PADUCAH GASEOUS DIFFUSION PLANT SITE SPECIFIC ADVISORY BOARD

Chartered under the Federal Advisory Committee Act

CO-CHAIRS

Mark Donham
Route 1
Brookport, Illinois 62910
mdonham@igc.org

Vicki Jones
1131 Hamburg Road
Kevil, Kentucky 42053
jonesvw@ornl.gov

BOARD MEMBERS

Nola Courtney
14299 Wickliffe Road
Kevil, Kentucky 42053

Edward Dulf
5134 Old 45
Paducah, KY, 42003

David Fuller
670 Springwell Lane
Paducah, Kentucky 42001

Ronald Lamb
10990 Ogden Landing Road
Kevil, Kentucky 42053
CHCE@LDD.net

Lynn W. Lane
P.O. Box 145
Wickliffe, KY, 42087

Linda Long
10625 Ogden Landing Road
Kevil, Kentucky 42053

Ray McLennan
2931 Mayfield Road
Paducah, Kentucky 42001

Craig Rhodes
3883 Mt. Pleasant Rd.
Brookport, Illinois, 62910

Connie J. Sykes
705 N. 24th Street
Paducah, Kentucky 42001

Bill Tanner
6072 Rosebud Road
Metropolis, Illinois 62960

Rev. Gregory Waldrop
4141 Buckner Lane
Paducah, Kentucky 42001

Meeting Minutes

May 21, 1998

The May 21, 1998, Site Specific Advisory Board (SSAB) meeting took place at the Executive Inn in Paducah at 5:00 p.m.

The following board members were present: Nola Courtney, Mark Donham, David Fuller, Vicki Jones, Ronald Lamb, Linda Long, Ray McLennan, Craig Rhodes, Bill Tanner, and Greg Waldrop. Ex officio members present were Carl Froede and Tuss Taylor. Representing ex officio member John Volpe was Todd Adams. Facilitator present: Steve Kay. The United States Department of Energy (DOE) federal coordinator present was Myrna Redfield. Also present were the following members of the public and employees, contractors, and subcontractors of the DOE: Jeannie Brandstetter, Edwena Crowe, Ken Davis, David Dollins, Shelley Hawkins, Raul Castaneda-Hernandez, Gary Hettler, Dennis Hill, Debora Jolly, Sylvia Kieding, and Kristin Reece.

The SSAB received information handouts as well as the minutes of the last meeting.

Steve Kay proposed the following items to be added to the agenda: report on the OCAW study and the Paducah Area Community Reuse Organization (PACRO) presentation. The two items were proposed to be added after the Bechtel Jacobs Company LLC presentation. The revised meeting agenda was adopted by consensus.

Ken Davis, a hydrogeologist with the Jacobs Environmental Management (EM) Team, was available again this month to answer questions and give an update on the Five-Year Review for the Northwest Plume as part of the EM and Enrichment Facilities (EF) project updates. Davis said that the Five-Year Review is a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)-mandated process that seeks public participation. He said the Record of Decision (ROD) for the Northwest Plume called for the installation of two extraction well fields and a treatment facility, or a pump-and-treat facility.

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According to Davis, the goal for the treatment facility is to achieve less than 5 parts per billion (ppb) trichloroethene and less than 900 picocuries per liter of technetium. The goals of the ROD were to initiate control of the high concentration zone and mitigate the spread of contaminants along the Northwest Plume. Davis said the goals that have been set are being achieved. He said that the west and south sides of the plume are seeing improvements; however, the levels on the east side are not being affected. He said the core of the plume is at extraction well 229. There have been seasonal fluctuations of contamination in the monitoring wells. Davis said that contaminant levels started at 2,000 ppb and have been very steady, but the levels have returned to 2,000 ppb over the course of the project. Davis said the operating costs for the Northwest Plume are around $1.9 million. David Fuller asked if the treatment facility started as a demonstration project. Davis said that the two-year time period for the facility has elapsed and it is now basically in a continuing operations mode; however, the Five-Year Review allows a chance for modification. Ray McLennan asked what data is available to show that seasonal fluctuations are not affecting contamination levels. Davis said that it is difficult to determine levels due to fluctuations; however, the north well-field, being closer to the river, makes it difficult to determine any effect. McLennan said the operation seemed to be high-cost. Davis said that for the amount of contamination, the cost is rather minor. Debora Jolly, Bechtel Jacobs Company facility operator, said that the facility is an interim remedial action, and it is fulfilling its function of slowing the spread of contamination. Fuller asked for a breakdown of cost on the operations and Jolly replied about $1.3 million. Ronald Lamb asked if $1.9 million was taken from the project, would the money stay at the Paducah Gaseous Diffusion Plant (PGDP). Myrna Redfield said there was no guarantee that the money would stay at the PGDP, but it would stay in the Environmental Restoration program. Davis said there is a Water Policy in place and no one is drinking contaminated water. Lamb said that he knew of one family in the area that was not on the PGDP's Water Policy and was still using well water. Mark Donham asked how many barrels of waste have been created, both carbon and resin. Jolly replied that approximately 20 drums of ion exchange resin and approximately 20 drums of activated carbon have been created about every four months, for a total of about 80 drums a year. Fuller asked how this process could be done for less money. David Dollins said these costs are lower than what they once were. He said that the PGDP is just now spending what the original budgeted cost for the operation was four years ago. Fuller said that it is always good to cut costs when possible. Dollins said that they are looking for ways to cut costs without sacrificing quality. Craig Rhodes asked if the purpose of the project was to stop the movement of contamination. Davis said the purpose was to capture the high concentration zone and keep it from moving further north. Rhodes said that Jimmy Massey had once said that the contamination was moving a foot per day. Davis said that ground-water flow is about a foot per day; however, the contaminant or the plume itself is probably stable. He said the contamination is moving laterally as it moves north. Rhodes asked what kind of barrier the Ohio River was. Davis said the river is a natural discharge point for the aquifer. Davis said that below the river, there is a thick sand and silt deposit and that it is possible for some contamination to get through, but so far, only levels above drinking-water standards have been found. Kay asked for comments from the board on the Five-Year Review. Fuller said he would like to see cost figures on the operation. Donham asked if the Federal Facility Agreement had any consideration for the operation after the demonstration phase. Carl Froede said that the operation is an interim action. He proposed that the SSAB's comments consist of questions such as what can the DOE do to save money, what options in technology are available, and are there

alternatives for the use of carbon filters. Jolly said she would come to the meeting next month to supply the cost information she had available to the public. There were no proposals made by the SSAB on the Five-Year Review.

The next item on the agenda was the approval of the April 19, 1998, minutes. Donham proposed that verbiage be added to Page 4, Paragraph 3, to reflect that information was to be provided to board members about a letter from the state related to the 2006 Plan on the uranium burial grounds. The minutes were approved as amended.

The DOE's response to SSAB comments was the next item on the agenda. Redfield said that all comments on the Vortec Environmental Assessment have been received by the DOE and it is in the process of reviewing the comments. Information will be relayed to the board when it is available.

Edwena Crowe, executive assistant to the president of Bechtel Jacobs, gave a presentation on the new management and integration (M&I) contract. Crowe said the five-and-a-half-year contract was awarded December 18, 1997, and has the option for a five-year renewal. Crowe said the challenge of the contract was to expedite cleanup, reduce cost, maximize subcontractors, and transition to M&I. She said that Bechtel Jacobs is focusing on customer expectations. She said this contract would have very few management layers and the contract's mission was to have an end to projects and focus on completion. Crowe said that employee transfer has involved individual placement discussions with 2,100 Lockheed Martin employees. Approximately 1,525 employees were transferred to Bechtel Jacobs from Lockheed Martin. In addition, Bechtel Jacobs assumed about 400 subcontracts that were novated over from Lockheed Martin; these were reviewed in detail before being assumed. Another goal of the M&I was to align with the customers including Rod Nelson in EM, Joe Parks in EF, and Robert Brown in Reindustrialization. Crowe showed the board an M&I organization chart. Donham asked why Oak Ridge is divided into seven projects and Paducah and Portsmouth were divided in only two. Crowe said that Oak Ridge covers three sites and that Paducah and Portsmouth are together. Greg Waldrop asked if the support people are in Oak Ridge or onsite in Paducah. Crowe said they are onsite with the project manager. She said that another difference with the M&I is that the project manager is fully empowered and has cradle-to-grave responsibilities and manages the subcontracts associated with his or her project. Crowe said that 93% of the workforce would be subcontracted to perform all of the executed work. She said that there are 150 Bechtel Jacobs employees in Paducah and about 600 jobs are subcontracted already. There will be about 30 Bechtel Jacobs employees after the transition. Rhodes asked why this was cost effective. Crowe said that it was more competitive to subcontract work. Crowe said the M&I is encouraging its employees to support organizations that contribute to the quality of life. Donham asked who the customer was to the M&I. Crowe said the DOE and that Bechtel Jacobs is concentrating on making sure there is effective communication with the customer and that the customer is getting what is asked for. Fuller asked how many employees were layed off in Oak Ridge and if they were OCAW employed? Crowe said that no one was laid off due to this transition as of April 1; some of the people remained with Lockheed Martin Energy Systems in Oak Ridge such as with the Oak Ridge National Laboratory. She said there were some OCAW people at the Y-12 and X-10 plants. Redfield asked that Crowe explain where Jimmie Hodges fits into the organization

chart. Crowe said there is a strong interface which includes Jimmie Hodges with the Enrichment Facilities, the program that Tom Tison manages for Bechtel Jacobs and Joe Parks managers for the DOE. Hodges reports directly to Parks. Jimmy Massey works directly with Jimmie Hodges.

