

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IV

IN THE MATTER OF:)	Proceeding Under Sections 104
)	and 106 of the Comprehensive
THE UNITED STATES DEPARTMENT)	Environmental Response, Com-
OF ENERGY'S PADUCAH)	ensation and Liability Act, as
GASEOUS DIFFUSION PLANT)	amended, 42 U. S. C. Sections
AT PADUCAH, KENTUCKY)	9604 and 9606
<hr/>) Docket No. 88-35-C

ADMINISTRATIVE ORDER BY CONSENT

I. JURISDICTION

Each Party is entering into this Administrative Order By Consent (hereinafter, "Consent Order") pursuant to the following authorities:

A. The United States Environmental Protection Agency, Region IV (hereinafter, "EPA") enters into this Consent Order pursuant to the authority vested in the President of the United States by Sections 104 and 106(a) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, (hereinafter, "CERCLA"), 42 U. S. C. Sections 9604 and 9606(a). The authority of the President to issue this Order has been delegated under Sections 104 and 106(a) of CERCLA, 42 U. S. C. Sections 9604 and 9606(a) to the Administrator of EPA, with the concurrence of the Attorney General, by Executive Order 12580 dated January 23, 1987, 52 Federal Register 2923 (January 29, 1987).

B. The United States Department of Energy (hereinafter, "DOE") enters into this Consent Order pursuant to Sections 104 and 106(a) of CERCLA, 42 U. S. C. Sections 6904 and 6906(a), Executive Order 12580, and the Atomic Energy Act of 1954, as amended, (AEA), 42 U. S. C. Sections 2201, et seq.

C. The DOE agrees to undertake all actions required by the terms of this Consent Order, including any additional work required pursuant to Section V, paragraph I, herein, at its Paducah Gaseous Diffusion Plant (hereinafter, "PGDP") located at Paducah, Kentucky.

D. This Consent Order is entered into by the Parties to address only the response actions described herein. This Consent Order does not address corrective action at the PGDP or response measures pursuant to Section 120(e)(1) of CERCLA, as amended, 42 U. S. C. Section 9620(e)(1), or Sections 3004(u), 3004(v), and 3008(h) of RCRA, as amended, 42 U. S. C. Sections 6924(u), 6924(v), and 6928(h).

E. All determinations necessary for the issuance of this Consent Order have been made and the DOE agrees not to contest the jurisdictional basis for this Consent Order. The execution of this Consent Order by the DOE is not an admission of liability for purposes of any proceeding.

II. STATEMENT OF PURPOSE

In entering this Consent Order, the mutual objectives of EPA and DOE include: (1) to determine fully the nature and extent of the threat to human health or welfare and the environment caused by the off-site contamination of the groundwater from the PGDP; (2) to ensure that the environmental effects associated with the releases and threatened releases described herein are thoroughly investigated and appropriate action taken as necessary to protect the public health, welfare and the environment; (3) to establish a work plan and schedule(s) for developing, implementing and monitoring any necessary response actions at the site in accordance with CERCLA; and, (4) to facilitate the cooperation, exchange of information and participation of the Parties in such action.

III. EPA'S FINDINGS OF FACT

For purposes of this Consent Order only, the EPA finds that:

A. The DOE owns the Paducah Gaseous Diffusion Plant (hereinafter, "PGDP") located in Paducah, Kentucky. The PGDP is used for the enrichment of uranium for use in fueling power plants and for the U. S. Navy.

B. The DOE performed a baseline environmental survey in 1987 which revealed approximately ninety-three (93) areas in which hazardous substances may have been released into the environment within the meaning of Section 101(22) of CERCLA, as amended, 42 U. S. C. Section 9601(22). The survey also identified at least three (3) areas in which the groundwater is contaminated with trichloroethylene (TCE) and radionuclides.

C. The PGDP's 1987 Environmental Surveillance Report included data showing that beta emitters were present in samples taken from groundwater well number 66 located in the northwest corner of the PGDP. Well number 66 was installed in August 1986. Due to the length of time for well development, the first sampling event occurred in November 1987. The data revealed a dissolved beta activity in the sample of 1020 picocuries per liter (pCi/l).

