

**R-009-204.17**

**2497**

**REPORT OF STATUS ON PARTS 1, 2 & 3**

**11/20/91**

**10  
ENCLOSURE  
OU5**

**Part 1 - Alternate Water Supply**

The Work Plan for the Alternate Water Supply, Part 1 of the South Groundwater Contamination Plume Removal Action, was approved on January 3, 1991, by the U.S. Environmental Protection Agency (U.S. EPA) and conditionally approved on January 9, 1991, by the Ohio Environmental Protection Agency (Ohio EPA). Within the Work Plan, a schedule was presented which indicated that construction would be completed by December 13, 1991. The Department of Energy (DOE) is requesting an extension of approximately seven (7) months to the milestone, which revises the completion of construction date to July 14, 1992.

Following are the activities that have led to the schedule delay:

- The Work Plan was not approved by U.S. EPA until January 3, 1991, and by Ohio EPA on January 9, 1991. The plan was originally submitted to the EPAs on October 3, 1990, and expected to be approved by November 5, 1990.
- One of the comments raised by Ohio EPA in their October review of the Work Plan was technical justification that installing a deeper well on Delta Steel's property would not jeopardize future remediation efforts. Because this concern could not be adequately addressed within the 30-day period allocated for revision of the Work Plan, and a re-evaluation on the part of DOE of the appropriateness of having a potable well in a known contaminated area, a decision was made to move the Delta Steel well out of the contaminated zone. This was reflected in the revised Work Plan.
- On the basis of discussions with Ohio EPA, it was determined that the Part 1 well field should meet state requirements for a public drinking water supply. Review of the State of Ohio criteria determined that a minimum 300 foot radius of controlled property would be needed around each well. Therefore, since Albright & Wilson Americas, Inc. (AWA) would not agree to permit the Delta Steel supply to be a tap from their water supply, the decision to provide an off-site well for Delta Steel caused a significant impact to the well field design criteria and schedule.
- The U.S. Army Corps of Engineers (COE) began negotiations for an approximately 22-acre well field with the owner of the proposed property on January 14, 1991, immediately after the Work Plan was approved by U.S. EPA and Ohio EPA. It was determined in the course of negotiations,

that the property parcel on which the well field was proposed to be located was part of a larger land trust property. Because of the reluctance of the Trust spokesperson to agree to the test well installation, an investigation was made into moving the well field to another property. However, because of the need for a 22-acre site, no other single property was available in the area. Therefore, it was decided to continue negotiating with the Trust, rather than trying to negotiate with several property owners. However, because the negotiations extended beyond 30 days, a Litigation Report was prepared and subsequently issued to the Department of Justice. As part of the continued negotiations with the Trust spokesperson, it was agreed to relocate the well field to the western end of the Trust property in order to reduce the potential impact to future development of the Trust property. After this condition was addressed, and other issues were resolved, the owner reluctantly agreed to sign the "right of entry" allowing DOE to proceed with the installation of the test well on March 21, 1991, (total time to acquire right of entry was approximately two (2) months).

- In March 1991, conversations were held with Advanced Sciences, Inc./International Technologies Corporation (ASI/IT), the Remedial Investigation/Feasibility Study (RI/FS) Contractor, regarding modifications needed to the Test Well Scope of Work. A revised plan was prepared to address AWA, Delta Steel, and possible future demand requirements and approval to proceed was issued. Contractor mobilization began on July 8, 1991 and drilling of the test well began on July 15, 1991. During the course of the drilling operation, a one-month delay was incurred to address health and safety concerns. The drilling operation was completed on September 16, 1991. Testing of the well began on September 17, 1991, but was put on hold after the tenant farmer expressed his concern regarding flooding of the farm land. Unfortunately, the schedule delay had pushed the well testing to coincide with his harvesting time. Additional measures were taken to resolve this issue and allow testing and sampling to proceed. Full radiological and HSL samples were taken on September, 26, 1991. Sample analysis results are expected by December 10, 1991, (Total time projected to revise and approve Work Plan, procure contractor, drill, develop, test, sample well, and receive analysis is expected to take approximately nine (9) months).

- In order to comply with the requirements of the National Historic Preservation Act, Section 106, an archeological/historical (A/H) survey of the area impacted by the Alternate Water Supply Project was deemed necessary. Since it was necessary to expedite the installation of the test well, the survey was performed in a phased approach, giving priority to the well field area. The procurement activity needed to bring the COE on board to perform the archeological/historical survey took approximately two months. The first phase of the survey was performed by the COE on May, 14-16, 1991, at the well field area, and the second phase on June 3-6, 1991, along the proposed pipeline layout. The letters reporting the findings on both phases of the survey were submitted on May 31, 1991, and June 26, 1991, respectively. Based on the COE's May 31, 1991, letter report and conversations being held with the State Historical Preservation Officer (SHPO), DOE approved the installation of the test well on June 14, 1991, (total time to procure and perform the survey was approximately three (3) months).
- The Alternate Water Supply design package transmitted to U.S. EPA and Ohio EPA on January 31, 1991, only included the AWA System and showed the well field on the original easterly location. As explained previously, the well field needed to be moved to a more westerly location per agreement with the Trust spokesperson. Additional negotiations with AWA followed during the months of March through July 1991. A field inspection of their system held in July, required additional design changes be made. These changes were incorporated into the 100 percent design package transmitted to the U.S. EPA and Ohio EPA on September 19, 1991.
- From cursory discussions, Delta Steel was not receptive to DOE's proposal to supply their water from a well field located away from their facility. However, no firm decision was made on DOE's proposal until the August 14, 1991 meeting when they expressed no interest in an alternate water supply system. Another meeting was held with Delta Steel on October 3, 1991, at which DOE presented some modifications to the original proposal. A mutual agreement was made whereby DOE would install a system with sufficient infrastructure that a future demand of up to 150 gpm could be provided with minimum modifications and provide that their internal piping system would be either decontaminated or replaced. DOE agreed to operate the system until the Public Water

Supply becomes a reality at which time Delta Steel would be switched to the public supply. DOE is currently preparing a written agreement based on the terms of the verbal agreement.

The CFC package containing both AWA and Delta Steel is scheduled to be issue to the U.S. EPA and Ohio EPA by December 27, 1991. Issuance of the CFC package is contingent upon receiving acceptable laboratory analysis results on the quality of the well field's groundwater.

Following are the key contingency assumptions being made which support the revised milestone date:

- Test well results support the proposed well field location.
- Access to perform soil sampling is obtained by December 10, 1991, (no CERCLA 104(e) Action is required).
- Access to remove any contaminated soil as determined by the soil survey is obtained by January 30, 1992.
- Approval from the Ohio EPA, Division of Public Drinking Water, on the CFC Design for the Alternate Water Supply is obtained by March 9, 1992 and no changes to the design are required.
- Easements are acquired by March 9, 1992.

#### Part 2 - Pumping and Discharge

The Work Plan for the Pumping and Discharge, Part 2 of the South Groundwater Contamination Plume Removal Action was approved by the U.S. EPA and Ohio EPA on April 24, 1991. The schedule contained in the Work Plan indicated an operation date of April 23, 1992. The DOE requests an extension of approximately nine (9) months to the system operation milestone date which revises the system operation date to January 29, 1993.

Following are the activities that have led to the schedule delay:

- DOE requested a February 8, 1991 meeting in Dayton, Ohio, with the U.S. EPA and Ohio EPA to review and discuss responses to comments on the 50 percent Part 2 design package. During the meeting, Ohio EPA expressed concerns regarding the recovery well field location and how it would affect the Paddy's Run Road Site (PRRS)

contaminants. It was determined at that time that a meeting with the Regulators, DOE and PRRS was needed to discuss potential impact to the PRRS contaminants by the recovery wells. This meeting was scheduled to be held on February 20, 1991.

- At the February 20, 1991 meeting, it was determined that the operation of the recovery well field location, as described in the November 1990 Engineering Evaluation/ Cost Analysis (EE/CA) for the South Groundwater Contamination Plume Removal Action, could potentially impact the PRRS contaminants. Accordingly, it was envisioned that the well field would need to be relocated approximately 500 to 1000 feet north from the original location at New Haven Road.
- Based on the information discussed at the February 20 meeting, DOE revised the Part 2 Work Plan. The revised Work Plan was submitted for review on March 11, 1991. The Work Plan was approved by U.S. EPA and Ohio EPA on April 24, 1991.
- On March 12, 1991, a preliminary proposal from ASI/IT was received which included the additional groundwater modeling needed to relocate the recovery well field. In an attempt to relocate the recovery well field north of New Haven Road, while at the same time keeping downgradient of the uranium concentration level of 30 ppb and also minimizing interference with the existing businesses and physical obstructions in the vicinity, WEMCO proposed that the recovery well field be located behind the Ready Mix Concrete Company at New Haven Road, as shown in Figure 1. Comments on the preliminary proposal, including the proposed new location for the recovery wells, were transmitted to ASI/IT. A new proposal was received from ASI/IT on April 15, 1991. The new proposal included additional groundwater sampling on existing wells and hydropunching to better define the location of the 30 ppb uranium isopleth, a soil vapor survey to delineate the boundary of the PRRS plume and groundwater modeling. On May 16, 1991, additional comments were transmitted to ASI/IT on the new proposal. The Final Draft of this proposal was submitted to U.S. EPA and Ohio EPA on May 17, 1991. A meeting was scheduled to be held in Chicago on May 22, 1991, with the U.S. EPA and Ohio EPA to discuss the proposed plan to relocate the recovery wells.