The next item on the agenda was a presentation from Kristin Reece, president of the Greater Paducah Economic Development Council, who has been involved in helping create the PACRO. Reece has been in economic development since 1987. Reece said that community reuse organizations started in 1993 to provide local communities with federal money upon the closure of plants and to develop a transition plan to reduce adverse economic impacts. Reece said that Portsmouth is about a year ahead of Paducah with its reuse organization. Reece said that the Community Reuse Organization in Portsmouth found that for every one job lost at the plant, it can be expected that nine jobs would be lost in the community. The PACRO had its first meeting in August 1997 and looked at the initial impact area of the plant and chose people that represented each area for membership. The PACRO grew to about a 50-person general assembly. Workforce reuse is the primary goal of a community reuse organization. The PACRO received notification in April 1998 that a $400,000 planning and startup grant was awarded and the next step was to write requests for proposals for consultants to perform studies for the transition plan to be written. Tuss Taylor asked if the transition plan will account for employees not picked up by subcontractors after Bechtel Jacobs and Reece said it would. Dennis Hill said the Bechtel Jacobs change does not affect Lockheed Martin Utility Services. Reece said the PACRO is not solely focused on either the Utility Services or Energy Systems side; it is putting strategies in place for any job lost. Donham asked if the primary focus was to get new industries at the site itself. Reece said that was to be determined with studies. Reece said the workforce is the number one priority presently and economic development strategies would be next.

Sylvia Kieding was at the meeting to give a presentation on the OCAW Health Study of current and former gaseous diffusion plant workers. She said the OCAW project is at the three gaseous diffusion facilities to determine whether former workers should have medical screening due to past exposure. Kieding said the study has contracted local clinics to conduct the screening. She asked the members if the SSAB mission could embrace the OCAW mission and thought it would be a good idea for the two groups to work together. Donham asked if the OCAW was including older workers who had higher exposures. Kieding said they have trained people at the site to conduct risk mapping sessions to plot exposures. She said the study included screening for respiratory problems and hearing loss and blood tests for liver and kidney damage. She said no bladder carcinogens were reported here; however, the tests can be revised over time. Rhodes said he would like to have a copy of the assessment. There was an OCAW presentation being conducted at the Executive Inn at the same time of the SSAB meeting; however, Hill said that a full OCAW presentation was to be given at Kevil at 9:00 a.m., May 22. Kieding said the study was a health service and it needed community support for success. Waldrop asked how often the studies are conducted and Kieding replied twice a year in terms of the study's budget. Lamb asked if area doctors were used or doctors were brought in by OCAW. Kieding replied at least two clinics in each area were used in order to give the employees a choice in doctors. Waldrop asked how many people were involved and Kieding replied at least 3,000 in Paducah. She said they only tested for diseases where early intervention was effective. Kieding said this was a

modest effort determined by budget and not intended to give workers false hopes. She said this could change over time and the more input received, the better the program could be.

The next item on the agenda was comments on the 2006 Plan. Donham asked if the state had changed its position on the uranium burial grounds. Froede said that the state made verbal comments to the DOE and said that the DOE did not consider the document a plan, but a strategy concept and the EPA does not review these concepts. Donham said this was the problem with the document in that the DOE is trying to say this is not a plan when it is. Taylor said that he had a problem with the budget being based on the document. Taylor said the concept came from headquarters, and nationwide, the plan might work okay. Froede said that the DOE is well aware of the state's position. Redfield said that the DOE requested funding for Fiscal Year 2000 and had to tell headquarters that some assumptions changed and more funding is needed. Redfield said the DOE is in the process of incorporating the extra need into the budget request. Donham said he did not like the blanket statement that the landfills will stay in place. Waldrop said that it seems that neither the DOE nor the United States Environmental Protection Agency (EPA) would allow this to happen and wondered if the SSAB should comment. Froede asked the board to comment so that headquarters could see community interest. He said the SSAB is leverage for the DOE to provide funding. Donham asked if everyone had received the correspondence between the EPA and the DOE on the burial grounds. He said he wanted to object to Basic Assumption J on Page A11 of the 2006 Plan, which concerned landfills and burial grounds. Froede encouraged the board not to just object, but to provide a comment on what was specifically wanted. Bill Tanner restated the objection to a proposal concerning the Future Land Use section on Page A10 that capping the landfill is not satisfactory and other alternatives should be investigated. Tanner said that Assumption J is contrary to other items or proposed actions in preventing migration of contamination in the ground water and proposed that each landfill be studied individually and that capping all landfills may not meet the future-use scenario. The proposal was approved by consensus by the SSAB. Donham said the polychlorinated biphenyl levels of 10 parts per million for unrestricted areas outside the fence seem high. Taylor said the state thinks this also. Taylor said the state concurs with the removal action but disagrees with the cleanup action. Froede said he supported the state in setting its own cleanup levels. Lamb said the SSAB should support the state risk numbers. Froede said the issue is basically that the state is proceeding along a risk-based number that can be supported in CERCLA, but the regulated Toxic Substances Control Act (TSCA) levels are higher than the state's recommended levels. Donham said that the TSCA standards are old. Kay asked if there was a proposal to object to the levels that have been indicated and if the SSAB wanted to suggest new levels. Lamb said it seems that the SSAB had to determine whether to support the state or TSCA levels, and he preferred the state's recommended levels. Donham proposed that in Section G, Federal TSCA Levels, based on existing data, that the SSAB support the state's position on the acceptable risk-based levels until evidence shows that they should be either more restrictive or less restrictive. Vicki Jones objected to the proposal stating that she feels the numbers are less than half of what is required by the EPA. The proposal was adopted with one objection. Taylor made a general comment stating that the most valuable contribution the SSAB had was to comment. He said the SSAB was not being very effective so far and suggested the board not wait until the last minute to comment and to make the comments more detailed as to why the board liked or did not like something. He said some boards use subgroups to comment on particular documents. Rhodes

asked Taylor if he was paid to attend the meeting. Taylor replied yes. Rhodes said the board members are not, and it is difficult to find time for everything that needs to be done. Froede said the SSAB should make a general comment on how the plan is being used. Donham said he considered the 2006 Plan a major federal action that required an environmental impact statement. Fuller asked Donham if the board wanted to view this document as a plan and not accept it as a strategy. Nola Courtney asked what was the point of having these strategies, plans, and concepts when they were very expensive and time consuming. Redfield said that the DOE has some assumptions, and that the specifics for each of the waste area groups (WAGs) are not in this strategy. She said this document is a tool for projection and that the DOE is not closing the door to the public. Redfield did not want to discourage the members to comment because she said they may see things that the people who are so involved in the document do not see. Waldrop said that if this document is serving as a funding claim, it is very important that the board not count on anyone standing up for Paducah in claiming funds. Donham said that the DOE has split up waste management (WM) and environmental restoration (ER) in the document and wondered when they would be able to look at the whole picture. Redfield said that the 2006 Plan covers funding for WM and ER activities; however, the document does not cover the decontamination and decommissioning program and the cylinder management program. Tanner asked if this document was a true plan or just "fluff" to see who will get the money. Redfield said the Plan is a strategy in a way, but any changes to the assumptions that come after the cycle is over, additional funding would be difficult to obtain. Redfield said the budget cycle sometimes limits how the strategy works. Waldrop proposed that the SSAB disagree with the 2006 Plan serving as a funding plan because it seems to limit what can happen at Paducah. He said that viewing this as a funding plan heightens the fear that cleanup will stop at Paducah. Donham proposed to add that this plan is a major federal action as defined in the Council of Environmental Quality regulations. Waldrop proposed that this be added in the proposal as more of a question as to why the board's question of this plan being considered as a major federal action has not been addressed. The proposal was adopted by consensus.

The next item on the agenda was administrative issues. The SSAB draft work plan was discussed first. Kay said the National Environmental Protection Act (NEPA) was the only item on schedule for June. Dennis Hill asked if the board would like for David Allen to come back and talk about the NEPA categorical exclusions (CXs), which were distributed to the SSAB last month. Donham said it might be helpful for the board to take one or two CXs and review, such as the one concerning the cleanup on the bursting barrels. Hill said that CXs are generated here, but Oak Ridge makes the decision for NEPA on when to do a CX. He said it is also possible to have a local NEPA representative to come to the meeting next month. Froede referred to the EMEF project updates and suggested the board choose some current projects to place on the work plan. Lamb said he would like to see fewer presentations. Hill asked if the board would like a project manager and a fact sheet available instead of a presentation and Lamb agreed. Waldrop suggested assigning people to look at different projects separately. Fuller said the board's problem seems to be not having documents in enough time to comment. At this point, some of the members volunteered to be responsible to the board for particular projects. Courtney agreed to be responsible for WAG 22 and Waldrop agreed to be responsible for WAG 6.