D. On July 25, 1988, personnel from the McCracken County Health Department of the Commonwealth of Kentucky collected groundwater samples from groundwater wells designated 173-R-08 and

173-R-11, near the PGDP. The Department for Health Services for the Commonwealth of Kentucky reported analytical results showing that the gross beta, and potentially gross-alpha, activity from these samples were 49.2 pCi/l and 6.8 pCi/l at sampling location 173-R-08 and 188.2 pCi/l and 6.8 pCi/l at sampling location 173-R-11. The analytical results from subsequent samples showed an alpha activity of 7.1 pCi/l and beta activity of 264.0 pCi/l.

E. The analytical data from samples taken in 1988 from on-site groundwater monitoring well number 66 show results for TCE that range from 3800 parts per billion (ppb) to 5900 ppb, and results for technetium (Tc) that range from 2850 pCi/l to 4200 pCi/l.

F. Groundwater well numbers 173-R-08 and 173-R-11 are located approximately 1.5 miles and 0.75 miles, respectively, from the northwest corner of the PGDP and are located in line with groundwater well number 66 on the PGDP.

G. On August 10, 1988, the DOE's contractor at the PGDP, Martin Marietta Energy Systems, Inc. (Energy Systems), initiated groundwater sampling of private groundwater wells and analyzed the samples for TCE and Tc.

H. To date, approximately 135 residential groundwater wells and 23 monitoring wells on the TVA-SHAWNEE reservation have been sampled. These wells are located around the perimeter of the PGDP. The results of sampling to date indicate that the contaminants TCE and Tc are/or may be present in twelve (12) wells (four of the twelve being residential wells) located north of the PGDP. In six (6) wells (two of the six being residential), analytical results revealed the presence of TCE in excess of the standard (i. e., 5 ug/l) established by EPA for drinking water, promulgated on July 8, 1987.

I. The concentration of TCE detected in the above-mentioned wells ranged from less than 1 ug/l to 960 ug/l. The concentration of technetium in the above-mentioned wells varied from less than 25 to 408 pCi/l. The maximum measured concentration of Tc in a residential well was 408 pCi/l.

J. On August 12, 1988, the PGDP and McCracken County Disaster and Emergency Services personnel contacted ten (10) residents north of the plant and advised them not to drink or bathe in water from their wells. Potable water was supplied to the affected residents via a centrally located water truck equipped with a dispensing nozzle.

K. On August 16, 1988, based on results supplied by Energy Systems, the Commonwealth of Kentucky released five (5) residents from the restriction regarding the use of water from their wells.

L. By August 20, 1988, the remaining five (5) residents were provided with an interim water supply consisting of a 1000 gallon water tank (i. e., one 1000 gallon tank per resident) connected directly to their plumbing. The system was approved for use by the Paducah/McCracken County Health Department. The tanks are filled on a routine schedule or as requested by the residents.

M. On September 9, 1988, the West McCracken Water District issued a bid package for extending water service to the five (5) residents currently on an interim water supply.

N. On September 23, 1988, a contract was awarded to construct the water line extension.

IV. EPA'S CONCLUSIONS OF LAW

For purposes of this Consent Order only, the EPA concludes that:

A. The PGDP is a facility within the meaning of Section 101(9) of CERCLA, as amended, 42 U. S. C. Section 9601(9).

B. The DOE is a person as within the meaning of Section 101(21) of CERCLA, as amended, 42 U. S. C. Section 9601(21).

C. The contaminants found at the site as described in Section III, above are hazardous substances within the meaning of Section 101(14) of CERCLA, as amended, 42 U. S. C. Section 9601(14).

D. There have been releases of hazardous substances into the environment from the facility. The potential migration pathways of the hazardous substances described above constitute both an actual release and a threatened release within the meaning of Section 101(22) of CERCLA, as amended, 42 U. S. C. Section 9601(22).