- At the May 22, 1991 meeting in Chicago, various issues were discussed regarding the contaminants from the PRRS and potential impact by the Part 2 recovery wells. In addition, new unvalidated data from the PRRS was presented by Ohio EPA which indicated that cumene, a footprint contaminant from the PRRS, was much nearer to the proposed well field than previously thought. Therefore, operation of a uranium recovery well field, even at 500 to 1000 feet north of New Haven Road could result in the spreading of the PRRS contaminants and/or extraction and discharge of PRRS contaminants to the Great Miami River (Part 3 IAWWT System will only address uranium). At the meeting, many changes to the proposal were made. Based on this new information, it was agreed that the well field would be moved immediately north of the AWA Facility, completely upgradient of the PRRS contamination. It was agreed that further studies would be made to evaluate any potential impact on the PRRS inorganics resulting from the new location. Complications arose when it was determined that higher uranium levels found at the revised location could jeopardize the equivalent mass concept agreed to in the EE/CA dispute resolution on November 1990. DOE agreed to evaluate the possibility of increasing the capacity of the IAWWT uranium removal system to compensate for the increase in uranium concentration at the new proposed location.
- On June 5, 1991, following EPA approval ASI/IT was directed to proceed on the groundwater modeling effort to relocate the well field. The initial computer runs indicated that a proposed well field location just north of AWA near the Texas Gas easement would not be acceptable. Accordingly, the well field was moved farther north until a location was found which would not have significant impact on specific points of known inorganic and organic contamination.
- The final location of the well field and issues related to the new location, i.e., higher uranium concentration, additional treatment, schedule impacts and revisions to the Part 5 Work Plan, were discussed at a July 23, 1991 meeting with U.S. EPA and Ohio EPA. The proposal discussed addressed U.S. EPA and Ohio EPA concerns on the uranium compensation issue by combining additional IAWWT treatment with a less than full hydraulic barrier. 6
- On August 29, DOE presented a revised proposal to U.S. EPA and Ohio EPA which called for an even larger

additional IAWWT treatment capacity and which would require no restriction to pumping operations. Following are the key assumptions which support the revised milestone date:

- No changes are required to address public comments on the EE/CA Addendum.
- Soil Sampling access is obtained by January 22, 1992.
- Should it be necessary to remove contaminated soils on private property, construction access is required by March 10, 1992.
- Easements are acquired by April 19, 1992.

### Part 3 - Interim Advanced Wastewater Treatment (IAWWT) System

The Work Plan for the Interim Advanced Wastewater Treatment (IAWWT) System, Part 3 of the South Groundwater Contamination Plume Removal Action was approved by U.S. EPA and Ohio EPA on April 24, 1991. The current milestone date for system operation is April 23, 1992, as shown in the Work Plan. The DOE requests an extension of approximately three (3) months to the system operation milestone date which revises the system operation date to July 30, 1992.

Following are the activities that have lead to the schedule delay:

- On July 23, 1991, DOE presented to the U.S. EPA and Ohio EPA the results from the groundwater modeling which support the new proposed location of the Part 2 recovery wells. The new proposed location of the Part 2 recovery wells is in an area of higher uranium concentration. This would jeopardize the equivalent mass concept as described in the November 1990 EE/CA. Accordingly, the Part 3 IAWWT system will be increased in capacity to provide the additional treatment necessary to meet the previously agreed to reduction in Fernald Environmental Management Project (FEMP) uranium discharge level to 1700 pounds per year.
- On August 29, 1991, a proposal was presented by DOE which described how this additional treatment capability will be provided. Following the meeting on September 4, 1991, an Engineering Change Proposal (ECP) was issued allowing the A/E to proceed with the required modifications on the IAWWT Design packages. The changes to the design of the

IAWWT Trailers portion was completed and re-issued for bid on October 25, 1991. The revisions to the IAWWT Utilities Service design package is in progress and is expected to be completed on November 22, 1991.

- Note that the July 30, 1992 operation date coincides with the Waste Pit Area Runoff Control Removal Action. This date will, therefore, still satisfy one of the original issues raised during the dispute resolution for the South Groundwater Contamination Plume Removal Action, which was to have the Part 3 IAWWT system in operation to prevent an increase in the (FEMP) uranium mass discharge when the Waste Pit Removal Action commences.

Following are the key contingency assumptions being made which support the revised milestone date:

- Obtain approval of the Finding of No Significant Impact (FONSI) for the EE/CA Environmental Assessment by DOE-HQ prior to the scheduled start of construction on January 20, 1992.
- Ability of low-bid contractor, for the trailer portion of the design/build package, to receive bonding in a timely manner.

#### SUMMARY OF PROPERTY ACCESS STATUS

The U. S. Army Corps of Engineers (COE) continues negotiation of right of entry for access to properties being affected by this removal action. All access referrals were made to the Department of Justice within the required timeframes.

#### **Part 1 - Alternate Water Supply**

Access agreements or right of entry for survey and exploration (soil sampling) have been obtained on six properties of the seven being affected by the alternate water supply pipeline, (i.e., Mandery Trust, Clayton and Rose Ann Burton, Clarence Roy, CSX Realty, Delta Steel, and Albright & Wilson Americas, Inc.). Mr. Frank K. Linesch has in many occasions denied U.S. DOE access. A letter of demand requiring access to perform a subsurface investigations was transmitted to Mr. Linesch on October 30, 1991. The DOE has directed the COE to submit the necessary documentation, as required by the Department of Justice (DOJ), to process the claim in court. An affidavit to document the need for access is being prepared and will become a part of this package.

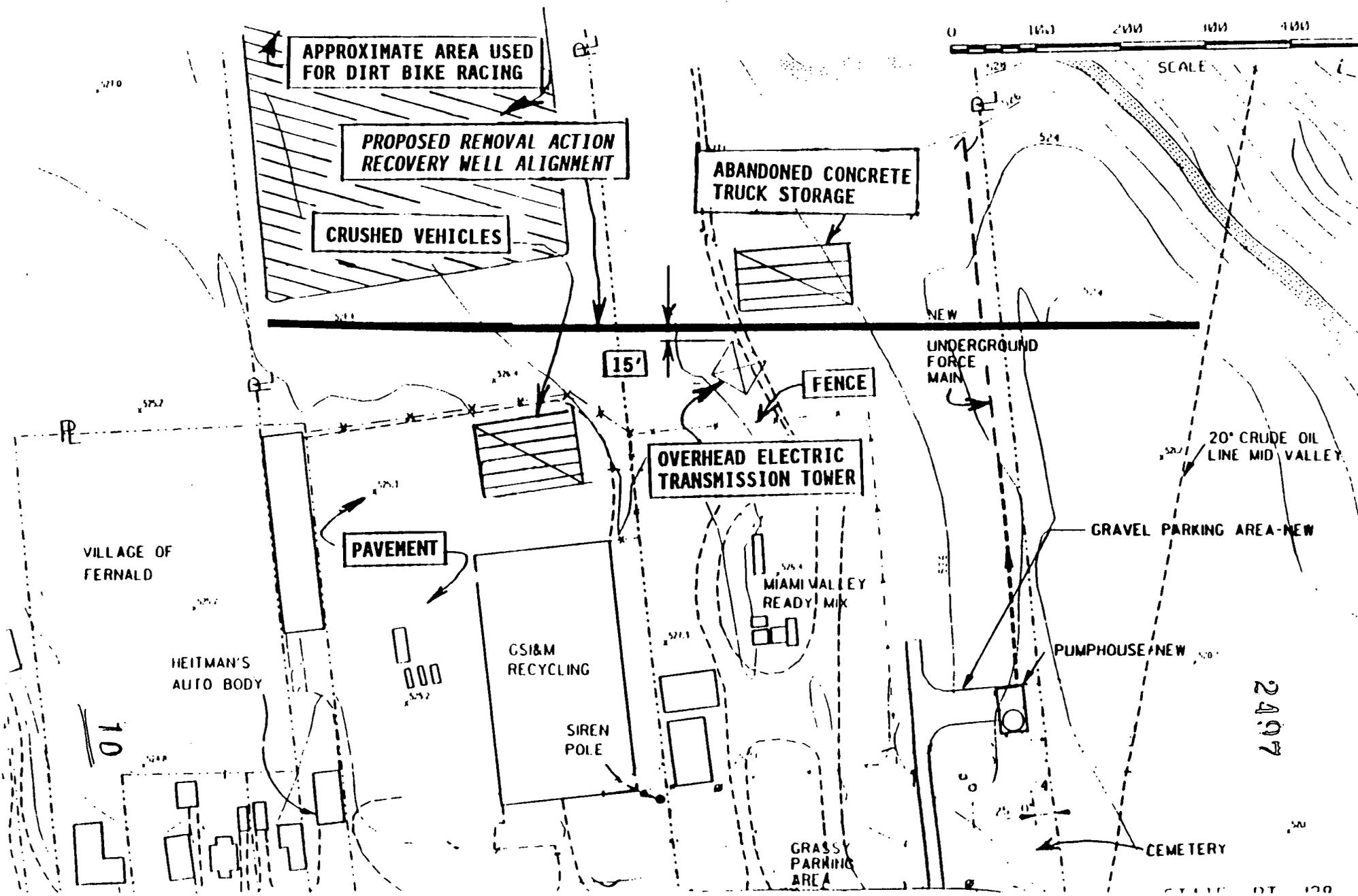
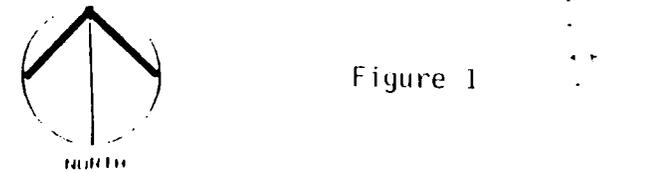
Access for construction is being negotiated in advance of starting easement negotiations. Accordingly, five owners have granted access. Mr. Linesch has denied access and the Mandery Trust has made an unacceptable offer.