The office equipment and lease agreement was next under administrative issues. Hill said most of the office equipment had been ordered and received and they are still working on obtaining office furniture and a surplus computer for the SSAB. Hill said that he and Redfield have discussed the lease agreement with the DOE in Oak Ridge and said that the DOE would not allow the SSAB to be a signee on the lease and would not approve the lease because there was government space available to the board. He said that a purchase order for six months instead of a lease agreement was an interim solution and the order should be approved in the next few weeks for the office space at the Information Age Park for the SSAB. He said the board should have the office by the next meeting; however, the meeting would have to take place at the Executive Inn since the Federal Register notice requires a two-week advanced notification.

The next meeting will be held June 18, 1998, in the VanBuren Room at 5:00 p.m. at the Executive Inn. The meeting was adjourned.

Tentative agenda for the June 18, 1998, meeting:

- Minutes
- Information (Handouts)
- EMEF Project Updates
- DOE Response to SSAB Recommendations (15 minutes)
- Northwest Plume Pump-and-Treat Facility Costs (15 minutes)
- Local NEPA Representative on Categorical Exclusions (30 minutes)
- Waste Area Group 6— Fact Sheet and Q&A (30 minutes)
- Waste Area Group 22, SWMUs 7 and 30—Fact Sheet and Q&A (30 minutes)
- Administrative Plans for the Board
  - Office Space, Computer, and Furniture (10 minutes)
  - Review of the SSAB Draft Work Plan (10 minutes)

Action Items

- Provide the board with a breakdown of cost figures for the Northwest Plume pump-and-treat facility.

PADUCAH GASEOUS DIFFUSION PLANT SITE SPECIFIC ADVISORY BOARD
U.S. DEPARTMENT OF ENERGY
ENVIRONMENTAL MANAGEMENT & ENRICHMENT FACILITIES
PROJECT UPDATES
MAY 21, 1998

Northwest Plume Interim Remedial Action Pilot Plant

More than 266 million gallons of water have been treated at the Northwest Plume Groundwater Treatment Facility since operations began Sept. 1, 1995. The facility operates to contain a high contamination zone of the degreaser trichloroethylene and the man-made radionuclide technetium-99.

When an Explanation of Significant Difference (ESD) was proposed in November 1996, one of the items DOE proposed was removal of the carbon filters from the treatment process.

However, when DOE put the ESD out for public comment, sentiment during a public meeting and in comments received from the Site Specific Advisory Board against removal of the filters was strong enough that the filters were left in. The filters, which were voluntarily installed by DOE, are replaced every three months.

A Five-Year Review of the Northwest Plume IRA Record of Decision, signed in July 1993, is currently underway. Requirements of this document include reviews of documents and standards, visual inspections and interviews.

Northeast Plume Interim Containment System

The Northeast Plume project includes extraction wells in the northeast quadrant of DOE property with an underground pipeline running to the existing PGDP cooling towers as part of the containment system.

Routine operations began in March 1997, with more than 110 million gallons of groundwater treated to date.

Lasagna demonstration

The Lasagna soil remediation technology tested at PGDP works by using buried electrodes to move water through contaminated soil. Applied current drives the water an inch a day from a positive to a negative electrode. Along the way, the water picks up contaminants from the soil which are removed by treatment zones containing iron filings.

DOE now plans to propose its preferred remedial measures for SWMU 91, which is The advancement into Phase IIB, full-scale remediation. The spoils from the Lasagna Phase IIA demonstration were sampled March 6 for waste characterization. The spoils consist of soil containing a mix of iron filings, carbon and clay, which are the basic ingredients of the electrodes and treatment zones in the Lasagna process. The analytical results from this sampling event will be used to determine final disposition of this waste.

The project now includes a revised Feasibility Evaluation rather than the earlier proposed Feasibility Study. EPA approved the D1 Record of Decision May 12. DOE is expected to sign the ROD in July.

If full-scale remediation is undertaken, the remediation will be funded by EM-40 (the office of the Deputy Assistant Secretary for Environmental Restoration), which funds the remainder of Paducah's Environmental Restoration and Waste Management program.

Waste Area Groups 1 & 7/C-746-K Landfill, Kentucky Ordnance Works

WAG 1 consists of a fire training area, the plant sewage treatment facility and a known trichloroethylene spill site inside the PGDP security fence. WAG 7 consists of five underground storage tanks at the plant water treatment facility, and an inactive sanitary landfill outside the security fence. Three SWMUs are connected with the former Kentucky Ordnance Works (KOW) and are located on the DOE reservation. They are the KOW sewage treatment facility, a known Toluene spill site and a burn area.

The current proposed plan includes continued controlled access, groundwater monitoring and deed restrictions in the preferred alternative. DOE signature of the Record of Decision came in February. The state continues to review the document.

Waste Area Group 3/burial grounds
WAG 3 is composed of three burial grounds within the PGDP security fence — C-747 Contaminated Burial Yard (SWMU 4), C-746-F Classified Burial Yard (SWMU 5) and C-747-B Burial Yard (SWMU 6). The yards, located in the western section of PGDP, contain natural and slightly depleted uranium, Technetium-99, magnesium fluoride, uranium-contaminated solid waste, security-classified weapons components, radionuclide-contaminated scrap metal, and slag from nickel and aluminum smelters.

The Remedial Investigation/Work Plan was issued to regulatory agencies on Nov. 13, 1997, and regulatory comments have been received. Because significant changes were made following comment resolution meetings between DOE and the regulators, an extension has been requested for the June 6 due date for the D2 version. In addition, EPA has requested that it review the document for 60 days instead of 30 days.

Waste Area Group 6/Trichloroethylene spill site
The C-400 TCE spill site is a major source of TCE in the groundwater and soil. The Industrial Hydrogeologic Study focused on piping, utilities and building foundations in the C-400 building area to determine how these man-made structures and systems influence groundwater infiltration and flow.

The data from this investigation was used to prepare a WAG 6 Remedial Investigation Work Plan which focuses on contaminant distribution and movement. Treatability studies to get data necessary to remediate contaminants expected to be found during the investigation have been completed.

All of the borings for the remedial investigation have been completed and data is in the process of being validated. Following completion of the RI/FS, a Proposed Plan and Record of Decision for the preferred remedial action will be developed. The selected action will be designed and implemented following the signing of the ROD.

Waste Area Groups 9 & 11
WAGs 9 and 11 are being investigated to determine if there have been contaminant releases from buried tanks, vaults and pits around the PGDP. This project is being combined with two petroleum underground storage tank (UST) investigations, and the collection of six groundwater samples from the C-747-A burial yards.
Drilling and excavation is scheduled to begin in mid-June, 1998, but preliminary fieldwork to prepare the excavation permits is beginning next week.

WAG 9 consists of the C-722 acid neutralization tank, off the northeast corner of the C-720 maintenance facility; the C-712 acid neutralization tank, off the southwest corner of the C-710 laboratory; the C-616-L Pipeline and vault soil contamination area; and the C-729 Acetylene building drain pits, just east of C-720.

WAG 11 consists of the C-410-B hydrofluoric acid (HF) neutralization sludge lagoon; the C-410-

E HF emergency holding pond; and the C-410-C HF neutralization tank.

At these locations, shallow soil borings will be conducted to collect soil samples to determine if there have been contaminant releases from the structures. If this information reveals there may have been a release, further investigation to determine the full nature and extent will be required later.

PGDP has four USTs that will require shallow soil sampling and analysis in accordance with Kentucky UST regulations to obtain the status of "Closed in Place." In 1996, the soil around tanks was sampled, the tank contents were emptied and sampled, and the tanks themselves were filled with inert material as part of the UST closure process. However, the analysis of the soil samples was not low enough to meet Kentucky UST regulations, and the soil must be resampled. The four tanks are C-750-D, off the southwest corner of the C-750 garage; C-200-A, next to the plant Police/Fire station; C-710-B next to the C-710 laboratory; and C-746-A, off the northwest corner of the C-746-A warehouse.

Two USTs at the C-750 garage, C-750-A&B, were the tanks that was the original plant gas station, off the southeast corner of the building. Here sampling has indicated that in order to achieve closure, approximately 175 cubic yards of soils contaminated with gasoline (A hole 10 foot wide by 40 foot long by 10 foot deep) will be excavated. During this excavation, the road in front of C-750 (between C-750 and C-200) will be closed.

Six shallow groundwater wells will be installed in the C-747-A burial yards, located in the northwest corner of PGDP. This resampling of the shallow water table was requested by the State of Kentucky as part of the ongoing WAG 22 investigation.

Initial cost estimates for field work and the Site Evaluation are finished, and approval has been granted by KDEP. The Site Evaluation Report is scheduled for December 1998.

Waste Area Group 16 & 19/PCB sites

WAGs 16 & 19 are considered low-risk PCB sites. WAG 16 includes a PCB spill site, inactive PCBP transformer area, PCB soil contamination and an outfall ditch. WAG 19 includes a PCB spill sites and soil contamination.

FY 98 tasks include development of the Preliminary Assessment/Site Investigation Work Plans and implementation fo the field work addressed in the approved work plan. The Site Evaluation Report is currently scheduled for FY 99.