V. WORK TO BE PERFORMED

Based upon the foregoing, it is AGREED TO AND ORDERED that the following work will be performed at the PGDP:

A. Within sixty (60) days of the effective date of this Consent Order, the DOE shall submit to EPA and the public a draft Work Plan for Investigation of contamination of ground-water and surface water (as described in Section III of this Consent Order) from the PGDP. This Work Plan shall include a sampling plan to determine the extent of surface water and groundwater contamination, both on-site and off-site. At a minimum, the plan shall assess the contamination for the purposes of delineating the plume of groundwater contamination both vertically and horizontally. The Work Plan shall also include: (1) the identification of potential

sources, pathways and receptors, including but not limited to the number of residents using groundwater wells potentially impacted by the groundwater plume, and the number of drinking water intakes within fifteen (15) miles downstream of the PGDP; (2) a field sampling and analysis plan that meets the requirements of Section VII, herein; (3) a description of Quality Assurance/Quality Control procedures that will be used; (4) a health and safety plan; and (5) a schedule for completion of the investigation.

B. Upon receipt of the draft Work Plan, the EPA shall notify DOE in writing of EPA's comments within thirty (30) days.

C. The DOE shall submit a final Work Plan within thirty (30) days of receipt of EPA's and the public's comments. Within fifteen (15) days of receipt of the final Work Plan, EPA shall concur as appropriate.

D. Within forty-five (45) days of receipt of EPA's written approval, the DOE shall commence work as described in the final Work Plan.

E. The DOE shall provide monthly written progress reports to the EPA and the Commonwealth of Kentucky according to the schedule contained in the Work Plan. At a minimum, these reports shall: (1) describe the actions which have been taken toward achieving compliance with the Consent Order; (2) include all results of sampling, tests, and all other data received by the DOE within the reporting period; and (3) include all plans and procedures which are completed subsequent to EPA-approval of the Work Plan, as well as such actions, data, and plans which are scheduled for the next month. These reports are to be submitted to EPA no later than the fifteenth day of each month following the commencement of work by DOE under the Work Plan.

F. The DOE shall provide preliminary and final reports to EPA according to the schedule contained in the Work Plan. These reports shall include: (1) data summaries from the investigation; (2) interpretation of the data collected; and (3) a summary of alternatives for remediation of off-site contamination together with a proposed schedule for the implementation of any such remediation.

G. The EPA shall review the preliminary and final reports and, within sixty (60) days of receipt of the reports, notify DOE in writing of EPA's comments, together with its approval or disapproval of these reports, or any part thereof.

H. Within thirty (30) days of the receipt of any written notification of disapproval from EPA, the DOE shall amend its preliminary or final report and submit the amended report to EPA.

I. Upon approval of the final report submitted under paragraph F, above, the DOE and the EPA agree to amend this Order to include any necessary actions to carry this program to completion.

J. The DOE shall continue to undertake interim measures to protect human health, including but not limited to the following interim measures: (1) supply drinking water to residents with contaminated drinking water wells; (2) conduct sampling, on at least a monthly basis, of drinking water wells potentially affected by migration of contaminants, and of monitoring well number 66; and (3) identify the constituents of any elevated Gross alpha and Gross beta levels and evaluate these concentrations against the National Interim Primary Drinking Water Regulations (NIPDWR, EPA-570/9-76-003).

K. Within thirty (30) days of the effective date of this Consent Order, the DOE shall provide a summary to EPA and the Commonwealth of Kentucky, of any emergency measures already taken and any further necessary interim measures.

L. All documents, including reports, approvals, disapprovals and other correspondence required to be submitted under this Consent Order shall be mailed, by certified mail, to the Designated Project Coordinators identified in Section VI, herein, and copies shall be mailed to the following persons:

1. With respect to the EPA:

Mr. Arthur G. Linton
Federal Facility Coordinator
U. S. EPA, Region IV
345 Courtland Street, N. E.
Atlanta, GA 30365

2. With respect to the DOE:

Dr. Ronald O. Hultgren, Director
Enriching Operations Division
U. S. Department of Energy
Post Office Box 2001
Oak Ridge, Tennessee 37831-8651