The COE will begin easement negotiations after groundwater samples analysis are received. This is expected to occur on December 11, 1991. All documentation needed to support this activity have been obtained.

#### **Part 2 - Pumping and Discharge**

Easement negotiations in support of the Part 2 project were put on hold until final location of the well field was determined. A letter will be transmitted to the COE to begin negotiations with the Cincinnati Gas and Electric, owner of the easement in which the outfall pipeline is located, and Mr. Knollman.

Figure 1



ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1989												1990												1991												1992											
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
				ALTERNATE WATER SUPPLY - PART 1 MILESTONES																																															
5R30E01M3E	0	30MAR90A		<ul style="list-style-type: none"> <li>◆ Initiate Title I/II Design</li> <li>◆ Submit EE/CA to USEPA</li> </ul>																																															
5R30E01M3K	0	1MAY90A																																																	
5R30E01M3H	0	26DEC91		<ul style="list-style-type: none"> <li>◆ CFC</li> <li>◆ CWO - Construction</li> <li>Construction End ◆</li> <li>Initiate Start-up ◆</li> <li>Project Complete ◆</li> </ul>																																															
5R30E01M4C	0	9MAR92																																																	
5R30E01M4F	0	14JUL92																																																	
5R30E01M7H	0	15JUL92																																																	
5R30E01M8B	0	14SEP92																																																	
				SUMMARY ACTIVITIES																																															
5R30E02H41	0	14JUL89A	15NOV90A	EE/CA																																															
5R30E02H40	26	19MAR90A	6JAN92	Work Plan																																															
5R30E02H15	20	30MAR90A	26DEC91	Design																																															
5R30E02H42	91	9MAR92	14JUL92	Removal/Corrective Action																																															
				ASI/IT SUPPORT ACTIVITIES																																															
5R30E04010	0	17JUN91A	2JUL91A	Prep/Rvw/Approv of Revd Scope of Work (Test Well)																																															
5R30E04020	0	3JUL91A	16SEP91A	ASI/IT Procure/Mobilize/Drill Test Well																																															
5R30E04065	0	16SEP91A	26SEP91A	ASI/IT Perform Test/Collect Samples																																															
5R30E04070	0	25SEP91A	25OCT91A	ASI/IT Water Sample Analysis																																															
5R30E04150	10	40CT91A	10DEC91	Prep/Review/Approv Scope of Work (Smpl/Analy Prop)																																															
5R30E04075	10	28OCT91A	10DEC91	ASI/IT Prepare/Issue Report for Well Site																																															
5R30E04100	34	11DEC91	30JAN92	ASI/IT Soil Sampling/Analysis Completed																																															
				ENGINEERING EVALUATION/COST ASSESSMENT																																															
5R30E15030	0	14JUL89A	8SEP89A	Prepare & Submit Draft EE/CA Documents to DOE																																															
5R30E15035	0	19SEP89A	27OCT89A	DOE/FEMP EE/CA Review																																															
5R30E15040	0	30OCT89A	18DEC89A	Resolve DOE/FEMP EE/CA Comments & Resubmit																																															
5R30E15045	0	27NOV89A	13APR90A	Establish Admin Record & Info Repository																																															
5R30E15050	0	1MAR90A	13APR90A	Prepare Community Relations Plan																																															
5R30E15055	0	30MAR90A	12APR90A	DOE/HQ Review & Approve EE/CA Document																																															
5R30E15060	0	30MAR90A	30MAR90A	IDOE/FEMP Approval of Final EE/CA Document																																															
5R30E15065	0	16APR90A	14JUN90A	Public Comment Period - EE/CA (incl 30 cd ext)																																															
5R30E15070	0	16APR90A	15MAY90A	EPA Review of EE/CA Document																																															
5R30E15075	0	16APR90A	16APR90A	Publish EE/CA & AR Notice of Availability																																															
5R30E15080	0	18JUN90A	17JUL90A	DOE Request Extension - EE/CA Resubmittal to EPA																																															
5R30E15085	0	18JUL90A	4SEP90A	USEPA Review EE/CA (Inform.Disp.Res. Initiated)																																															
5R30E15090	0	27AUG90A	27SEP90A	DOE HQ Approval of NEPA Memo to File																																															
5R30E15095	0	4SEP90A	4SEP90A	Removal Action Memorandum Signed (LTR REF 5HR12)																																															
5R30E15100	0	4OCT90A	25OCT90A	USEPA/DOE Initiate Formal EE/CA Disp. Resolution																																															
5R30E15105	0	25OCT90A	25OCT90A	USEPA Approves EE/CA With Comments																																															
5R30E15110	0	15NOV90A	15NOV90A	EE/CA Revised to Incorporate Comments & Submit to USEPA																																															

Activity Not/Being Done  
Critical Activity  
Program Bar

Westinghouse Environmental Mgmt. Co.  
S. Grndwtr Contam. Plume - Part 1  
LEVEL IV DETAIL SCHEDULE

Sheet 1 of 3

Prepared by Control Planning & Integration

Date	Revisions	Checked	Approved

Date Date: 25NOV91  
Plot Date: 20NOV91

Project Start: 1JUL86  
Project Finish: 14SEP92

2497

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1990												1991												1992												1993											
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
				ALTERNATE WATER SUPPLY - PART 1																																															
				WORK PLAN																																															
5R30E22000	0	19MAR90A	28SEP90A	<input checked="" type="checkbox"/> WEMCO Develop Work Plan <input checked="" type="checkbox"/> EPA Review/Approve Work Plan (w/ Comments) <input checked="" type="checkbox"/> Submit Work Plan to USEPA <input checked="" type="checkbox"/> WEMCO Revise WP Based on USEPA Comments <input checked="" type="checkbox"/> EPA Review/Condtl Approve Revised WP w/comments WEMCO Prep/Use Rev WP incl Smpl/Anly Plan to EPA <input checked="" type="checkbox"/> EPA Rev/Approv the WP incl Samplg/Analysis Plan <input type="checkbox"/>																																															
5R30E22010	0	30CT90A	5NOV90A																																																
5R30E22005	0	30CT90A	30CT90A																																																
5R30E22011	0	6NOV90A	4DEC90A																																																
5R30E22012	0	5DEC90A	9JAN91A																																																
5R30E22150	4	18JUN91A	2DEC91																																																
5R30E22160	22	3DEC91	6JAN92																																																
				DESIGN																																															
5R30E25200	0	29NOV89A	1DEC89A	<input type="checkbox"/> Prepare & Submit ECP <input type="checkbox"/> TRB Review of ECP <input type="checkbox"/> CCB Review of ECP <input type="checkbox"/> Final Review and Approval of ECP <input checked="" type="checkbox"/> Issue ECP Approved <input checked="" type="checkbox"/> A-E Prepare Proposal <input checked="" type="checkbox"/> Prep. & Send Title I/II RFP to A/E - AWS <input type="checkbox"/> A-E Submits Proposal <input checked="" type="checkbox"/> Technical Evaluation <input checked="" type="checkbox"/> Negotiations <input checked="" type="checkbox"/> Contract Modification Issued <input checked="" type="checkbox"/> Design Kick-Off Meeting <input checked="" type="checkbox"/> 50% Title I/II Design <input checked="" type="checkbox"/> Easement Package <input checked="" type="checkbox"/> 90% Title I/II - Design Review Pkg (AWA Commit.) <input checked="" type="checkbox"/> 100% Cost Estimate (Revision) - AWA <input checked="" type="checkbox"/> 100% Title I/II Design (Revision) - AWA 100% Design & Estimate Review (Revision) - AWA <input checked="" type="checkbox"/> Complete Title I/II Design (Revision) - AWA <input checked="" type="checkbox"/> Complete Title I/II Design (Revision) - AWA/DS <input checked="" type="checkbox"/> <input type="checkbox"/> Construction Permits <input type="checkbox"/> CFC Review & Approval/AE Prep.																																															
5R30E25205	0	1DEC89A	5DEC89A																																																
5R30E25211	0	6DEC89A	13DEC89A																																																
5R30E25215	0	14DEC89A	21DEC89A																																																
5R30E25221	0	21DEC89A	21DEC89A																																																
5R30E25300	0	22DEC89A	12JAN90A																																																
5R30E25302	0	11JAN90A	24JAN90A																																																
5R30E25305	0	12JAN90A	16JAN90A																																																
5R30E25310	0	17JAN90A	7FEB90A																																																
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5R30E25330	0	30MAR90A	30MAR90A																																																
5R30E25335	0	3APR90A	4OCT90A																																																
5R30E25340	0	3APR90A	27JUN90A																																																
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5R30E25365	0	9AUG91A	30AUG91A																																																
5R30E25367	0	3SEP91A	19SEP91A																																																
5R30E25380	0	14OCT91A	1NOV91A																																																
5R30E25360	15	29OCT91A	17DEC91																																																
5R30E25370	10	11DEC91	26DEC91																																																
				EASEMENTS																																															
5R30E73010	0	10JAN91A	21MAR91A	<input checked="" type="checkbox"/> COE Negotiate & Finalize Well Site Access <input checked="" type="checkbox"/> OEPA Jurisdiction Confirmed for Well Site Param.s <input checked="" type="checkbox"/> COE Arch./Hist. Study/Rpt. on Well Site (no rfc) COE Arch./Hist. Study/Rpt. on Pipeline (no rfc) <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> IDOE-FSO Approval to Proceed Based on COE A/H Rpt COE Obtain Access for Soil Sampling/Analysis <input checked="" type="checkbox"/> A/H Apprv by SHPO - Well Site/Pipeline <input checked="" type="checkbox"/> COE Obtain Title for Well Site Property <input type="checkbox"/>																																															
5R30E73030	0	18APR91A	13JUN91A																																																
5R30E73020	0	14MAY91A	4JUN91A																																																
5R30E73080	0	4JUN91A	28JUN91A																																																
5R30E73040	0	14JUN91A	14JUN91A																																																
5R30E73110	10	20JUN91A	10DEC91																																																
5R30E73090	10	1JUL91A	10DEC91																																																
5R30E73070	60	11DEC91	6MAR92																																																