Waste Area Group 22/Burial grounds

This project includes the investigation of burial grounds in the northwest corner of the plant (SWMUs 7 & 30) and in the west-central portion of the plant (SWMU 2). Original plans included installation of a cap at SWMU 2, the C-749 Uranium Burial Ground, but investigation activities have determined that the buried material was saturated in the water table, indicating a cap would have limited effect. The scope of this project for Fiscal Year 1998 is to prepare the SWMU 2 D1/D2 Feasibility Study, D0/D1 Proposed Plan and the D0 Record of Decision. EPA comments on the D1 FS were received May 13. The D2 FS is due back to agencies by July 12. Finalization of the Proposed Plan and the ROD are forecast for Fiscal Year 1999.

The development of a Feasibility Study is ongoing at SWMUs 7 & 30 (the C-747-A Uranium Burial Ground and C-747-A Burn Area), with regulatory comments on the D1 FS due June 26. The project scope also includes the D0/D1 Proposed Plan and the D0 Record of Decision. Finalization of the Proposed Plan and ROD is forecasted for Fiscal Year 99. SWMU 7 & 30 waste pit sampling is scheduled for late June and early July.

Waste Area Group 23/Polychlorinated Biphenyls (PCBs) Spill Sites

The DOE recently finished excavation of approximately 175 cubic yards of contaminated soil at several PCB sites. The excavation and temporary on-site storage of the contaminated soil was necessary to eliminate risk to workers from contact with soil.

These sites include eight SWMUs inside the security fence, and one outside the fence, located near the C-611 Water Treatment Facility fence. One of the SWMUs is actually a part of WAG 27, but has been grouped with the WAG 23 SWMUs because it has similar physical characteristics and contamination present.

Past use of PCBs and subsequent accidental spills and leaks of oils that contain PCBs caused the surface soil contamination at the SWMUs.

This action was performed with an Engineering Evaluation/Cost Analysis Summary for the cleanup and an Action Memorandum. This process allows for the non-time critical removal action to be completed with DOE approval. DOE plans to issue a position paper for final action to the state and EPA. The final disposition of the soil will be determined at a later date, consistent with applicable laws and regulations.

A continuing issue is the disagreement between the Commonwealth and DOE on the PCB clean-up level.

Waste Area Group 27/Potential trichloroethylene sources

Field work remains on schedule for the WAG 27 project, with the last sample scheduled to be collected by June 15. WAG 27 consists of potential or known sources of TCE on the west side of PGDP suspected of contributing to groundwater contamination. WAG 27 includes the C-747-C Oil Land Farm, SWMU 91 (the cylinder drop test area), SWMU 196 (C-746-A Warehouse septic systems) and the C-720 maintenance facility. SWMU 1 is part of WAG 27, but excavation work was recently completed at this SWMU to remove dioxin contamination as part of the WAG 23 removal actions.

Shallow drilling, sampling and field analytical work began in February 1998, with an approved work plan outlining more than 100 soil borings to be taken, more than 20 of which require deep drilling. Deep drilling was postponed in late March because the drillers' attempt to find a single drill bit that could be used from top to bottom through each geologic unit was unsuccessful. EPA and UK-AIP have approved a proposal to continue Dual Wall Reverse Circular drilling on the project, but eliminate the soil samples from the Regional Gravel Aquifer (RGA). The state and EPA have agreed that geotechnical parameters can instead be collected from the drilling cuttings and environmental parameters can be substituted for the water samples, which are collected every 5 feet throughout the RGA. DOE is preparing a Record of Conversation to document the changes in the D3 WAG 27 RI/FS Work Plan.

Following the remedial investigation, a Feasibility Study will be completed prior to a Proposed Plan. It is in the Proposed Plan that DOE names the "preferred" alternative for remediation. Following a public comment period on this plan, DOE issues a Record of Decision, first internally, then to the regulatory agencies, then to the public.

The Administrative Record File for WAG 27 is available at the DOE Environmental Information Center. Access to the ARFs may be obtained by contacting Shelley Hawkins at the DOE Environmental Information Center, West Kentucky Technology Park, U.S. 60 Kevil, Ky. 42053. Phone 502-462-2550, 7:30 a.m. - 4:30 p.m. weekdays.

Vortec Vitrification Project

DOE's Environmental Assessment (EA) of the potential impacts from construction and operation of the Vortec Corporation Cyclone Melting System technology at PGDP has been released for public

comment. With this assessment, DOE has evaluated the potential environmental impacts of the system for treating low-level radioactive, Resource Conservation and Recovery Act (RCRA) hazardous and Polychlorinated Biphenyls (PCB) mixed (radioactive, PCB and RCRA-hazardous) waste, primarily contaminated soils, currently stored at PGDP. The Vortec system would use a glass-making technology known as vitrification to melt wastes into a solid product that will meet the land disposal requirements of RCRA. This process destroys organics, such as PCBs, and produces a glass which will bind any metallic or radioactive compounds. The comment period for the draft lasts through April 20.

Based on the impacts analysis of the EA, DOE will determine whether to issue a Finding of No Significant Impact (FONSI) for the proposed Vortec project or prepare an Environmental Impact Statement (EIS), which would further study the project's impact to human health and the environment.

Argonne National Laboratory (ANL), which conducted a site visit in August 1997, prepared the EA. DOE chose ANL because ANL had no prior knowledge of the Vortec system or Paducah's waste management program. DOE's original plan for release the EA for public review the week of Feb. 23 was preempted because of extensive internal review. The EA was done to comply with the requirements of the National Environmental Policy Act (NEPA) of 1969.

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Engineers and Constructors

5-Year Review of the Northwest Plume Interim Remedial Action Record of Decision

Presented by:
Ken Davis, Jacobs EM Team
for the
Bechtel Jacobs Company LLC

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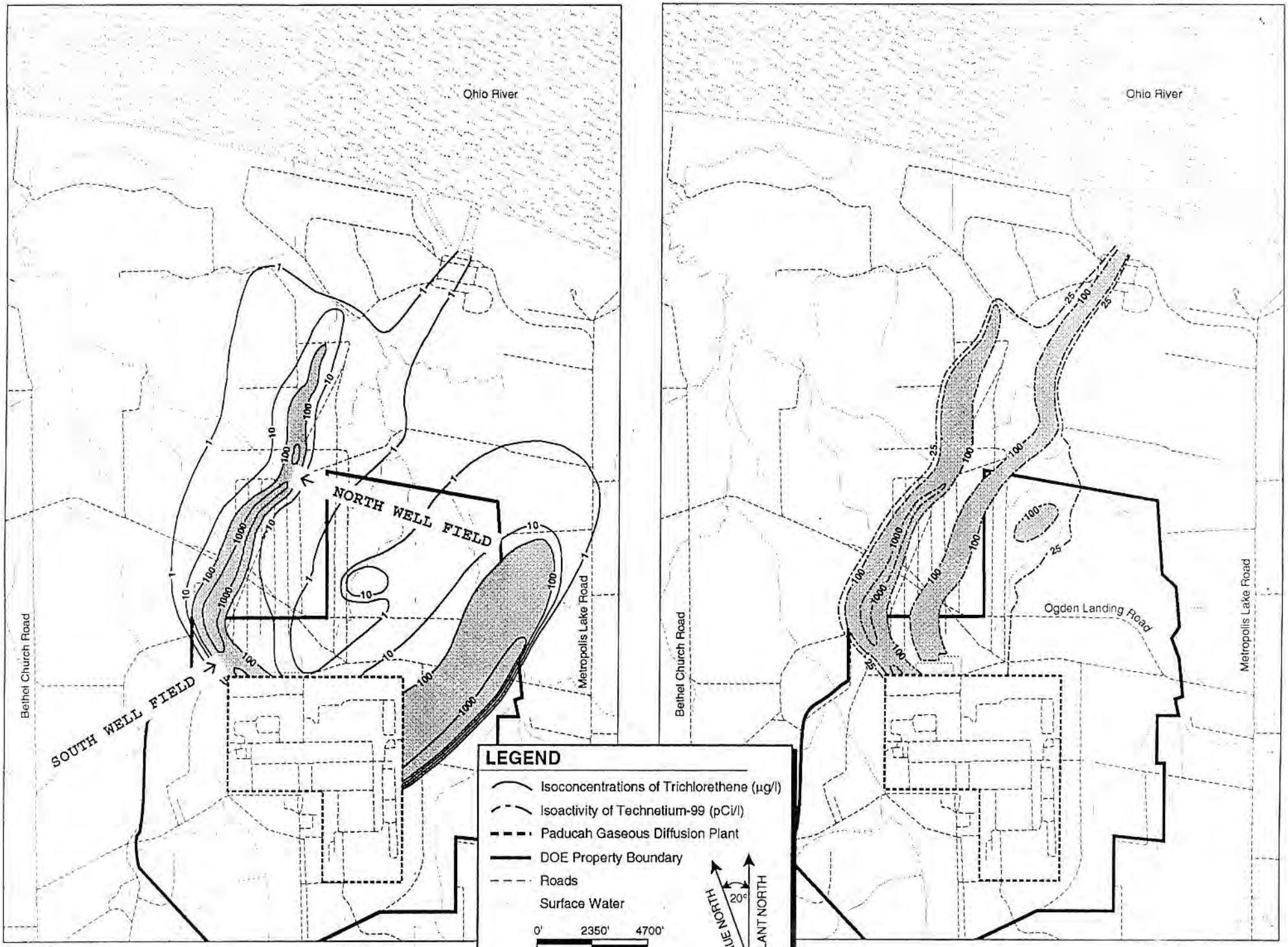
Engineers and Constructors

Northwest Plume IRA ROD

- ROD signed July 10, 1993.
- Two extraction well fields to capture the high concentration zone of trichloroethene (TCE) and technetium-99 (^{99}Tc) in the Northwest Plume.
- Water treatment facility to reduce contaminant levels prior to effluent release to Bayou Creek.