3. With respect to the Commonwealth of Kentucky:

Ms. Valerie Hudson,
Deputy Commissioner for Special Projects
Kentucky Natural Resources & Environmental
Protection,
18 Reilly Road
Frankfort, Kentucky 40601

VI. DESIGNATED PROJECT COORDINATORS

On or before the effective date of the Consent Order, EPA and DOE, and the Commonwealth of Kentucky, shall each designate a Project Coordinator. Each Project Coordinator shall be responsible for overseeing the implementation of this Consent Order. The EPA Project Coordinator shall be its designated representative at the site. To the extent possible, communications between EPA and DOE and all documents, including reports, approvals, and other correspondence, concerning the activities performed pursuant to this Consent Order, shall be directed through the Project Coordinators.

EPA and DOE each have the right to change their respective Project Coordinator. Any change shall be accomplished by notifying the other party in writing.

Nothing in this Consent Order shall alter the EPA's or the DOE's authority with respect to removal actions conducted pursuant to Section 104 of CERCLA, as amended, 42 U. S. C. Section 9604.

VII. QUALITY ASSURANCE

The DOE shall use quality assurance, quality control, and chain of custody procedures in accordance with EPA's Region IV Engineering Support Branch Standard Operating Procedures and Quality Assurance manual (U. S. EPA Region IV, Environmental Services Division, April 1, 1986) throughout all sample collection and analytical activities during implementation of the Work Plan. This manual shall be provided to the DOE by the EPA within fourteen (14) calendar days of the effective date of this Consent Order, if it has not previously been made available. In order to provide quality assurance and maintain quality control regarding all samples collected pursuant to this Consent Order, the DOE shall:

A. Ensure that EPA and/or its authorized representatives are allowed access to the laboratory (or laboratories) used by DOE or its contractors for analyses.

B. Submit the QA/QC Plan incorporated within its draft Work Plan within sixty (60) days of the effective date of this Consent Order to ensure that the laboratory (or laboratories) used by the DOE or its contractors for analyses perform such analyses according to EPA methods or methods deemed satisfactory to EPA.

C. Ensure that the laboratory (or laboratories) used by the DOE or its contractors for analyses participate in an EPA quality assurance/quality control program equivalent to that which is followed by EPA and which is consistent with EPA Document No. QAMS-005/80. As a part of such a program, and upon request by

EPA, such laboratory (or laboratories) shall perform analyses of samples provided by EPA to demonstrate the quality of each laboratory's analytical data.

VIII. SITE ACCESS

A. Without limitation on any authority conferred on either EPA, DOE or the Commonwealth of Kentucky by statute or regulation, the EPA, DOE and the Commonwealth of Kentucky, or their authorized representatives, shall have authority to enter the site at all reasonable times for the purposes of, among other things: (1) inspecting records and other documents relevant to the implementation of this Consent Order; (2) reviewing the progress of the DOE or its contractors or other authorized representatives in implementing this Consent Order; and (3) verifying the data submitted to the EPA by the DOE. The DOE shall honor all reasonable requests for access by the EPA or the Commonwealth of Kentucky conditioned only upon presentation of proper credentials. However, such access shall be obtained in conformance with the DOE's security regulations and in a manner minimizing interference with any operations at the PGDP.

B. To the extent that any areas covered by the Work Plan are presently owned or leased by parties other than DOE, the DOE shall use its best efforts to obtain site access from the present owners. The DOE agrees to exercise its authorities pursuant to Section 104(e) of CERCLA, as amended, 42 U. S. C. Section 9604(e) when necessary to obtain access from the present owners and/or lessees. With respect to property not owned/leased by the DOE and upon which any monitoring wells or other response actions are to be located, any access agreements obtained by the DOE after the signing of this Consent Order shall provide for written notice to DOE before a conveyance of title, easement, or other interest in the property is consummated. In the event that property to which DOE has obtained access is subsequently conveyed or leased to a third party, the DOE shall use its best efforts to obtain access from the new owner/lessee so that delays or disruptions in work or other response actions are minimized.