1.2

2407

Activity Not/Early Start  
 Critical Activity  
 Progress Bar

Primavera Systems, Inc. 1984-1991

Project Start : 1JUL86  
Project Finish: 14SEP92

Westinghouse Environmental Mgmt. Co.  
S. Grndwtr Contam. Plume - Part 1  
LEVEL IV DETAIL SCHEDULE

Sheet 2 of 3

Date Date: 25NOV91  
Plot Date: 26NOV91

Prepared by: Central Planning & Integration			
Date	Revision	Checked	Approved

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1991												1992												1993											
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
				ALTERNATE WATER SUPPLY - PART 1 EASEMENTS																																			
5R30E73120	60	11DEC91	6MAR92																																				
5R30E73125	34	11DEC91	30JAN92	COE Obtain Pipeline Easement <input type="checkbox"/>																																			
				COE Obtain Construction Access for Soil Rmvl <input type="checkbox"/>																																			
				BID AND AWARD																																			
5R30E74001	0	23SEP91A	23SEP91A	WEMCO PM/PE Notify RUST of Upcoming Pkg																																			
5R30E74005	0	24SEP91A	27SEP91A	RUST Prep Advance Notice																																			
5R30E74010	0	30SEP91A	30SEP91A	RUST Issue Advance Notice																																			
5R30E74015	1	27DEC91	27DEC91	WEMCO Recv CFC Dwgs/Specs from A/E																																			
5R30E74020	2	30DEC91	31DEC91	WEMCO PE Writes/Sends RCA to RUST																																			
5R30E74025	2	2JAN92	3JAN92	RUST PE Writes/Sends Req to RUST Purch																																			
5R30E74030	5	6JAN92	10JAN92	RUST Purch Preps/Issues IFB Pkg (Inc S/C Plan) <input type="checkbox"/>																																			
5R30E74040	20	13JAN92	7FEB92	WEMCO Issue CWO to RUST (Cleanup Contamin.) <input type="checkbox"/>																																			
5R30E74090	5	31JAN92	6FEB92	RUST Recv Bids (Inc S/C Plan) <input type="checkbox"/>																																			
5R30E74035	5	10FEB92	14FEB92	RUST Purch Writes/Sends Pur Letter to WEMCO Proc <input type="checkbox"/>																																			
5R30E74045	1	17FEB92	17FEB92	RUST Conduct Pre-Award Survey <input type="checkbox"/>																																			
5R30E74050	5	18FEB92	24FEB92	RUST Eval S/C Plan																																			
5R30E74055	5	18FEB92	24FEB92	WEMCO Proc Conduct Revw of Pur Letter																																			
5R30E74060	5	18FEB92	24FEB92	WEMCO PE Conduct Revw of Pur Letter																																			
5R30E74065	2	25FEB92	26FEB92	WEMCO QA Conduct Revw of Pur Letter																																			
5R30E74070	2	25FEB92	26FEB92	WEMCO Proc Appv																																			
5R30E74075	2	25FEB92	26FEB92	WEMCO Issue CWO to RUST																																			
5R30E74080	1	27FEB92	27FEB92																																				
5R30E74085	1	28FEB92	28FEB92																																				
				CONSTRUCTION																																			
5R30E78520	22	7FEB92	9MAR92	Cleanup Contaminated Areas (RUST) <input type="checkbox"/>																																			
5R30E78500	80	10MAR92	29JUN92	Install Alternate Water Supply System <input type="checkbox"/>																																			
5R30E78525	10	30JUN92	14JUL92	System Operability Checkout <input type="checkbox"/>																																			
5R30E78510	44	15JUL92	14SEP92	Startup of AWS Sys. (Initial Acceptance Period) <input type="checkbox"/>																																			



Activity No./Early Date  
 Critical Activity  
 Program No.

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 1  
 LEVEL IV DETAIL SCHEDULE

Sheet 3 of 3

Prepared by: Critical Planning & Integration

Date	Revision	Checked	Approved

Primavera Systems, Inc. 1988-1991

Project Start : 1JUL88  
 Project Finish: 14SEP92

Date Date: 25NOV91  
 Plot Date: 20NOV91



2407

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1990												1991												1992												1993																															
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC																				
				PUMPING AND DISCHARGE - PART 2																																																																			
				MILESTONES																																																																			
				<ul style="list-style-type: none"> <li>↓ CDR Start</li> <li>↓ Start Preliminary Engineering</li> <li>↓ Complete Well Field Data Interpretation</li> <li>↓ Start Title I/II Design</li> <li>↓ Submit EE/CA to USEPA</li> </ul>																																																																			
5R50E01M3A	0	25APR89A																																																																					
5R50E01M6E	0	19JUL89A																																																																					
5R50E01M1G	0		30AUG89A																																																																				
5R50E01M3E	0	18OCT89A																																																																					
5R50E01M3K	0		1MAY90A																																																																				
5R50E01M5A	0		10JAN92																																																																				
5R50E01M3H	0		14FEB92																																																																				
5R50E01M4C	0		17FEB92																																																																				
5R50E01M7H	0		29DEC92																																																																				
5R50E01M4F	0		29JAN93																																																																				
5R50E01M7J	0		29JAN93																																																																				
5R50E01M7C	0		1FEB93																																																																				
5R50E01M4L	0		30APR93																																																																				
5R50E01M8B	0		4JUN93																																																																				
				<ul style="list-style-type: none"> <li>↓ Submit Permit Data to DOE - Site</li> <li>↓ CFC</li> <li>↓ Issue CWO/Start Construction</li> <li>Initiate Startup ↓</li> <li>Construction End ↓</li> <li>Turnover to Customer ↓</li> <li>Start Pumping/Discharge System (CA) ↓</li> <li>Complete Proj. Capital Close-out ↓</li> </ul>																																																																			
				SUMMARY ACTIVITIES																																																																			
5R50E02H41	0	14JUL89A	15NOV90A	EE/CA - NEPA																																																																			
5R50E02H60	0	19JUL89A	26DEC89A	Preliminary Studies/Investigations																																																																			
5R50E02H40	0	19MAR90A	24APR91A	Work Plan																																																																			
5R50E02H15	55	25OCT90A	14FEB92	Design																																																																			
5R50E02H42	246	17FEB92	29JAN93	Removal/Corrective Action																																																																			
5R50E02H61	2000	1FEB93	6NOV00	Groundwater Treatment																																																																			
				ASI/IT SUPPORT ACTIVITIES																																																																			
5R50E04001	20	23DEC91	22JAN92	Prep/Rev/Appr Scope of Work (Samplg/Analy) Prop <input type="checkbox"/>																																																																			
5R50E04005	34	23JAN92	10MAR92	ASI/IT Soil Sampling/Analysis Completed <input type="checkbox"/>																																																																			
				ENGINEERING EVALUATION/COST ASSESSMENT																																																																			
5R50E15030	0	14JUL89A	8SEP89A	Prepare & Submit Draft EE/CA Documents to DOE																																																																			
5R50E15032	0	19SEP89A	27OCT89A	DOE/FEMP EE/CA Review																																																																			
5R50E15034	0	30OCT89A	18DEC89A	Resolve DOE/FEMP EE/CA Comments & Resubmit																																																																			
5R50E15024	0	27NOV89A	13APR90A	Establish Admin Record & Info Repository																																																																			
5R50E15022	0	1MAR90A	13APR90A	Prepare Community Relations Plan																																																																			
5R50E15037	0	30MAR90A	12APR90A	DOE/HQ Review & Approve EE/CA Document																																																																			
5R50E15036	0	30MAR90A	30MAR90A	DOE/FEMP Approval of Final EE/CA Document																																																																			
5R50E15038	0	16APR90A	2JUL90A	EPA Review of EE/CA Document																																																																			
5R50E15042	0	16APR90A	2JUL90A	Public Comment Period - EE/CA (incl 30 cd ext)																																																																			
5R50E15040	0	16APR90A	16APR90A	Publish EE/CA & AR Notice of Availability																																																																			
5R50E15044	0	2JUL90A	17JUL90A	DOE Dev Response Summary, Revise EE/CA & Resubmit																																																																			
5R50E15046	0	18JUL90A	4SEP90A	USEPA Review EE/CA (Inform. Disp. Res. Initiated)																																																																			
5R50E15048	0	4SEP90A	4SEP90A	Removal Action Memorandum Signed (LTR REF 5HR12)																																																																			
5R50E15047	0	4OCT90A	25OCT90A	USEPA/DOE Initiate Formal EE/CA Disp. Resolution																																																																			
				<p style="text-align: center;">Westinghouse Environmental Mgmt. Co. S. Grndwtr Contam. Plume - Part 2 LEVEL IV BARCHART</p>																																																																			
				<p style="text-align: right;">Sheet 1 of 4</p> <p style="text-align: right;">Prepared by Control Planning &amp; Integration</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>																																																Date	Revision	Checked	Approved																
Date	Revision	Checked	Approved																																																																				
<p>Project Start : 1JUL86 Project Finish: 6NOV00</p>				<p>Data Date: 25NOV91 Plot Date: 20NOV91</p>																																																																			

