2.203(b) and substantiated at the time the claim is made. Information determined to be confidential by EPA will be given the protection specified in 40 C.F.R. Part 2. If no such claim accompanies the information when it is submitted to EPA, it may be made available to the public by EPA or the state without further notice to the Respondent.

b. 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, Respondent 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 the Consent Decree shall be withheld on the grounds that they are privileged, and 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.

55. In entering into this Order, Respondent waives any objections to any data gathered, generated, or evaluated by EPA, the State or Respondent in the performance or oversight of the Work that has been verified according to the quality assurance/quality control (QA/QC) procedures required by the Consent Order or any EPA-approved work plans or sampling and analysis plans. If Respondent objects to any other data relating to the RI/FS, Respondent shall submit to EPA a report that identifies and explains its objections, describes the acceptable uses of the data, if any, and identifies any limitations to the use of the data. The report must be submitted to EPA within 15 days of the monthly progress report containing the data.

56. If the Site, or the off-site area that is to be used for access or is within the scope of the RI/FS, is owned in whole or in part by parties other than those bound by this Consent Order, Respondent will obtain, or use its best efforts to obtain, site access agreements from the present owner(s) within 60 days of the effective date of this Consent Order. Such agreements shall provide access for EPA, its contractors and oversight officials, the State and its contractors, and the Respondent or its authorized representatives, and such agreements shall specify that Respondent is not EPA's representative with respect to

liability associated with Site activities. Copies of such agreements shall be provided to EPA prior to Respondent's initiation of field activities. Respondent's best efforts shall include providing reasonable compensation to any off-site property owner. If access agreements are not obtained within the time referenced above, Respondent shall immediately notify EPA of its failure to obtain access. EPA may obtain access for the Respondent, perform those tasks or activities with EPA contractors, or terminate the Consent Order in the event that Respondent cannot obtain access agreements. In the event that EPA performs those tasks or activities with EPA contractors and does not terminate the Consent Order, Respondent shall perform all other activities not requiring access to that site, and shall reimburse EPA for all costs incurred in performing such activities. Respondent additionally shall integrate the results of any such tasks undertaken by EPA into its reports and deliverables. Furthermore, the Respondent agrees to indemnify the U.S. Government as specified in Section XXV of this Order. Respondent also shall reimburse EPA for all costs and attorney fees incurred by the United States to obtain access for the Respondent.

XV. DESIGNATED PROJECT COORDINATORS

57. Documents including reports, approvals, disapprovals, and other correspondence which must be submitted under this Consent Order, shall be sent by certified mail, return receipt requested, by overnight delivery service or UPS, recipient's signature required, by electronic mail to the addresses or to a Web site established for that purpose to the following addressees or to any other addressees which the Respondent and EPA designate in writing:

A. Documents to be submitted to EPA should be sent to:

Sharon Jaffess, Remedial Project Manager
EPA - Region 5
Superfund Division, SR-6J
77 West Jackson Boulevard
Chicago, IL 60604-3507

B. Documents to be submitted to the Respondent should be sent to:

Richard W. Galloway Manager Remediation & Evaluation
Services
Honeywell International Inc.
101 Columbia Road, Morristown, New Jersey 07962

C. Each document to be submitted by Respondent shall also be sent to:

Kevin O'Hara, Site Coordinator
Ohio EPA
Southeast District Office
2195 Front Street
Logan, OH 43138

EPA reserves the right to require any of the documents, or portions thereof, described in this paragraph be submitted in hard copy rather than electronically.

58. On or before the effective date of this Consent Order, EPA and the Respondent shall each designate their own Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Order.

59. EPA and the Respondent each have the right to change their respective Project Coordinator. The other party must be notified in writing at least 10 prior to the change.

60. EPA's Project Coordinator shall have the authority lawfully vested in a Remedial Project Manager (RPM) and On-Scene Coordinator (OSC) by the NCP. In addition, EPA's Project Coordinator shall have the authority consistent with the National Contingency Plan, to halt any work required by this Consent Order, and to take any necessary response action when s/he determines that conditions at the site may present an immediate endangerment to public health or welfare or the environment. 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.