Trichlorethene

Technetium-99

Jacobs EM Team, 1998

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Operations

- Pump-and-treat facility began operations on August 28, 1995.
- By the end of March 1998, the facility had treated 252 million gallons of water.

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Latest Contaminant Levels

- South Well Field (PGDP Security Fence).
  - Up to 12,700 ppb TCE.
  - Up to 1,600 pCi/l ^{99}Tc.
- North Well Field (North Limit of High Concentration Zone).
  - Up to 2,300 ppb TCE.
  - Up to 885 pCi/l ^{99}Tc.

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Treatment Facility Efficiency

- Facility typically operates +99% of the time.
- Last quarter effluent levels (to Bayou Creek) average less than 5 ppb TCE and 24 pCi/l ^{99}Tc.
- Operational goals are less than 5 ppb TCE and 900 pCi/l ^{99}Tc.

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ROD Goals

- Initiate control of the high concentration zone.
- Mitigate the spread of contaminants.

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Monitoring Well Results

- General trend of decline in contaminant levels.
- Isolation of high concentration zone between fields.

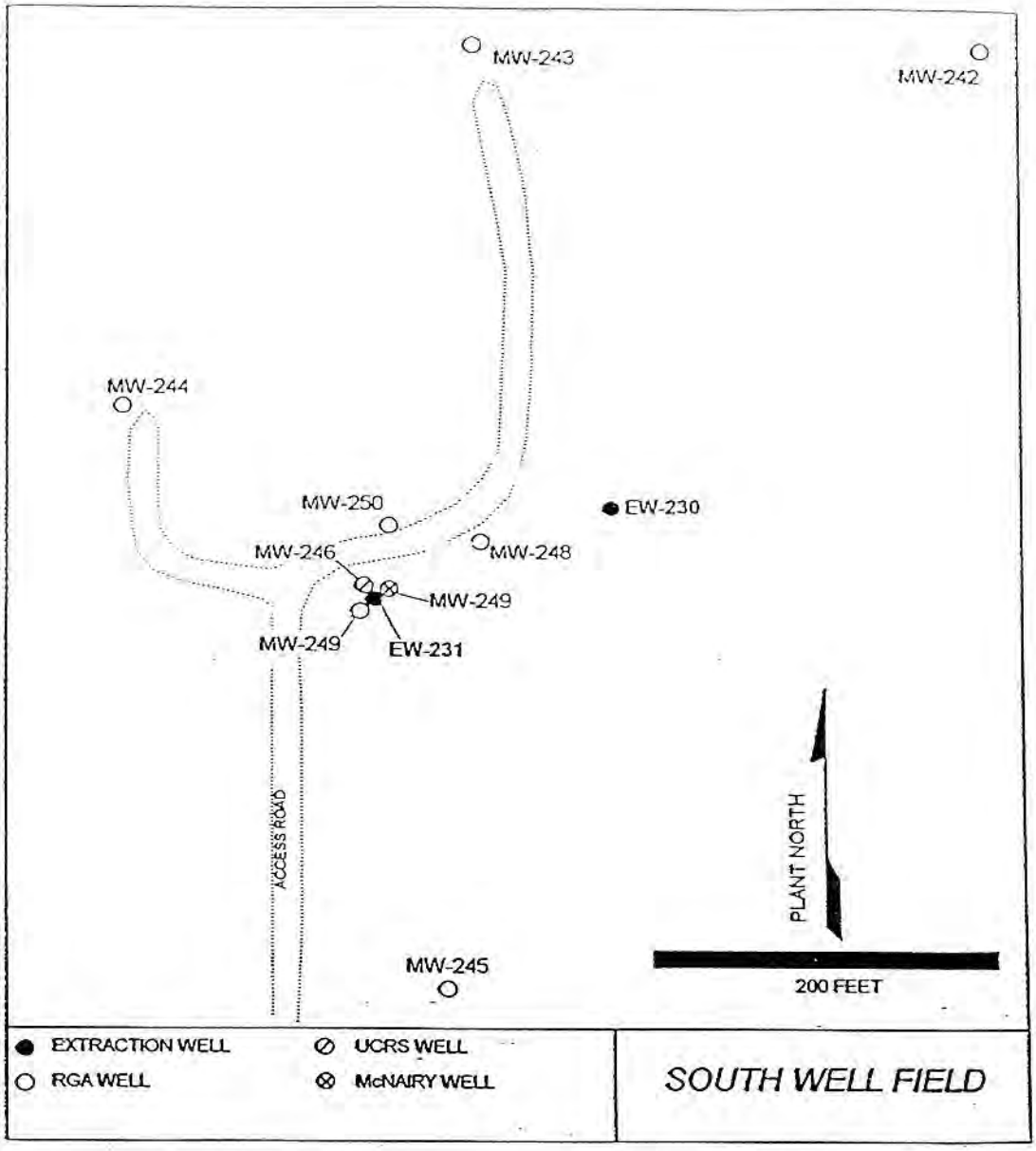
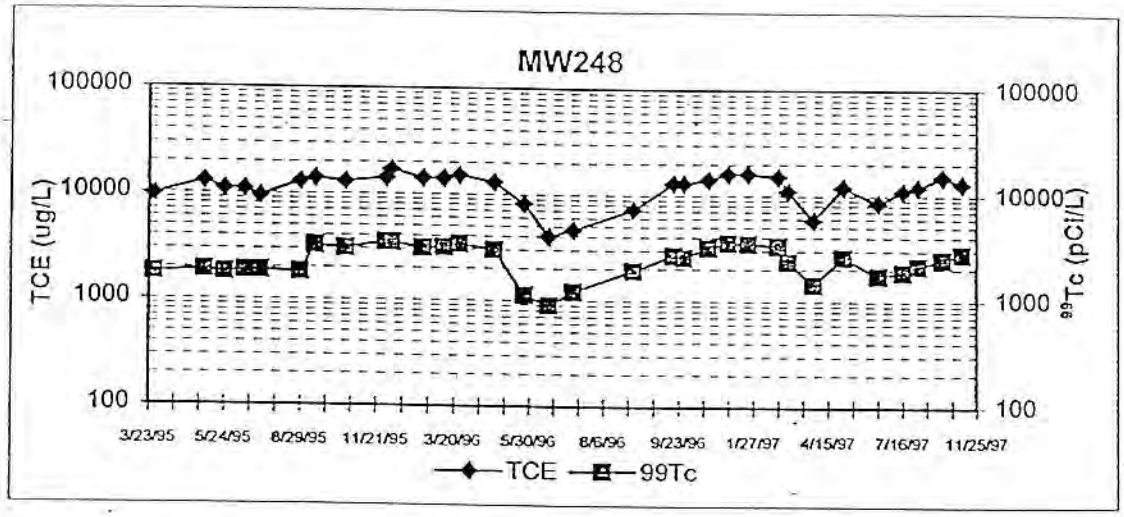