2407

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1989												1990												1991												1992												1993											
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
				PUMPING AND DISCHARGE - PART 2 ENGINEERING EVALUATION/COST ASSESSMENT																																																											
SR50E15050	0	10OCT90A	9NOV90A	<input checked="" type="checkbox"/> Prepare Draft NEPA FONSI <input checked="" type="checkbox"/> USEPA Approves EE/CA with Comments <input checked="" type="checkbox"/> WEMCO Internal Review of Draft FONSI <input checked="" type="checkbox"/> EE/CA Revised to Incorp Cmmts & Submit to USEPA <input checked="" type="checkbox"/> DOE FEMP Review of Draft FONSI <input checked="" type="checkbox"/> DOE HQ Review/Approval of FONSI (Revision)																																																											
SR50E15049	0	25OCT90A	25OCT90A																																																												
SR50E15051	0	13NOV90A	28NOV90A																																																												
SR50E15054	0	15NOV90A	15NOV90A																																																												
SR50E15052	0	30NOV90A	31DEC90A																																																												
SR50E15053	55	2JAN91A	14FEB92																																																												
SR50E15100	0	30AUG91A	19SEP91A	<input checked="" type="checkbox"/> Issue EE/CA Add. (Draft) to EPA/DOE HQ for Comm <input checked="" type="checkbox"/> EE/CA Add. (Draft) Rvw./Comment EPA/DOE HQ																																																											
SR50E15105	0	20SEP91A	25SEP91A																																																												
SR50E15110	0	26SEP91A	23OCT91A	<input checked="" type="checkbox"/> Issue Rev. EE/CA Add. to EPA/DOE HQ/Rcv EPA Cmmts																																																											
SR50E15119	55	8NOV91A	14FEB92																																																												
SR50E15115	0	17FEB92	14FEB92	<input checked="" type="checkbox"/> DOE-HQ Review/Approve EE/CA - EA <input checked="" type="checkbox"/> FONSI (Revision) Approval by DOE HQ																																																											
				WORK PLAN																																																											
SR50E22000	0	19MAR90A	17DEC90A	<input checked="" type="checkbox"/> WEMCO Develop Work Plan and Submit to USEPA <input checked="" type="checkbox"/> EPA Review & Approve Work Plan (with Comments)																																																											
SR50E22010	0	17DEC90A	16JAN91A	<input checked="" type="checkbox"/> WEMCO Rev. WP based on USEPA Cmmt-Incl.20 day ex <input checked="" type="checkbox"/> USEPA Review and Approve Revised Work Plan																																																											
SR50E22015	0	17JAN91A	8MAR91A																																																												
SR50E22020	0	11MAR91A	24APR91A																																																												
SR50E22025	13	25APR91A	13DEC91	<input checked="" type="checkbox"/> WEMCO Revise/Issue WP to USEPA (Extr Well Reloc)																																																											
SR50E22030	22	16DEC91	17JAN92	<input type="checkbox"/> USEPA Review/Approve Revised WP																																																											
				DESIGN																																																											
SR50E25060	0	17MAY89A	18JUL89A	<input checked="" type="checkbox"/> Evaluate Treatment Options <input checked="" type="checkbox"/> Procure DCR A/E <input checked="" type="checkbox"/> Issue Auth to ASI for Well Field Data Interpret.																																																											
SR50E25040	0	9JUN89A	16JUN89A																																																												
SR50E25004	0	13JUN89A	9AUG89A																																																												
SR50E25070	0	19JUL89A	10AUG89A	<input checked="" type="checkbox"/> 50% DCR <input checked="" type="checkbox"/> 100% DCR <input checked="" type="checkbox"/> Well Field Data Interpretation																																																											
SR50E25090	0	10AUG89A	27SEP89A																																																												
SR50E25010	0	10AUG89A	30AUG89A																																																												
SR50E25080	0	10AUG89A	16AUG89A	<input checked="" type="checkbox"/> 50% DCR Review - WEMCO/DOE <input checked="" type="checkbox"/> Prepare & Send Title I/II RFP to A/E <input checked="" type="checkbox"/> A/E Prepares & Submits Title I/II Proposal																																																											
SR50E25200	0	18SEP89A	21SEP89A																																																												
SR50E25210	0	21SEP89A	30CT89A	<input checked="" type="checkbox"/> 100% DCR Review & Approval - WEMCO/DOE <input checked="" type="checkbox"/> A/E Title I/II Negotiations & Authorization																																																											
SR50E25100	0	28SEP89A	30CT89A																																																												
SR50E25220	0	9OCT89A	1NOV89A																																																												
SR50E25225	0	18OCT89A	26DEC89A	<input checked="" type="checkbox"/> 50% Title I/II Design <input checked="" type="checkbox"/> 50% Title I/II Design & Cost Est (Revised EE/CA)																																																											
SR50E25251	0	25OCT90A	1FEB91A	<input checked="" type="checkbox"/> Submit Easement Package (Part 2) to DOE OR <input checked="" type="checkbox"/> 100% Title I/II Design <input checked="" type="checkbox"/> 100% Design Estimate																																																											
SR50E25234	0	6NOV90A	6NOV90A																																																												
SR50E25250	0	4FEB91A	31MAY91A																																																												
SR50E25255	0	20MAY91A	31MAY91A																																																												
SR50E25466	4	23MAY91A	2DEC91	<input checked="" type="checkbox"/> 100% Title I/II Design & Estimate Review - WEMCO <input checked="" type="checkbox"/> 100% Cost Estimate (Revision - Not Issued)																																																											
SR50E25260	0	3JUN91A	28JUN91A																																																												
SR50E25310	0	28JUN91A	28JUN91A																																																												
SR50E25461	22	25NOV91	30DEC91	<input checked="" type="checkbox"/> WEMCO/AMK Cofferdam Dsgn RFP/Negtn/Authoriztn																																																											