C. In the event that site access is not obtained, the DOE shall immediately notify the EPA and the Commonwealth of Kentucky regarding its efforts to obtain access. Within fifteen (15) days of any such notice, the DOE shall submit any necessary modification(s) to the Work Plan as a result of such inability to obtain access.

D. The DOE may request the assistance of the EPA when access problems arise.

IX. SAMPLING, ACCESS, AND DATA/DOCUMENT AVAILABILITY

A. The EPA and DOE shall make the results of all sampling and/or tests or other data generated by the DOE or on the DOE's behalf available to EPA, the DOE, and the Commonwealth of Kentucky and shall submit these results in monthly progress reports as described in Section V.E. of this Consent Order. The EPA will make available to DOE the results of sampling and/or tests or other data similarly generated by it, consistent with the schedule in Section V.

B. At the request of EPA, and/or the Commonwealth of Kentucky, the DOE shall allow split or duplicate samples to be taken by EPA and/or its authorized representatives, of any samples collected by the DOE pursuant to the implementation of this Consent Order. For the purposes of performing split or duplicate sampling, the DOE Project Coordinator shall provide the EPA and the Commonwealth of Kentucky advance notice of any significant change(s) in its sampling plan.

C. EPA shall allow split or duplicate samples to be taken by the DOE Project Coordinator of any samples collected by EPA or its contractors during the performance of work associated with this Consent Order and shall notify the DOE Project Coordinator not less than seventy-two (72) hours in advance of any sample collection activity.

X. DISPUTE RESOLUTION

Except as specifically set forth elsewhere in this Consent Order, if a dispute arises under this Consent Order, the procedures of this Section shall apply. The parties to this Consent Order shall make reasonable efforts to informally resolve disputes at the Project Coordinator or immediate supervisor level. If resolution cannot be achieved informally, the procedures of this Section shall be implemented to resolve a dispute.

A. Within thirty (30) days after: (1) the period established for review of a draft final preliminary document pursuant to Section V of this Consent Order, or (2) any action which leads to or generates a dispute, the disputing party shall submit to the other party a written statement of dispute setting forth the nature of the dispute, the work affected by the dispute, the disputing party's position with respect to the dispute and the information which the disputing party is relying upon to support its position.

B. Prior to any party's issuance of a written statement of dispute, the disputing party shall engage the other party in informal dispute resolution among the Project Managers and/or

their immediate supervisors. During this informal dispute resolution period the parties shall meet as many times as are necessary to discuss and attempt resolution of the dispute.

C. If agreement cannot be reached on any issue within the thirty (30) day informal dispute resolution period, the disputing party shall forward the written statement of dispute to the Dispute Resolution Committee (DRC) thereby elevating the dispute to the DRC for resolution.

D. The DRC will serve as a forum for resolution of disputes for which agreement has not been reached through informal dispute resolution. The parties shall each designate one individual and an alternate to serve on the DRC. The individuals designated to serve on the DRC shall be employed at the policy level (SES or equivalent) or be delegated the authority to participate on the DRC for the purposes of dispute resolution under this Consent Order. The EPA representative on the DRC is the Waste Management Director of EPA's Region IV. The DOE's designated member is the Director of the Environmental Protection Division of the DOE's Oak Ridge Operations Office. Written notice of any delegation of authority from a party's designated representative on the DRC shall be provided to all other Parties pursuant to the procedures of Section V.L. (Notices).

E. Following elevation of a dispute to the DRC, the DRC shall have twenty-one (21) days to unanimously resolve the dispute and issue a written decision. If the DRC is unable to unanimously resolve the dispute within this twenty-one (21) day period the written statement of dispute shall be forwarded to the Senior Executive Committee (SEC) for resolution.