Figure 2. Observation well layout for the South Well Field.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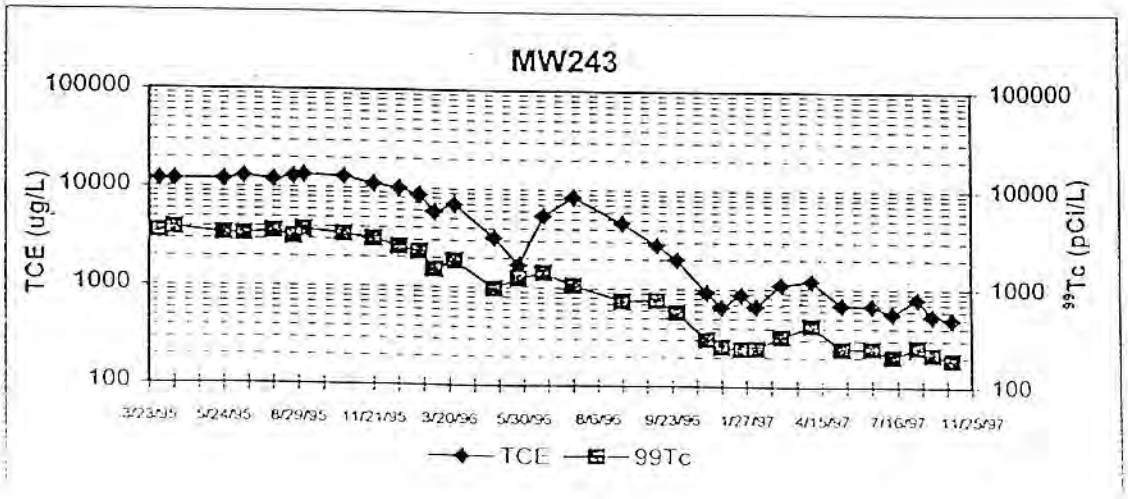
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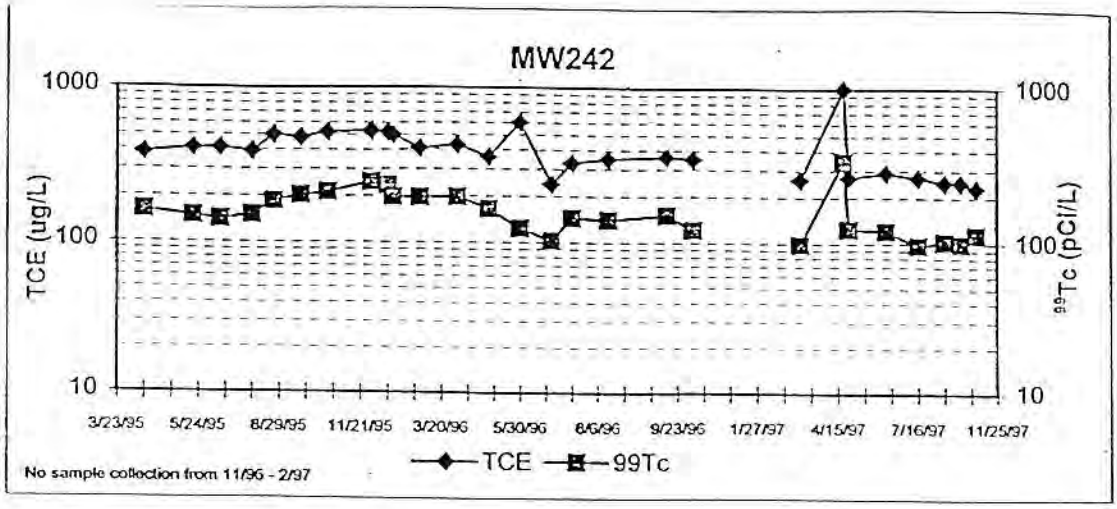
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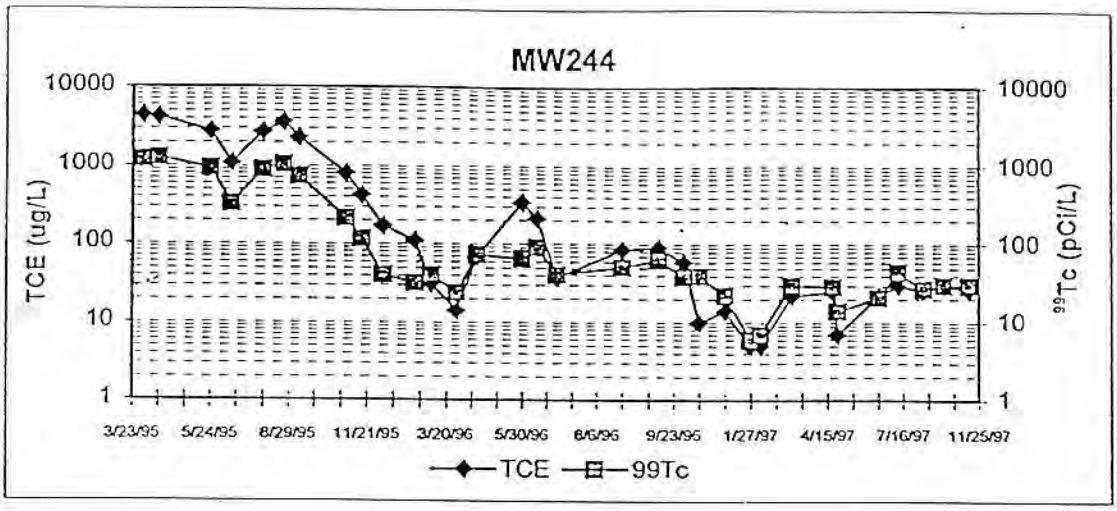
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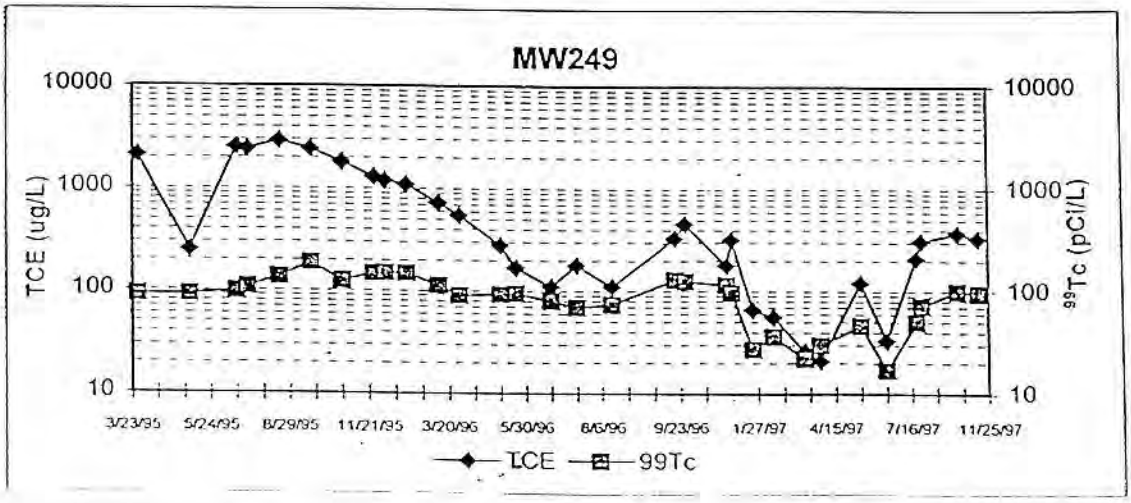
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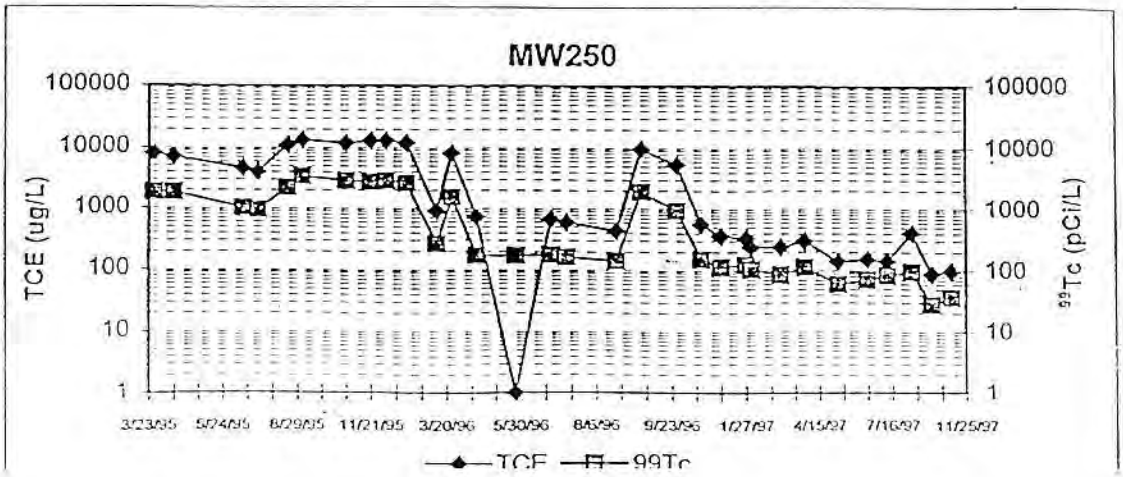
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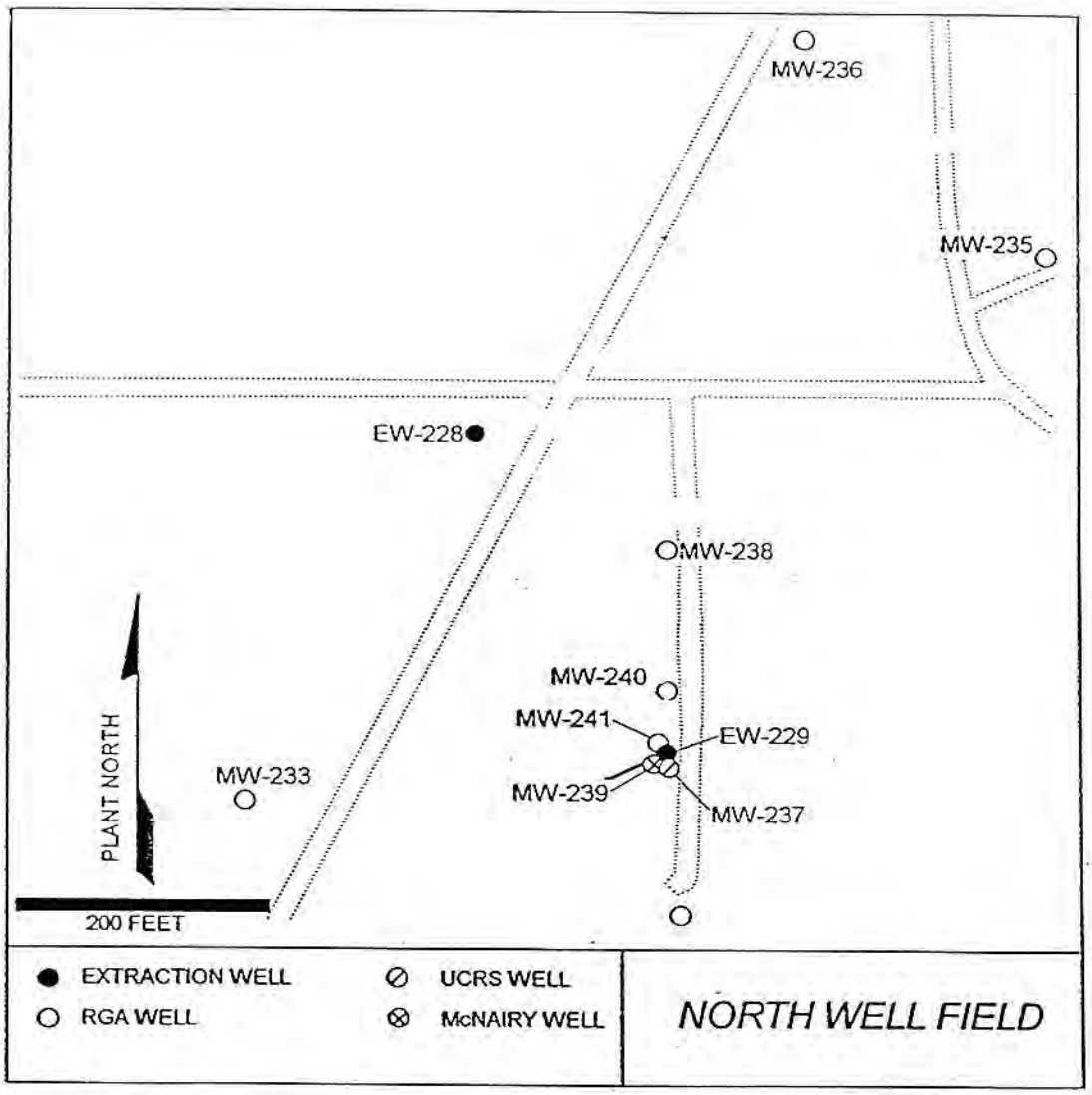
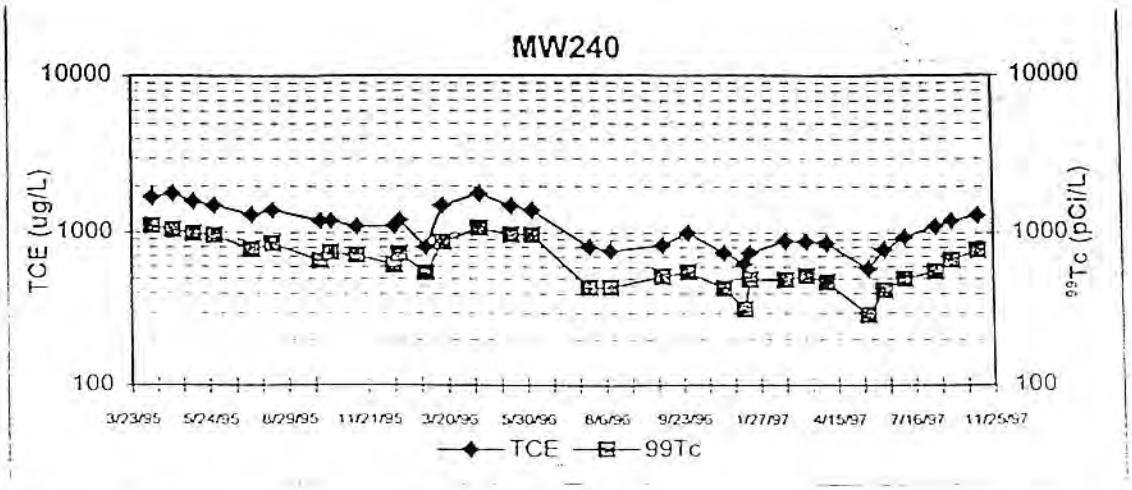