Activity Not/Not Due  
 Critical Activity  
 Program Use

Project Start : 1JUL86  
 Project Finish: 6NOV90

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 2  
 LEVEL IV BARCHART

Sheet 2 of 4

Prepared by: Charles Fleming & Integration

Date	Revision	Checked	Approved

Date Date: 25NOV91  
 Plot Date: 20NOV91

2497

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1990												1991												1992												1993											
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
				PUMPING AND DISCHARGE - PART 2 DESIGN																																															
SR50E25300	14	3DEC91	20DEC91	100% Title I/II Design (Investigation/Revision) <input type="checkbox"/>																																															
SR50E25320	22	23DEC91	24JAN92	100% Title I/II Design & Est Rev (Revision) <input type="checkbox"/>																																															
SR50E25400	44	31DEC91	2MAR92	Title I/II to CFC (AMK - Cofferdam) <input checked="" type="checkbox"/>																																															
SR50E25451	5	27JAN92	31JAN92	<input type="checkbox"/> Issue CFC (AMK) Design Package																																															
SR50E25270	10	3FEB92	14FEB92	CFC (AMK) Review & Approval/AE Prep. - WEMCO/DOE <input type="checkbox"/>																																															
SR50E25456	5	3MAR92	9MAR92	Issue CFC (AMK) Cofferdam Design Package <input type="checkbox"/>																																															
SR50E25271	10	10MAR92	23MAR92	CFC (AMK-Coffrdam) Rvw & Appr/AE Prep.-WEMCO/DOE <input checked="" type="checkbox"/>																																															
				PERMIT TO INSTALL (INFORMATIONAL)																																															
SR50E61010	30	25NOV91	10JAN92	PM/PE Prepare WPTI, OS&H & Legal Rev; OS&H Submt <input type="checkbox"/>																																															
SR50E61020	30	13JAN92	21FEB92	DOE Site Review & Submit WPTI to OEPA/USEPA <input type="checkbox"/>																																															
				FMPC PERMITS (INCLUDES CESHWS/CWID)																																															
SR50E69010	40	25NOV91	24JAN92	<input type="checkbox"/> FEMP Site Construction Permits																																															
				EASEMENTS																																															
SR50E73300	0	14JAN91A	14JAN91A	<input type="checkbox"/> Initiate Contacts with Private Landowners																																															
SR50E73310	22	15JAN91A	30DEC91	Review Requirements of Private Landowners <input checked="" type="checkbox"/>																																															
SR50E73200	22	25NOV91	30DEC91	<input type="checkbox"/> Initiate Contact with County																																															
SR50E73320	44	31DEC91	2MAR92	Negotiate & Finalize Easements w/Prvt Landowners <input type="checkbox"/>																																															
SR50E73210	22	31DEC91	30JAN92	<input type="checkbox"/> Review County Requirements																																															
SR50E73225	16	31DEC91	22JAN92	Obtain Constructiun Access for Soil Sampling <input type="checkbox"/>																																															
SR50E73220	33	31JAN92	17MAR92	Negotiate & Finalize Easement with County <input type="checkbox"/>																																															
				BID AND AWARD																																															
SR50E74001	1	23DEC91	23DEC91	<input type="checkbox"/> WEMCO PM/PE Notify RUST of Upcoming Pkg																																															
SR50E74005	4	26DEC91	31DEC91	<input type="checkbox"/> RUST Prep Advance Notice																																															
SR50E74010	1	2JAN92	2JAN92	<input type="checkbox"/> RUST Issue Advance Notice																																															
SR50E74015	1	17FEB92	17FEB92	<input type="checkbox"/> WEMCO Recv CFC Dwgs/Specs from A/E																																															
SR50E74020	2	18FEB92	19FEB92	<input type="checkbox"/> WEMCO PE Writes/Sends RCA to RUST																																															
SR50E74025	2	20FEB92	21FEB92	RUST PE Writes/Sends Req to RUST Purch <input type="checkbox"/>																																															
SR50E74030	5	24FEB92	28FEB92	RUST Purch Preps/Issues IFB Pkg (Inc S/C Plan) <input type="checkbox"/>																																															
SR50E74040	20	2MAR92	27MAR92	<input type="checkbox"/> Pkg Out for Bids																																															
SR50E74084	5	11MAR92	17MAR92	WEMCO Issue CWO to RUST (Contamination Cleanup) <input type="checkbox"/>																																															
SR50E74000	65	24MAR92	22JUN92	IFB thru CWO to RUST (Cofferdam) <input checked="" type="checkbox"/>																																															
SR50E74035	5	30MAR92	3APR92	<input type="checkbox"/> Recv Apprv from WEMCO PE/QA																																															
SR50E74045	1	6APR92	6APR92	<input type="checkbox"/> RUST Recv Bids (Inc S/C Plan)																																															
SR50E74050	5	7APR92	13APR92	RUST Purch Writes/Sends Pur Letter to WEMCO Proc <input type="checkbox"/>																																															
SR50E74055	5	7APR92	13APR92	<input type="checkbox"/> RUST Conduct Pre-Award Survey																																															
SR50E74060	5	7APR92	13APR92	<input type="checkbox"/> RUST Eval S/C Plan																																															
SR50E74065	2	14APR92	15APR92	WEMCO Proc Conduct Revw of Pur Letter <input type="checkbox"/>																																															
SR50E74070	2	14APR92	15APR92	WEMCO PE Conduct Revw of Pur Letter <input type="checkbox"/>																																															
SR50E74075	2	14APR92	15APR92	WEMCO QA Conduct Revw of Pur Letter <input type="checkbox"/>																																															

Activity Not/Notly Done  
 Critical Activity  
 Progress Bar

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 2  
 LEVEL IV BARCHART

Sheet 3 of 4

Prepared by: Control Planning & Integration

Date	Revision	Checked	Approved

Project Start: 1JUL86  
 Project Finish: 6NOV90

Date Date: 25NOV91  
 Plot Date: 28NOV91

2497

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1987												1988												1989												1990												1991											
				JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
				PUMPING AND DISCHARGE - PART 2																																																											
				BID AND AWARD																																																											
5R50E74080	1	16APR92	16APR92																																																												
5R50E74085	1	17APR92	17APR92																																																												
				REMOVAL\REMEDATION																																																											
5R50E81570	44	18MAR92	18MAY92	Cleanup Contaminated Areas (RUST) <input type="checkbox"/>																																																											
5R50E81560	176	20APR92	22DEC92	Install Outfall Line <input type="checkbox"/>																																																											
5R50E81540	164	20APR92	4DEC92	Install Pipeline <input type="checkbox"/>																																																											
5R50E81530	121	20APR92	6OCT92	Install Well Field <input type="checkbox"/>																																																											
5R50E81550	121	20APR92	6OCT92	Install Valve House <input type="checkbox"/>																																																											
5R50E81520	132	23JUN92	28DEC92	Install Cofferdam <input type="checkbox"/>																																																											
5R50E81510	23	29DEC92	29JAN93	Perform Overall System Tests (Pipeline) <input type="checkbox"/>																																																											
				FINAL REPORT/VERIFICATION																																																											
5R50E86010	25	1FEB93	5MAR93	PM/PE Prepares & Issues CCN <input type="checkbox"/>																																																											
5R50E86020	30	22MAR93	30APR93	PB&A Prepares & Issues CC&CS <input type="checkbox"/>																																																											
5R50E86030	25	3MAY93	4JUN93	PB&A Closes Job Order <input type="checkbox"/>																																																											
				FUNDING																																																											
5R50E89010	0	2MAY89A	2MAY89A	♦ Budget Pre-Validation																																																											
5R50E89020	0	16MAY89A	16MAY89A	♦ Budget Validation																																																											
5R50E89030	0	26JUN89A	26JUN89A	♦ Preliminary ESAAB Meeting																																																											
5R50E89050	0	18SEP89A	18SEP89A	♦ Funding Received																																																											
5R50E89040	0	19SEP89A	19SEP89A	♦ Final ESAAB Approval																																																											

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Activity Bar/Early Dates  
 Critical Activity  
 Progress Bar  
 Primavera Systems, Inc. 1984-1991

Project Start: 1JUL86  
 Project Finish: 6NOV00

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 2  
 LEVEL IV BARCHART

Sheet 4 of 4

Prepared by: Control Planning & Integration Inc.