61. EPA shall arrange for a qualified person to assist in its oversight and review of the conduct of the RI/FS, as required by section 104(a) of CERCLA, 42 U.S.C. Section 9604(a). The oversight assistant may observe work and make inquiries in the absence of EPA, but is not authorized to modify the work plan.

XVI. OTHER APPLICABLE LAWS

62. Respondent shall comply with all laws that are applicable when performing the RI/FS. No local, state, or federal permit shall be required for any portion of any action conducted entirely on-site, including studies, where such action is selected and carried out in compliance with section 121 of CERCLA.

XVII. RECORD PRESERVATION

63. All records and documents in EPA's and Respondent's possession that relate in any way to the site shall be preserved during the conduct of this Consent Order and for a minimum of 10 years after commencement of construction of any remedial action. The Respondent shall acquire and retain copies of all documents that relate to the site and are in the possession of its employees, agents, accountants, contractors, or attorneys. After this 10 year period, the Respondent shall notify EPA at least 90 days before the documents are scheduled to be destroyed. If EPA requests that the documents be saved, the Respondent shall, at no cost to EPA, give EPA the documents or copies of the documents.

XVIII. DISPUTE RESOLUTION

64. Any disputes concerning activities or deliverables required under this Order, excluding the baseline risk assessment, for which dispute resolution has been expressly provided for, shall be resolved as follows: If the Respondent objects to any EPA notice of disapproval or requirement made pursuant to this Consent Order, Respondent shall notify EPA's Project Coordinator in writing of its objections within 21 days of receipt of the disapproval notice or requirement. Respondent's written objections shall define the dispute, state the basis of Respondent's objections, and be sent certified mail, return receipt requested. EPA shall then respond within 21 days to Respondent's objections. EPA and the Respondent then have an additional 14 days to reach agreement, unless this period is extended by mutual agreement of the parties. If an agreement is not reached within 14 days or any mutually agreed extension, Respondent may request a determination by EPA's Division Director. Such request may include a request to meet with the Division Director. The Division Director's determination is EPA's final decision. Respondent shall proceed in accordance with EPA's final decision regarding the matter in dispute, regardless of whether Respondent agrees with the decision. If the Respondent does not agree to perform or does not actually perform the work in accordance with EPA's final decision, EPA reserves the right in its sole discretion to conduct the Work itself, to seek reimbursement from the Respondent, to seek

enforcement of the decision, to seek stipulated penalties, and/or to seek any other appropriate relief.

65. Respondent is not relieved of its obligations to perform and conduct activities and submit deliverables on the schedule set forth in the work plan, while a matter is pending in dispute resolution. The invocation of dispute resolution does not stay stipulated penalties under this Order. EPA may take into account Respondent's good faith in invoking dispute resolution with respect to the decision whether to seek stipulated penalties.

XIX. DELAY IN PERFORMANCE/STIPULATED PENALTIES

66. If Respondent fails to complete a deliverable in a timely manner or fails to produce a deliverable of a quality acceptable to EPA, or otherwise fails to perform in accordance with the requirements of this Order, Respondent shall be liable for stipulated penalties. Penalties begin to accrue on the day that performance is due or a violation occurs, and extend through the period of correction. Where a revised submission by Respondent is required, stipulated penalties shall continue to accrue until a deliverable satisfactory to EPA is produced. EPA will provide written notice for violations that are not based on timeliness; nevertheless, penalties shall accrue from the day a violation commences. Payment shall be due within 30 days of receipt of a demand letter from EPA.

67. Respondent shall pay interest on the unpaid balance, which shall begin to accrue at the end of the 30-day period, at the rate established by the Department of Treasury pursuant to 30 U.S.C. Section 3717.