F. The SEC will serve as the forum for resolution of disputes for which agreement has not been reached by the DRC. The EPA representative on the SEC is the Regional Administrator of EPA's Region IV. The DOE's representative on the SEC is the DOE - Oak Ridge Operations Manager. The SEC members shall, as appropriate, confer, meet and exert their best efforts to resolve the dispute and issue a written decision. If unanimous resolution of the dispute is not reached within twenty-one (21) days, the EPA's Regional Administrator shall issue a written position on the dispute. The DOE may, within twenty-one (21) days of the Regional Administrator's issuance of a written position, issue a written notice elevating the dispute to the Administrator of the U. S. EPA for resolution in accordance with all applicable laws and procedures. In the event that the DOE elects not to elevate the dispute to the Administrator within the twenty-one (21) day escalation period, the DOE shall be deemed to have agreed with the Regional Administrator's written position with respect to the dispute.

G. Upon escalation of a dispute to the Administrator of the U. S. EPA pursuant to Subpart F, the Administrator will review and resolve the dispute within twenty-one (21) days. Upon request, and prior to resolving the dispute, the U. S. EPA Administrator shall meet and confer with the Secretary of the DOE to discuss the issue(s) under dispute. Upon resolution, the Administrator shall provide the DOE with a written final decision setting forth resolution of the dispute.

H. The pendency of any dispute under this Section shall not affect the DOE's responsibility for timely performance of the work required by this Consent Order, except that the time period for completion of work affected by such dispute shall be extended for a period of time usually not to exceed the actual time taken to resolve any good faith dispute in accordance with the procedures specified herein. All elements of the work required by this Consent Order which are not affected by the dispute shall continue and be completed in accordance with the applicable schedule.

I. When dispute resolution is in progress, work affected by the dispute will immediately be discontinued if the Waste Management Division Director for EPA's Region IV requests, in writing, that work related to the dispute be stopped because, in EPA's opinion, such work is inadequate or defective, and such inadequacy or defect is likely to yield an adverse effect on human health or the environment, or is likely to have a substantial adverse effect on the interim measures or implementation process. To the extent possible, the EPA shall give the DOE prior notification that a work stoppage request is forthcoming. After stoppage of work, if the DOE believes that the work stoppage is inappropriate or may have potential significant adverse impacts, the DOE may meet with the Division Director to discuss the work stoppage. Following this meeting, and further consideration of the issues, the Division Director will issue, in writing, a final decision with respect to the work stoppage. The final written decision of the Division Director may immediately be subjected to formal dispute resolution. Such dispute resolution may be brought directly to either the DRC or the SEC, at the discretion of the DOE.

J. Within twenty-one (21) days of resolution of a dispute pursuant to the procedures specified in this Section, the DOE shall incorporate the resolution and final determination into the appropriate plan, schedule, or procedures and proceed to implement this Consent Order according to the amended plan, schedule, or procedures.

K. Resolution of a dispute pursuant to this Section of the Consent Order constitutes a final resolution of any dispute arising under this Consent Order. The DOE shall abide by all

terms and conditions of any final resolution of dispute obtained pursuant to this Section of this Consent Order.

XI. EXTENSIONS

A. Either a timetable and deadline or a schedule shall be extended upon receipt of a timely request for extension and when good cause exists for the requested extension. Any request for extension by the DOE shall be submitted in writing and shall specify:

1. The timetable and deadline or the schedule that is sought to be extended;
2. The length of the extension sought;
3. The good cause(s) for the extension; and
4. Any related timetable and deadline or schedule that would be affected if the extension were granted.

B. Good cause exists for an extension when sought in regard to:

1. An event of force majeure;
2. A delay caused by another party's failure to meet any requirement of this agreement;
3. A delay caused by the good faith invocation of dispute resolution or the initiation of judicial action;
4. A delay caused, or which is likely to be caused, by the grant of an extension in regard to another timetable and deadline or schedule; and
5. Any other event or series of events mutually agreed to by the parties as constituting good cause.

C. Absent agreement of the parties with respect to the existence of good cause, the DOE may seek and obtain a determination through the dispute resolution process that good cause exists.

D. Within seven (7) days of receipt of a request for an extension of a timetable and deadline or a schedule, EPA shall advise the DOE in writing of its respective position on the request. Any failure by EPA to respond within the seven-day

period shall be deemed to constitute concurrence in the request for extension. If EPA does not concur in the requested extension, it shall include in its statement of nonconcurrence an explanation of the basis for its position.