Date	Revision	Checked	Approved

Data Date: 25NOV91  
 Plot Date: 20NOV91

2497

ACTIVITY ID	REM DUP	EARLY START	EARLY FINISH	1990												1991											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
				IAWWT (SWRB) - PART 3																							
				MILESTONES																							
SR60E01M2K	0		17DEC90A	Submit Work Plan to USEPA																							
SR60E01M3E	0	22FEB91A		Start Equipment Spec/Utilities Services Design																							
SR60E01M3H	0		28JUN91A	CFC																							
SR60E01M4C	0	31JAN92		CWO - Treatment Sys & Utilities Services																							
SR60E01M7C	0	30JUL92		Operate Treatment System (CA)																							
				SUMMARY ACTIVITIES																							
SR60E02H40	0	13NOV90A	24APR91A	Issue SOW																							
SR60E02H15	5	22FEB91A	25NOV91	Design																							
SR60E02H42	106	3MAR92	29JUL92	Removal/Corrective Action																							
				NATIONAL ENVIRONMENTAL PROTECTION ACT																							
SR60E20000	0	10OCT90A	30NOV90A	Prepare Draft FONSI																							
SR60E20001	0	3DEC90A	7DEC90A	WMCO Internal Review																							
SR60E20002	0	10DEC90A	30DEC90A	DOE FMPC Review/Approval																							
SR60E20003	40	15MAR91A	20JAN92	DOE HQ Review/Approval of FONSI (Revision)																							
SR60E20004	40	8NOV91A	20JAN92	DOE HQ Review/Approve EE/CA - EA																							
SR60E20005	0		20JAN92	FONSI (Revision) Approved by DOE HQ																							
				WORK PLAN																							
SR60E22000	0	19NOV90A	17DEC90A	WMCO Develop Work Plan																							
SR60E22002	0	17DEC90A	16JAN91A	EPA Review & Approve Work Plan (with Comments)																							
SR60E22001	0	17DEC90A	17DEC90A	DOE Review & Approve Work Plan																							
SR60E22003	0	17JAN91A	11MAR91A	WMCO Revise WP Based on USEPA Comments																							
SR60E22004	0	12MAR91A	24APR91A	USEPA Review/Approve Revised Work Plan																							
SR60E22005	17	25APR91A	13DEC91	WEMCO Revise/Issue WP to USEPA (Extr Well Reloc)																							
SR60E22010	22	16DEC91	17JAN92	USEPA Review/Approve Revised WP																							
				UTILITIES SERVICE DESIGN																							
SR60E26500	0	1MAY91A	16MAY91A	IAWWT System Utilities Drawings - Layt, Arrgt, P&ID																							
SR60E26508	0	1MAY91A	16MAY91A	IAWWT System Utilities Drawings (Details)																							
SR60E26516	0	13MAY91A	16MAY91A	Develop M&E List																							
SR60E26524	0	20MAY91A	7JUN91A	Develop IAWWT System Specifications																							
SR60E26502	0	22MAY91A	31MAY91A	DOE/WMCO Review (Layout/Arrgt/P&ID Dwgs)																							
SR60E26510	0	22MAY91A	31MAY91A	DOE/WMCO Review (Details Dwgs)																							
SR60E26518	0	28MAY91A	31MAY91A	DOE/WMCO Review (M&E List)																							
SR60E26504	0	3JUN91A	26JUN91A	Prepare Final (Layout/Arrgt/P&ID Dwgs)																							
SR60E26512	0	3JUN91A	26JUN91A	Prepare Final (Details Dwgs)																							
SR60E26520	0	3JUN91A	26JUN91A	Prepare Final (M&E List)																							

Activity Bar/Early Dates  
Critical Activity  
Program Bar

Primavera Systems, Inc. 1984-1991

Project Start: 1JUL86  
Project Finish: 29JUL92

Westinghouse Environmental Mgmt. Co.  
S. Grndwtr Contam. Plume - Part 3  
LEVEL IV

Sheet 1 of 3

Prepared by Central Planning & Integration

Date	Revisions	Checked	Approved

Date Date: 18NOV91  
Plot Date: 20NOV91

2497

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1990			1991												1992														
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP						
				IAWNT (SWRB) - PART 3																													
				UTILITIES SERVICE DESIGN																													
5R60E26526	0	3JUN91A	12JUN91A	☐ DOE/WMCO Review (Specs)																													
5R60E26528	0	26JUN91A	28JUN91A	☐ Prepare Final (Specs)																													
5R60E26506	0		26JUN91A	♦ Issue Final (Layout/Arrgt/P&ID Dwgs)																													
5R60E26514	0		26JUN91A	♦ Issue Final (Details Dwgs)																													
5R60E26522	0		26JUN91A	♦ Issue Final (M&E List)																													
5R60E26530	0		28JUN91A	♦ Issue Final (Specs)																													
5R60E26550	0	9SEP91A	28OCT91A	☐ Parsons Revise Utilities Design Package																													
5R60E26560	0	29OCT91A	13NOV91A	☐ WEMCO/DOE Review Utilities Design Pkg. & Comment																													
5R60E26570	5	14NOV91A	25NOV91	☐ Revise Utilities Design Package as Final																													
				EQUIPMENT SPECIFICATION																													
5R60E28500	0	22JAN91A	21FEB91A	☐ Submit Final Design Basis Document																													
5R60E28200	0		21FEB91A	♦ Design Basis Document Complete																													
5R60E28502	0	22FEB91A	15MAR91A	☐ Development of P&ID																													
5R60E28514	0	11MAR91A	22MAR91A	☐ Development of M&E List																													
5R60E28504	0		15MAR91A	♦ Submit Draft P&ID for DOE/WMCO Review																													
5R60E28526	0	18MAR91A	5APR91A	☐ Development of Mechanical Specs																													
5R60E28506	0	18MAR91A	25MAR91A	☐ DOE/WMCO Review Draft P&ID																													
5R60E28516	0		22MAR91A	♦ Submit Draft M&E List for DOE/WMCO Review																													
5R60E28518	0	25MAR91A	29MAR91A	☐ DOE/WMCO Review M&E List																													
5R60E28508	0		25MAR91A	♦ DOE/WMCO Provide P&ID Comments																													
5R60E28510	0	26MAR91A	1APR91A	☐ Incorp. DOE/WMCO Comments & Finalize P&ID																													
5R60E28520	0		29MAR91A	♦ DOE/WMCO Provide M&E List Comments																													
5R60E28522	0	1APR91A	5APR91A	☐ Incorp. DOE/WMCO Comments & Finalize M&E List																													
5R60E28512	0		1APR91A	♦ Submit Final P&ID																													
5R60E28530	0	5APR91A	17APR91A	☐ DOE/WMCO Review Draft Mech. Specs.																													
5R60E28524	0		5APR91A	♦ Submit Final M&E List																													
5R60E28528	0		5APR91A	♦ Submit Draft Mech. Specs. for DOE/WMCO Review																													
5R60E28532	0		17APR91A	♦ DOE/WMCO Provide Mech. Spec. Comments																													
5R60E28534	0	18APR91A	8MAY91A	☐ Incorp. DOE/WMCO Comments & Finalize Mech. Specs																													
5R60E28536	0		8MAY91A	♦ Submit Final Mechanical Specs. for Approval																													
5R60E28540	0		8MAY91A	♦ Equipment Specification Complete																													
5R60E28550	0	9SEP91A	10OCT91A	☐ Parsons Revise Trailer Design Package																													
5R60E28560	0	20OCT91A	11OCT91A	☐ WEMCO/DOE Review Trailer Design Pkg & Comment																													
5R60E28570	0	14OCT91A	18OCT91A	☐ Revise Trailer Design Package as Final																													

Activity Not/Early Start  
 Critical Activity  
 Program Bar



Primavera Systems, Inc. 1984-1991

Project Start : 1JUL86  
 Project Finish: 28JUL92

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 3  
 LEVEL IV

Sheet 2 of 3

Prepared by: Critical Planning & Integration

Date	Revised	Checked	Approved

Date Date: 18NOV91  
 Plot Date: 28NOV91

2497

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1990												1991												1992											
				OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC									
				IAWWT (SWRB) - PART 3																																			
				SAFETY ASSESSMENT																																			
5R60E35010	6	1APR91A	26NOV91	[Bar] Prepare Draft Safety Assessment																																			
5R60E35020	10	27NOV91	12DEC91	[Bar] MMCO/DOE Review & Incorporate Comments																																			
5R60E35021	0		12DEC91	[Bar] Issue Final Safety Assessment																																			
				BID AND AWARD																																			
5R60E74000	0	15MAY91A	26JUN91A	[Bar] Bid/Award - RFP (Equipment Spec)																																			
5R60E74005	0	15MAY91A		[Bar] RCA to RUST (Equipment Spec.)																																			
5R60E74001	0	1AUG91A	12SEP91A	[Bar] Bid/Award - IFB (Utilities Services)																																			
5R60E74010	0	1AUG91A		[Bar] RCA to RUST (Utilities Services)																																			
5R60E74100	0	18OCT91A		[Bar] Receive Specs (Trailer CFC Package)																																			
5R60E74105	0	5NOV91A		[Bar] Issue IFB - Equipment Spec.																																			
5R60E74110	0	21NOV91		[Bar] Bid Opening - Equipment Spec.																																			
5R60E74200	0	26NOV91		[Bar] Receive CFC Package - Utilities System																																			
5R60E74205	0	9DEC91		[Bar] Issue IFB - Utilities System																																			
5R60E74115	0	19DEC91		[Bar] Award - Equipment Spec.																																			
5R60E74210	0	13JAN92		[Bar] Bid opening - Utilities System																																			
5R60E74215	0	21JAN92		[Bar] Award - Utilities System																																			
5R60E74220	0	31JAN92		[Bar] Issue Notice to Proceed																																			
5R60E74225	0	3MAR92		[Bar] 100% Submittals are Due																																			
				REMEDIATION - TREATMENT SYSTEM																																			
5R60E82001	15	19NOV91	11DEC91	[Bar] Prepare System Operability Test Procedure																																			
5R60E82010	5	12DEC91	18DEC91	[Bar] System Operability Training																																			
5R60E82200	130	19DEC91	22JUN92	Procure Trailer #2 [Bar]																																			
5R60E82100	125	19DEC91	15JUN92	Procure Trailer #1 [Bar]																																			
5R60E82003	20	14APR92	11MAY92	System Operability Testing [Bar]																																			
5R60E82004	5	12MAY92	18MAY92	Operational Readiness Review [Bar]																																			
5R60E82150	15	16JUN92	7JUL92	Install Trailer #1 [Bar]																																			
5R60E82250	22	23JUN92	23JUL92	Install Trailer #2 [Bar]																																			
5R60E82260	0	24JUL92		Begin System Functional Testing [Bar]																																			
5R60E82270	0	30JUL92	29JUL92	Begin System Operation [Bar]																																			
				REMEDIATION - UTILITIES SYSTEM																																			
5R60E83100	69	3MAR92	5JUN92	Excavate/Install/Test [Bar]																																			
5R60E83002	20	8JUN92	6JUL92	Installation Checkout [Bar]																																			
5R60E83003	5	7JUL92	13JUL92	Utility Startup Test [Bar]																																			
5R60E83110	5	14JUL92	20JUL92	Hookup Trailer #1 [Bar]																																			
5R60E83115	5	21JUL92	27JUL92	Hookup Trailer #2 [Bar]																																			