68. Respondent shall make all payments by forwarding a check to:

U.S. Environmental Protection Agency
Superfund Accounting
P.O. Box 70753
Chicago, IL 60673

Checks should identify the name of the Site, the Site identification number, the account number, and the title of this Order. A copy of the check and/or transmittal letter shall be forwarded to the EPA Project Coordinator.

69. For the following major deliverables, stipulated penalties shall accrue in the amount of \$1,000 per day, per violation, for the first seven days of noncompliance; \$1,500 per day, per violation, for the eighth (8th) through the fourteenth (14th) day of noncompliance; \$2,000 per day, per violation, for the fifteenth (15th) day through the thirtieth (30th) day; and \$4,000 per day, per violation for all violations lasting beyond thirty (30) days:

- (1) An original and any revised work plan.
- (2) An original and any revised sampling and analysis plan.
- (3) An original and any revised remedial investigation report.
- (4) An original and any revised treatability testing work plan.
- (5) An original and any revised treatability study sampling and analysis plan.
- (6) An original and any revised feasibility study report.

70. For the following interim deliverables, stipulated penalties shall accrue in the amount of \$500 per day, per violation, for the first seven (7) days of noncompliance; \$750,500 per day, per violation, for the eighth (8th) through fourteenth (14th) day of noncompliance; \$1,000 per day, per violation, for the fifteenth (15th) day through the thirtieth (30th) day of noncompliance; and \$1,500 per day per violation for all violations lasting beyond thirty (30) days:

- (1) Technical memorandum on modeling of site characteristics.
- (2) Preliminary site characterization summary.
- (3) Summary of RI data.
- (4) Identification of candidate technologies memorandum
- (5) Treatability testing statement of work.
- (6) Treatability study evaluation report.
- (7) Memorandum on remedial action objectives.
- (8) Memoranda on development and preliminary screening of alternatives, assembled alternatives screening results, and final screening.
- (9) Comparative analysis report.

71. For the monthly progress reports, or any other violations of this order not specified above, stipulated penalties shall accrue in the amount of \$500 per day, per violation, for the first seven (7) days of noncompliance; \$750 per day, per violation, for the eighth (8th) through the fourteenth (14th) day of noncompliance; \$1,000 per day, per violation, for the fifteenth (15th) day through the thirtieth (30th) day; \$1,500 per day, per violation, for all violations lasting beyond thirty (30) days.

72. Respondent may dispute EPA's right to the stated amount of penalties by invoking the dispute resolution procedures under Section XVIII herein. Penalties shall accrue but need not be

paid during the dispute resolution period. If Respondent does not prevail upon resolution, all penalties shall be due to EPA within 30 days of resolution of the dispute. If Respondent prevails upon resolution, no penalties shall be paid. If Respondent prevails in part, at EPA's sole discretion, a proportionate adjustment of any penalty otherwise due shall be paid.

73. In the event that EPA provides for corrections to be reflected in the next deliverable and does not require resubmission of that deliverable, stipulated penalties for that interim deliverable shall cease to accrue on the date of such decision by EPA.

74. The stipulated penalties provisions do not preclude EPA from pursuing any other remedies or sanctions which are available to EPA because of the Respondent's failure to comply with this Consent Order, including but not limited to conduct of all or part of the RI/FS by EPA. Payment of stipulated penalties does not alter Respondent's obligation to complete performance under this Consent Order.

XX. FORCE MAJEURE

75. "Force majeure", for purposes of this Consent Order, is defined as any event arising from causes entirely beyond the control of the Respondent and of any entity controlled by Respondent, including their contractors and subcontractors, that delays the timely performance of any obligation under this Consent Order notwithstanding Respondent's best efforts to avoid the delay. The requirement that the Respondent exercises "best efforts to avoid the delay" includes using best efforts to anticipate any potential force majeure event and best efforts to address the effects of any potential force majeure event (1) as it is occurring and (2) following the potential force majeure event, such that the delay is minimized to the greatest extent practicable. Examples of events that are not force majeure events include, but are not limited to, increased costs or expenses of any work to be performed under this Order or the financial difficulty of Respondent to perform such work.