Figure 3. Observation well layout for the North Well Field.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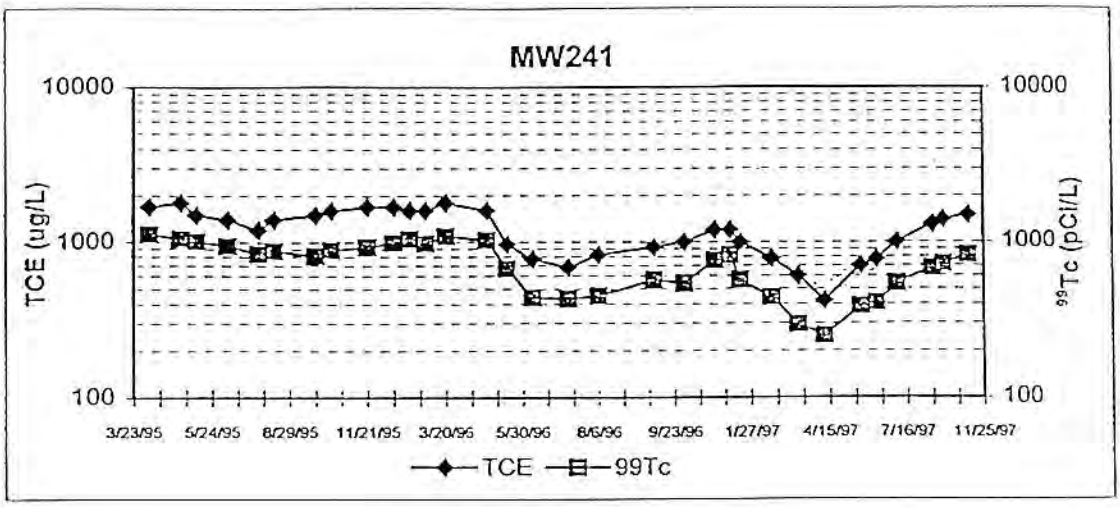
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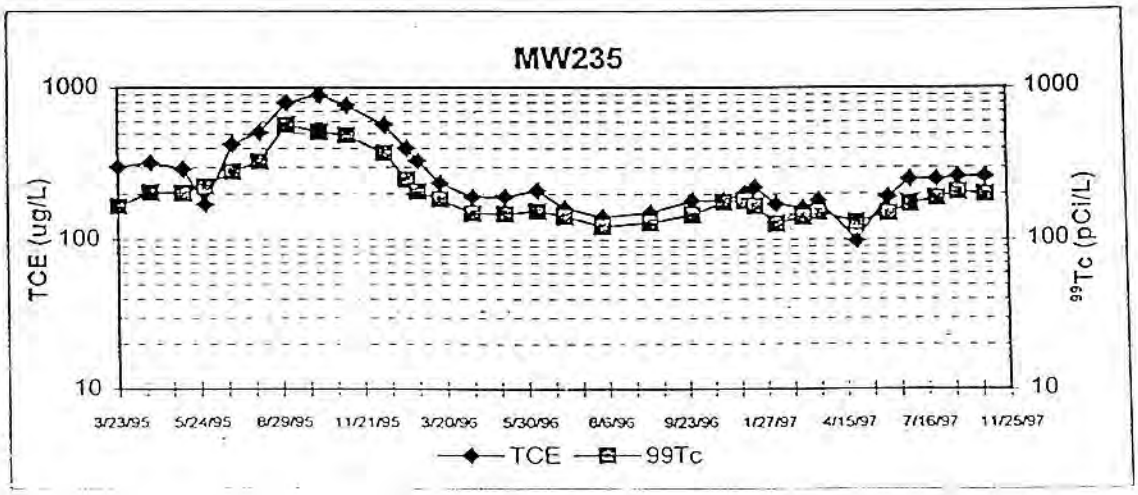
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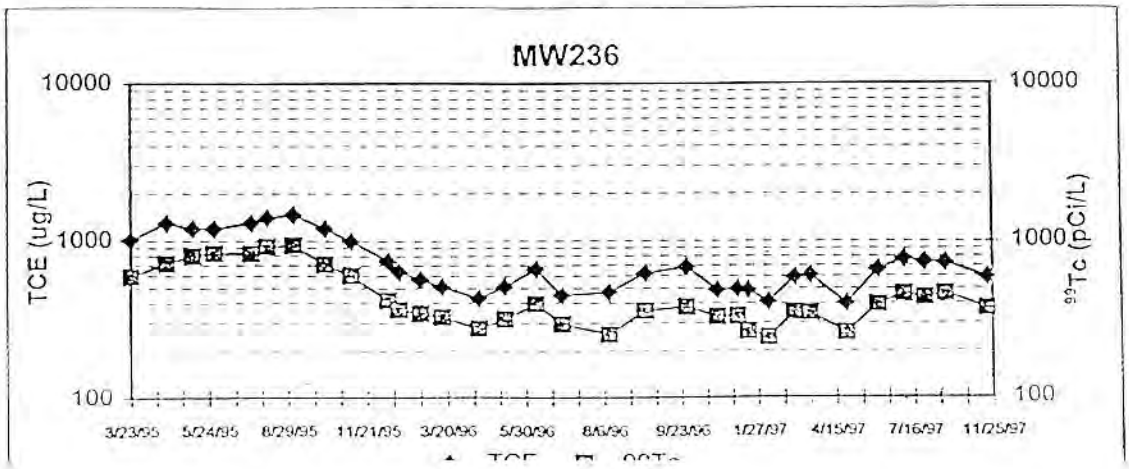
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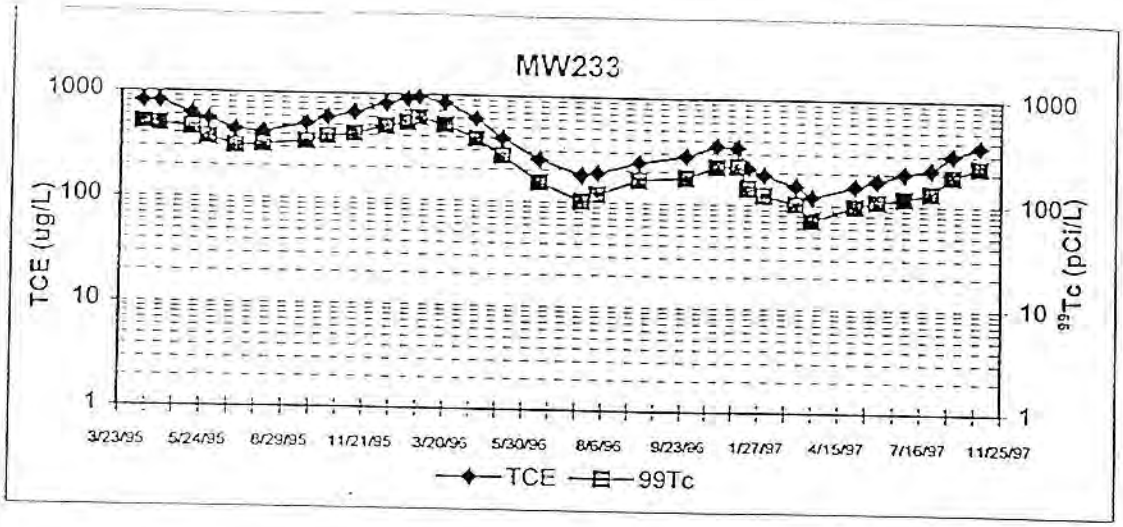
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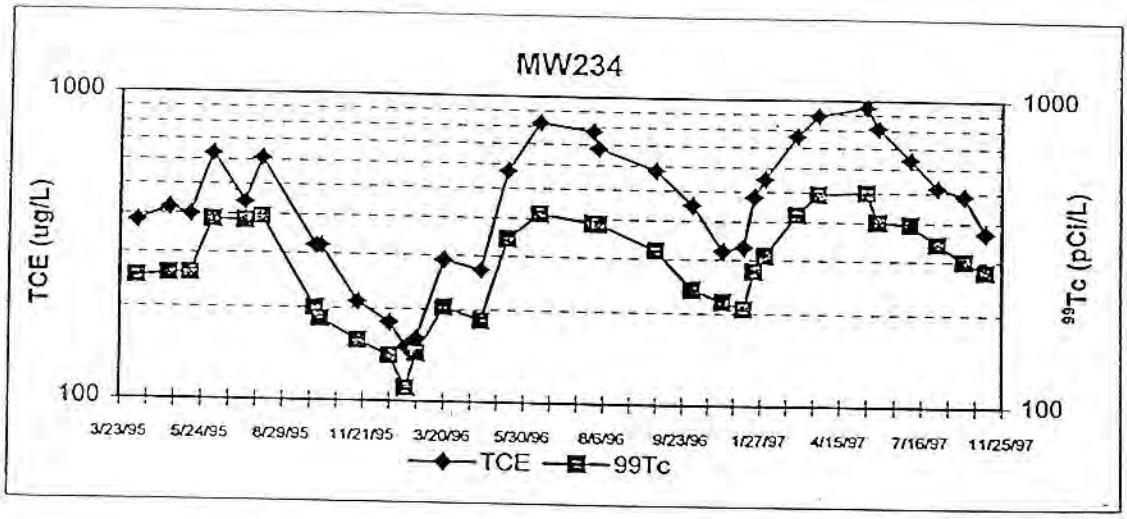
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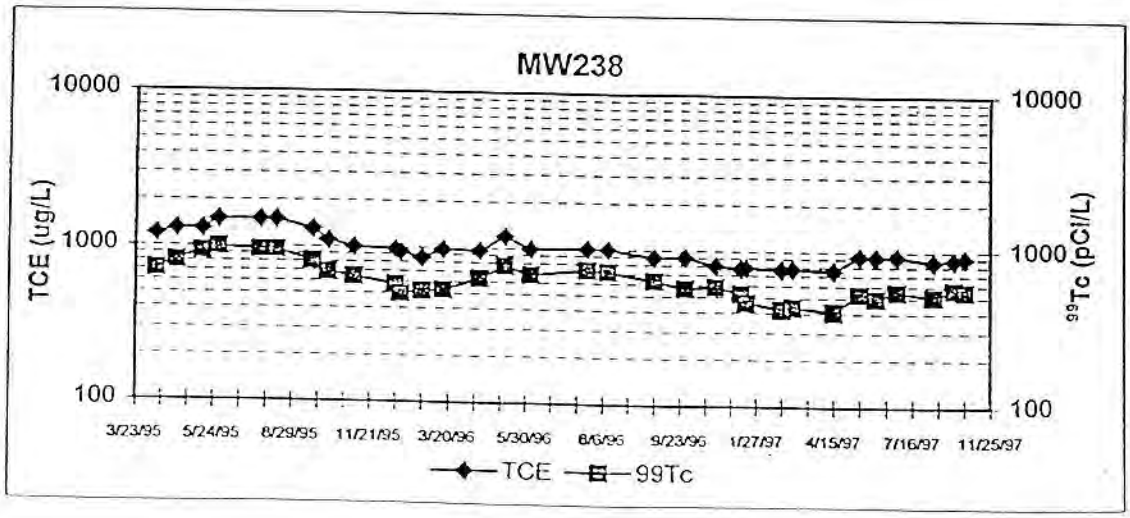
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5-Year Review Focus — Effectiveness of Remedial Action