E. If there is consensus among the parties that the requested extension is warranted, the DOE shall extend the affected timetable and deadline or schedule accordingly. If there is no consensus among the parties as to whether all or part of the requested extension is warranted, the timetable and deadline or schedule shall not be extended except in accordance with determination resulting from the dispute resolution process.

F. Within seven (7) days of receipt of a statement of nonconcurrence with the requested extension, the DOE may invoke dispute resolution.

XII. ENFORCEABILITY

A. All Parties to this Consent Order have the right to enforce the terms, conditions, and requirements of this Consent Order.

B. Any person not a party to this Consent Order has the right to commence a civil action against any person who violates the terms, conditions, and requirements of this Consent Order to the extent provided in Section 310 of CERCLA, as amended, 42 U. S. C. Section 9659.

XIII. STIPULATED PENALTIES

A. In the event that the DOE fails to submit a draft Work Plan, Final Work Plan, draft Report, or Final Report required to be submitted under Section VI of this Consent Order to EPA pursuant to the appropriate timetable or deadline in accordance with the requirements of this Consent Order, or fails to comply with a term or condition of this Consent Order which related to an interim response measure, EPA may assess a stipulated penalty against the DOE. A stipulated penalty may be assessed in an amount not to exceed \$5,000 for the first week (or part thereof), and \$10,000 for each additional week (or part thereof) for which a failure set forth in this paragraph occurs.

B. Upon determining that the DOE has failed in a manner set forth in paragraph A, EPA shall so notify the DOE in writing. If the failure in question is not already subject to dispute resolution at the time such notice is received, the DOE shall have fifteen (15) days after receipt of the notice to invoke dispute resolution on the question of whether the failure did in fact occur. The DOE shall not be liable for the stipulated penalty assessed by EPA if the failure is determined, through the dispute resolution process, not to have occurred. No assessment of a

stipulated penalty shall be final until the conclusion of dispute resolution procedures related to the assessment of the stipulated penalty.

C. Stipulated penalties assessed pursuant to this Section shall be payable to the Hazardous Substances Response Trust Fund from the funds authorized and appropriated for that specific purpose.

D. In no event shall this Section give rise to a stipulated penalty in excess of the amount set forth in Section 109 of CERCLA.

E. This Section shall not affect the DOE's ability to obtain an extension of a timetable, deadline or schedule pursuant to Section XI, of this Consent Order.

F. Nothing in this Consent Order shall be construed to render any officer or employee of the DOE personally liable for the payment of any stipulated penalty assessed pursuant to this Section.

XIV. FORCE MAJEURE

A Force Majeure shall mean any event arising from causes beyond the control of a party which causes a delay in or prevents the performance of any obligation under this Consent Order, including, but not limited to, acts of God; fire; war; insurrection; civil disturbance; explosion; unanticipated breakage or accident to machinery, equipment or lines of pipe despite reasonably diligent maintenance; adverse weather conditions that could not be reasonably anticipated; unusual delay in transportation; restraint by court order or order of public authority; inability to obtain, at reasonable cost and after exercise of reasonable diligence, any necessary authorizations, approvals, permits or licenses due to action or inaction of any governmental agency or authority other than the DOE; delays caused by compliance with applicable statutes or regulations governing contracting, procurement or acquisition procedures, despite the exercise of reasonable diligence; and insufficient availability of appropriated funds, if the DOE shall have made timely request for such funds as part of the budgetary process as set forth in Section XV (Funding) of this Consent Order. A Force Majeure shall also include any strike or other labor dispute, whether or not within the control of the parties affected thereby. Force Majeure shall not include increased costs or expenses of Response Actions, whether or not anticipated at the time such Response Actions were initiated.

XV. FUNDING

It is the expectation of the parties to this Consent Order that all obligations of the DOE arising under this Consent Order will be fully funded. The DOE shall take all necessary steps and make efforts to obtain timely funding to meet its obligations under this Consent Order.