76. If any event occurs or has occurred that may delay the performance of any obligation under this Order, whether or not caused by a force majeure event, Respondent shall notify by telephone the Remedial Project Manager or, in his or her absence, the Director of the Superfund Division, EPA Region 5, within 48 hours of when the Respondent knew or should have known that the event might cause a delay. Within five business days thereafter, Respondent shall provide in writing 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 mitigate the effect of the delay; 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. Respondent shall exercise best efforts to avoid or minimize any delay and any effects of a delay. Failure to comply with the above requirements shall preclude Respondent from asserting any claim of force majeure.

77. If EPA agrees that the delay or anticipated delay is attributable to force majeure, the time for performance of the obligations under this Order that are directly affected by the force majeure event shall be extended by agreement of the parties, pursuant to section XXVI of this Order, for a period of time not to exceed the actual duration of the delay caused by the force majeure event. An extension of the time for performance of the obligation directly affected by the force majeure event shall not, of itself, extend the time for performance of any subsequent obligation.

78. If EPA does not agree that the delay or anticipated delay has been or will be caused by a force majeure event, or does not agree with Respondent on the length of the extension, the issue shall be subject to the dispute resolution procedures set forth in section XVIII of this Order. In any such proceeding, to qualify for a force majeure defense, Respondent

shall have the burden of demonstrating by a preponderance of the evidence that the delay or anticipated delay has been or will be caused by a force majeure event, that the duration of the delay was or will be warranted under the circumstances, that Respondent did exercise or is exercising due diligence by using its best efforts to avoid and mitigate the effects of the delay, and that Respondent complied with the requirements of paragraph 76.

79. Should Respondent carry the burden set forth in paragraph 78, the delay at issue shall be deemed not to be a violation of the affected obligation of this Consent Order.

XXI. REIMBURSEMENT OF RESPONSE COSTS

80. Following the issuance of this Consent Order, EPA shall submit to the Respondent on a periodic basis, commencing no later than thirteen (13) months after the effective date of this Consent Order and continuing no less frequently than annually thereafter, an accounting of all Response Costs including oversight costs incurred by the United States with respect to this RI/FS. Response Costs may include, but are not limited to, costs incurred by the U.S. Government in negotiating this Order and in overseeing Respondent's implementation of the requirements of this Order and activities performed by the government as part of the RI/FS and community relations, including any costs incurred while obtaining access. Costs shall include all direct and indirect costs, including, but not limited to, time and

travel costs of EPA personnel and associated indirect costs, contractor costs, cooperative agreement costs, compliance monitoring, including the collection and analysis of split samples, inspection of RI/FS activities, site visits, discussions regarding disputes that may arise as a result of this Consent Order, review and approval or disapproval of reports, costs of performing baseline risk assessment, and costs of redoing any of Respondent's tasks. Any necessary summaries, including, but not limited to EPA's certified Agency Financial Management Systems summary data (SCORPIOS Reports), or such other summary as certified by EPA, shall serve as basis for payment demands.

81. Respondent shall make payment within 45 days of receipt of each accounting. Interest shall accrue from the later of: the date payment of a specified amount is demanded in writing; or the date of the expenditure. The interest rate is the rate of interest on investments for the Hazardous Substances Superfund in section 107(a) of CERCLA.

82. Payment shall be made by FedWire Electronic Funds Transfer ("EFT") to the U.S. EPA account in accordance with current EFT procedures, referencing the EPA Region and Site Spill ID Number 05-E4, and EPA Account # 113399. Payment shall be made to the First National Bank ABA # 071000013. Respondent shall send notice to EPA that payment has been made to:

Financial Management Officer
U.S. Environmental Protection Agency – Region 5
Mail Code MF 10-J
77 W. Jackson Blvd.
Chicago, IL 60604

83. Notice of payment should be sent simultaneously to the EPA Project Coordinator.

84. Respondent may contest payment of any response cost if it determines that there is an accounting error, a cost inconsistent with the NCP, or inclusion of costs outside the scope of this Consent Order. Respondent shall identify any contested costs and the basis of its objection. All undisputed costs shall be remitted by Respondent in accordance with the schedule set forth above. Disputed costs shall be paid by Respondent into an interest-bearing escrow account while the dispute is pending. Respondent bears the burden of establishing an EPA accounting error, a cost inconsistent with the NCP or the inclusion of costs outside the scope of this Consent Order.