Activity Bar/Early Date  
 Critical Activity  
 Program Bar

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 3  
 LEVEL IV

Sheet 3 of 3

Prepared by Control Planning & Integration			
Date	Revision	Checked	Approved

Data Date: 19NOV91  
 Plot Date: 20NOV91

2407

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1992												1993												1994												1995											
				SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
IAAWT (BDN/ETS)				MILESTONES																																															
5R40E01M3E	0	1JUN91A		♦ Start Title I & II Design																																															
5R40E01M3H	0		31DEC91	♦ CFC																																															
5R40E01M2L	0		17JAN92	♦ EPA Approves Work Plan																																															
5R40E01M4C	0	31MAR92		♦ Construction Start																																															
5R40E01M4F	0		6JUL92	♦ Construction Complete																																															
SUMMARY ACTIVITIES																																																			
NATIONAL ENVIRONMENTAL PROTECTION ACT																																																			
WORK PLAN																																																			
DESIGN																																																			
SAFETY ASSESSMENT																																																			

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Activity Bar/Bar/Bar  
 Critical Activity  
 Program Bar

Primavera Systems, Inc. 1986-1991

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 3  
 Level IV Barchart

Sheet 1 of 2

Project Start : 1JUL86  
 Project Finish: 6JUL92

Data Date: 12NOV91  
 Plot Date: 20NOV91

General Planning & Integration			
Date	Revision	Checked	Approved

2497

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1991												1992												1993											
				NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
				IAAWT (BDN/ETS) SAFETY ASSESSMENT																								<input type="checkbox"/> DOE Site Review/Transmit PSAR to DOE/ORO <input type="checkbox"/> DOE/ORO Review PSAR and Comment <input type="checkbox"/> Revise and Re-issue PSAR <input type="checkbox"/> DOE/ORO Approve PSAR											
5R40E35108	5	17DEC91	23DEC91																																				
5R40E35109	10	26DEC91	9JAN92																																				
5R40E35110	2	10JAN92	13JAN92																																				
5R40E35111	0		13JAN92																																				
				PROCUREMENT																																			
5R40E60010	0	17APR91A	8JUL91A													<input checked="" type="checkbox"/> Procure Durotek Trailer <input type="checkbox"/> Trailer Available																							
5R40E60020	0		12JUL91A																																				
5R40E60030	60	2JAN92	25MAR92																									<input checked="" type="checkbox"/> Procure Pumps & Piping <input type="checkbox"/> Pumps & Piping Available											
5R40E60040	0		25MAR92																																				
				STANDARD OPERATING PROCEDURES																																			
5R40E68000	44	2JAN92	3MAR92																									<input type="checkbox"/> Standard Operating Procedure Development											
				BID AND AWARD																																			
5R40E74000	22	20NOV91	23DEC91																									<input checked="" type="checkbox"/> Davis Bacon Review <input type="checkbox"/> IFB - PM/PE Notify RUST of Upcoming Pkg. <input type="checkbox"/> IFB - PE Prepares RCA <input type="checkbox"/> IFB - RUST Prep and Issue Package <input checked="" type="checkbox"/> Package Out for Bid <input type="checkbox"/> IFB - Proposals Due <input type="checkbox"/> IFB - Technical Review of Proposals <input type="checkbox"/> IFB - Construction Action Pkg. Sent to WEMCO <input type="checkbox"/> IFB - CWO Written & Sent to RUST											
5R40E74005	1	26DEC91	26DEC91																																				
5R40E74010	5	27DEC91	3JAN92																																				
5R40E74015	5	6JAN92	10JAN92																																				
5R40E74020	30	13JAN92	21FEB92																																				
5R40E74025	1	24FEB92	24FEB92																																				
5R40E74030	10	25FEB92	9MAR92																																				
5R40E74035	5	10MAR92	16MAR92																																				
5R40E74040	10	17MAR92	30MAR92																																				
				CONSTRUCTION																																			
5R40E78005	5	31MAR92	6APR92																									<input type="checkbox"/> Mobilization <input checked="" type="checkbox"/> Install Relocated Durotek Equip & New Equip. <input checked="" type="checkbox"/> Operational Readiness Review Documentation <input type="checkbox"/> Operational Readiness Review <input type="checkbox"/> System Operational Test											
5R40E78015	44	7APR92	5JUN92																																				
5R40E78020	33	22APR92	5JUN92																																				
5R40E78030	5	8JUN92	12JUN92																																				
5R40E78025	15	15JUN92	6JUL92																																				

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Activity Bar/Early Dates  
 Critical Activity  
 Progress Bar



Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 3  
 Level IV Barchart

Sheet 2 of 2

Overall Planning & Integration

Date	Revision	Checked	Approved

Primavera Systems, Inc. 1988-1991

Project Start : 1JUL91  
 Project Finish: 6JUL92

Date Date: 12NOV91  
 Plot Date: 20NOV91

207

ACTIVITY ID	REM DUR	EARLY START	EARLY FINISH	1990												1991												1992												1993												
				NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT													
				IAWWT (BDN/ETS) SAFETY ASSESSMENT																																																<input type="checkbox"/> DOE Site Review/Transmit PSAR to DOE/ORO <input type="checkbox"/> DOE/ORO Review PSAR and Comment <input type="checkbox"/> Revise and Re-issue PSAR <input checked="" type="checkbox"/> DOE/ORO Approve PSAR
5R40E35108	5	17DEC91	23DEC91																																																	
5R40E35109	10	26DEC91	9JAN92																																																	
5R40E35110	2	10JAN92	13JAN92																																																	
5R40E35111	0		13JAN92																																																	
				PROCUREMENT																																																<input checked="" type="checkbox"/> Procure Durotek Trailer <input checked="" type="checkbox"/> Trailer Available <input checked="" type="checkbox"/> Procure Pumps & Piping <input checked="" type="checkbox"/> Pumps & Piping Available
5R40E60010	0	17APR91A	8JUL91A																																																	
5R40E60020	0		12JUL91A																																																	
5R40E60030	60	2JAN92	25MAR92																																																	
5R40E60040	0		25MAR92																																																	
				STANDARD OPERATING PROCEDURES																																																<input checked="" type="checkbox"/> Standard Operating Procedure Development
5R40E68000	44	2JAN92	3MAR92	BID AND AWARD																																																<input checked="" type="checkbox"/> Davis Bacon Review <input checked="" type="checkbox"/> IFB - PM/PE Notify RUST of Upcoming Pkg. <input checked="" type="checkbox"/> IFB - PE Prepares RCA <input checked="" type="checkbox"/> IFB - RUST Prep and Issue Package <input checked="" type="checkbox"/> Package Out for Bid <input checked="" type="checkbox"/> IFB - Proposals Due <input checked="" type="checkbox"/> IFB - Technical Review of Proposals <input checked="" type="checkbox"/> IFB - Construction Action Pkg. Sent to WEMCO <input checked="" type="checkbox"/> IFB - CWO Written & Sent to RUST
5R40E74000	22	20NOV91	23DEC91																																																	
5R40E74005	1	26DEC91	26DEC91																																																	
5R40E74010	5	27DEC91	3JAN92																																																	
5R40E74015	5	6JAN92	10JAN92																																																	
5R40E74020	30	13JAN92	21FEB92																																																	
5R40E74025	1	24FEB92	24FEB92																																																	
5R40E74030	10	25FEB92	9MAR92																																																	
5R40E74035	5	10MAR92	16MAR92																																																	
5R40E74040	10	17MAR92	30MAR92																																																	
5R40E78005	5	31MAR92	6APR92																																																	
5R40E78015	44	7APR92	5JUN92																																																	
5R40E78020	33	22APR92	5JUN92																																																	
5R40E78030	5	8JUN92	12JUN92																																																	
5R40E78025	15	15JUN92	6JUL92																																																	

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Activity Not/Early Start  
 Critical Activity  
 Program Bar

Primavera Systems, Inc. 1984-1991

Project Start : 1JUL86  
 Project Finish : 6JUL92

Westinghouse Environmental Mgmt. Co.  
 S. Grndwtr Contam. Plume - Part 3  
 Level IV Barchart

Sheet 2 of 2

Date Date: 12NOV91  
 Plot Date: 26NOV91

General Planning & Integration			
Date	Revision	Checked	Approved

2497