Any requirement for the payment or obligation of funds by the DOE established by the terms of this Consent Order shall be subject to the availability of appropriated funds, and no provision herein shall be interpreted to require obligation or payment of funds in violation of the Anti-Deficiency Act, 31 U. S. C. Section 1341. In cases where payment or obligation of funds would constitute a violation of the Anti-Deficiency Act, the dates established requiring the payment or obligation of such funds shall be appropriately adjusted.

If appropriated funds are not available to fulfill the DOE's obligations under this Consent Order, the EPA reserves the right to initiate any other action which would be appropriate absent this Consent Order.

XVI. INCORPORATION OF REPORTS

Any reports, plans, specifications, schedules, and attachments required by this Consent Order are, upon approval by EPA, 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.

XVII. PUBLIC PARTICIPATION

The DOE shall make the draft Work Plan available to the public for review and comment for, at a minimum, a twenty-one (21) day period. Following the public review and comment, the DOE shall notify the EPA of any proposed changes to the Work Plan requested during the public comment period. The DOE shall prepare a Response to Comments which includes the reason(s) why requested changes were/were not adopted. The DOE shall make available to the public, the final report prepared by it upon completion of the final Work Plan.

XVIII. OTHER CLAIMS

Nothing in this Consent Order shall constitute or be construed as a bar or release from any claim, cause of action or demand in law or equity by or against any person, firm, partnership 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, hazardous or solid wastes, pollutants, or contaminants found at, taken to, or taken from the PGDP.

The EPA shall not be held as a party to any contract entered into by the DOE to implement the requirements of this Consent Order.

This Consent Order shall not restrict the EPA from taking any legal or response action for any matter not specifically part of the work covered by this Consent Order.

XIX. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to this Consent Order shall be undertaken in accordance with the requirements of all applicable state and federal laws and regulations to the extent required by CERCLA, as amended, 42 U. S. C. Section 9601, et seq.

XX. CONFIDENTIAL INFORMATION

The DOE may assert a confidentiality claim covering all or part of the information requested by this Consent Order. Analytical data shall not be claimed as confidential by the DOE. Information determined to be confidential by the EPA pursuant to 40 C. F. R. Part 2 shall be afforded the protection specified therein. If no claim of confidentiality accompanies the information when it is submitted to the EPA, the information may be made available to the public without further notice to DOE. Notwithstanding any other provision of law, all requirements of the Atomic Energy Act (AEA), 42 U. S. C. Sections 2011, et seq. and all Executive orders concerning the handling of restricted data and national security information, including "need to know" requirements, shall be applicable to any grant of access to classified information under the provisions of this Consent Order.

XXI. MODIFICATION OF CONSENT ORDER

This Consent Order may be modified or amended by mutual agreement of EPA and DOE. Such modifications shall be in writing and shall be subject to the approval of the Attorney General of the United States, or his delegate, in the same manner and form as this Consent Order.

XXII. NOTICE TO THE STATE

EPA has notified the Commonwealth of Kentucky pursuant to Section 106(a) of CERCLA, as amended, 42 U. S. C. Section 9606(a).


XXIII. TERMINATION

The provisions of this Consent Order shall be deemed satisfied and terminated upon receipt by the DOE of written notice from the EPA, that the DOE has demonstrated, to the satisfaction of the EPA, that all the terms of this Consent Order have been completed.

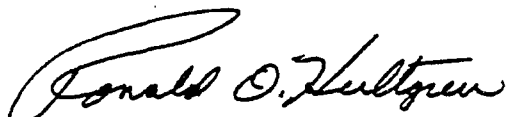
XXIV. EFFECTIVE DATE

The effective date of this Consent Order will be the date on which it is concurred upon by the Attorney General of the United States or delegate, following the signatures of the EPA and DOE.

IT IS SO AGREED:

BY:  11-4-88
J. Winston Porter, Assistant Administrator Date
Office of Solid Waste and Emergency Response
U. S. Environmental Protection Agency

IT IS SO AGREED:

BY:  10-20-88
Dr. Ronald O. Hultgren, Director Date
Enriching Operations Division
U. S. Department of Energy