XXII. RESERVATIONS OF RIGHTS AND REIMBURSEMENT OF OTHER COSTS

85. EPA reserves the right to bring an action against the Respondent under section 107 of CERCLA for recovery of all Response Costs including oversight costs, incurred by the United States at the site that are not reimbursed by the Respondent, any costs incurred in the event that EPA performs the RI/FS or any part thereof, and any future costs incurred by the United States

in connection with response activities conducted under CERCLA at this site.

86. EPA reserves the right to bring an action against Respondent to enforce the Response Cost reimbursement requirements of this Consent Order, to collect stipulated penalties assessed pursuant to section XVIII of this Consent Order, and to seek penalties pursuant to section 109 of CERCLA, 42 U.S.C. Section 9609.

87. Except as expressly provided in this Order, each party reserves all rights and defenses it may have. Nothing in this Consent Order shall affect EPA's removal authority or EPA's response or enforcement authorities including, but not limited to, the right to seek injunctive relief, stipulated penalties, statutory penalties, and/or punitive damages.

88. Following satisfaction of the requirements of this Consent Order, Respondent shall have resolved its liability to EPA for the Work performed by Respondent pursuant to this Consent Order. Respondent is not released from liability, if any, for any response actions taken beyond the scope of this Order regarding removals, other operable units, remedial design/remedial action of this operable unit, or activities arising pursuant to section 121(c) of CERCLA.

XXIII. DISCLAIMER

89. By signing this Consent Order and taking actions under this Order, the Respondent does not admit EPA's Findings of Fact and Conclusions of Law. Furthermore, the participation of the Respondent in this Order shall not be considered an admission of liability and is not admissible in evidence against the Respondent in any judicial or administrative proceeding other than a proceeding by the United States, including EPA, to enforce this Consent Order or a judgment relating to it. Respondent retains its rights to assert claims against other potentially responsible parties at the Site. However, the Respondent agrees not to contest the validity or terms of this Order, or the procedures underlying or relating to it in any action brought by the United States, including EPA, to enforce its terms.

XXIV. OTHER CLAIMS

90. In entering into this Order, Respondent waives any right to seek reimbursement under section 106(b) of CERCLA. Respondent also waives any right to present a claim under section 111 or 112 of CERCLA. This Order does not constitute any decision on preauthorization of funds under section 111(a)(2) of CERCLA. Respondent further waives all other statutory and common law claims against EPA, including, but not limited to, contribution and counterclaims, relating to or arising out of conduct of the

RI/FS.

91. Nothing in this 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, other than an entity as to which Respondent is a successor and whose liability Respondent has assumed, 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.

92. Respondent shall bear its own costs and attorneys fees.

XXV. FINANCIAL ASSURANCE, INSURANCE, AND
INDEMNIFICATION

93. Respondent shall provide an annual Financial Assurance letter and SEC Form 10K Statement or shall establish and maintain a financial instrument or trust account or other financial mechanism acceptable to EPA, funded sufficiently to perform the work and any other obligations required under this Consent Order, including a margin for cost overruns. Within 30 days after the effective date of this Consent Order, Respondent shall fund the financial instrument or trust account, if any, sufficiently to perform the work required under this Consent Order projected for the period beginning with the effective date of the Order through December 31, 2003. Beginning January 1, 2004 and on or before

the 15th calendar day of each calendar year quarter thereafter, Respondent shall fund the financial instrument or trust account sufficiently to perform the work and other activities required under this Order projected for the succeeding calendar year quarter.

94. If at any time the net worth of the financial instrument or trust account is insufficient to perform the work and other obligations under the Order for the upcoming quarter, Respondent shall provide written notice to EPA within 7 days after the net worth of the financial instrument or trust account becomes insufficient. The written notice shall describe why the financial instrument or trust account is funded insufficiently and explain what actions have been or will be taken to fund the financial instrument or trust account adequately.

95. (a) Prior to commencement of any work under this Order, Respondent shall secure, and shall maintain in force for the duration of this Order, and for two years after the completion of all activities required by this Consent Order, Comprehensive General Liability ("CGL") and automobile insurance, with limits of \$2 million dollars, combined single limit, naming as insured the United States. The CGL insurance shall include Contractual Liability Insurance in the amount of \$1 million dollars per occurrence, and Umbrella Liability Insurance in the amount of \$2 million per occurrence.

(b) Respondent shall also secure, and maintain in force for the duration of this Order and for two years after the completion of all activities required by this Consent Order the following:

i. Professional Errors and Omissions Insurance in the amount of \$1,000,000.00 per occurrence.

ii. Pollution Liability Insurance in the amount of \$1,000,000.00 per occurrence, covering as appropriate both general liability and professional liability arising from pollution conditions.

(c) For the duration of this Order, Respondent shall satisfy, or shall ensure that their contractors or subcontractors satisfy, all applicable laws and regulations regarding the provision of employer's liability insurance and workmen's compensation insurance for all persons performing work on behalf of the Respondent(s), in furtherance of this Order.

(d) If Respondent demonstrates by evidence satisfactory to EPA that any contractor or subcontractor maintains insurance equivalent to that described above, or insurance covering the same risks but in a lesser amount, then with respect to that contractor or subcontractor Respondent need provide only that portion of the insurance described above which is not maintained by the contractor or subcontractor.

(e) Prior to commencement of any work under this Order, and annually thereafter on the anniversary of the effective date of this Order, Respondent shall provide to EPA certificates of such insurance and a copy of each insurance policy.

96. At least 7 days prior to commencing any work under this Consent Order, Respondent shall certify to EPA that the required insurance has been obtained by that contractor.

97. The Respondent agrees 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 Respondent, its employees, agents, servants, receivers, successors, or assignees, or any persons 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 Respondent in carrying out activities under this Consent Order.

XXVI. EFFECTIVE DATE AND SUBSEQUENT MODIFICATION

98. The effective date of this Consent Order shall be the date it is signed by EPA.

99. This Consent Order may be amended by mutual agreement

of EPA and Respondent. Amendments shall be in writing, and project managers do not have the authority to sign amendments to the Consent Order.

100. No informal advice, guidance, suggestions, or comments by EPA regarding reports, plans, specifications, schedules, and any other writing submitted by the Respondent will be construed as relieving the Respondent of its obligation to obtain such formal approval as may be required by this Order. 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.

XXVII. TERMINATION AND SATISFACTION

101. This Consent Order shall terminate when the Respondent demonstrates in writing and certifies to the satisfaction of EPA that all activities required under this Consent Order, including any additional work, payment of Response Costs, and any stipulated penalties demanded by EPA, have been performed and EPA has approved the certification. This notice shall not, however, terminate Respondent's obligation to comply with Sections XVI, XXI, and XXII of this Consent Order.

102. The certification shall be signed by a responsible official representing each Respondent. Each representative shall make the following attestation: "I certify that the information contained in or accompanying this certification is, to the best of my knowledge and belief, true, accurate, and complete." For purposes of this Consent Order, a responsible official is a corporate official who is in charge of a principal business function.

BY: ORIGINAL SIGNED BY THEODORE A. FISHER II DATE: 8/06/03
Theodore A. Fischer II
Vice President
Health, Safety, Environment and Remediation
Honeywell International Inc.

BY: ORIGINAL SIGNED BY JAMES MAYKA FOR WILLIAM MUNO DATE: 8/22/03
William E. Munro
Superfund Division Director
U.S. Environmental Protection Agency
Region 5