- Operations and maintenance records.
- Monitoring results.
- Interviews of contractor, government, and public.

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5-Year Review Submitted to USEPA in July 1998

- SSAB uniquely qualified to provide public input.
- Comments incorporated into report to USEPA.
  - Comments on effectiveness of remedy.
  - Comments on appropriateness of remedy.

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SSAB Input

- Should pump-and-treat facility be continued?
  - With cleanup of C-400 Building TCE source, high concentration zone will persist for 10s of years.
  - Without cleanup of C-400 Building TCE source, high concentration zone will persist for 100s of years.

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SSAB Input

- Should the pump-and-treat capabilities be expanded?
  - To contain the full width of the Northwest Plume at the PGDP security fence.
  - To more completely capture the high concentration zone at the North Well Field.

From the Desk of Sheree Black

May 14, 1998

Karol Hazard
EM-22, Forrestal Building
U.S. Department of Energy
1000 Independence Avenue
Washington, DC 20585

Rachel Samuel
Deputy Federal Advisory Committee Management Officer
DOE HR-72, Room 7E-028
U.S. Department of Energy
1000 Independence Avenue
Washington, DC 20585

DOE Freedom of Information Public Reading Room
Room 1E-190, Forrestal Building
U.S. Department of Energy
1000 Independence Avenue
Washington, DC 20585

RE: Approved Meeting Minutes for April 1, 1998

Enclosed is a copy of the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) approved meeting minutes for April 1, 1998. Attached to the minutes are the latest recommendations submitted to the Department of Energy/Oak Ridge Operations.

Sincerely,

Sheree Black

Sheree Black
Administrative Assistant

/sb

Enclosures: Karol Hazard (2)
Rachel Samuel (1)
DOE Public Reading Room (1)

Oak Ridge Reservation Environmental Management Site Specific Advisory Board
Administrative Support, P.O. Box 2001, EW-91, Oak Ridge, TN 37831
Phone (423-241-3665) Fax (423-576-6074) e-mail (blacksl@oro.doe.gov)

Oak Ridge Reservation Environmental Management
Site Specific Advisory Board

Approved April 1, 1998 Meeting Minutes

The Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) held its regularly scheduled monthly meeting on April 1, 1998, Wednesday, at the Ramada Inn, Ballroom, beginning at 6:00 p.m.

Members Present

Bill Pardue, Chair
Joe Alexander
Jack Bowden
Donna Campbell
Fred Creswick
Peter Hillis
Steve Kopp
Demetra Nelson
Ken Parks
Bob Peelle
Pat Rush
Charles Washington

Members Absent

Mary Bryan
Randy Gordon
Sandra Reid
Lorene Sigal
Janice Stokes
Rikki Traylor
Jonathan Wood

Ex-Officios & Deputy Designated Federal Official Present

Rod Nelson, Deputy Designated Federal Official
Marianne Heiskell, DOE/ORO
John Owsley, TDEC
Dr. John Stockwell, EPA Region 4

Others Present

Sheree Black, Jacobs Support Staff
Tina Hawkins, Jacobs Support Staff
Paula Jennings, Jacobs Support Staff

There were approximately seven members of the public present.

Presentation
Mr. John Moore, DOE/ORO Environmental Technology Group Leader, gave a presentation entitled "Overview of Environmental Technology Program."

Public Comment
No comments were made during the official public comment period.

Deputy Designated Federal Official & Ex-Officio Comments

Deputy Designated Federal Official: Rod Nelson reported that Bechtel/Jacobs Company LLC took over the management and integration contract on April 1, and that the transition phase in period, from contract award to April 1, went smoothly. He gave much of the credit for the successful transition to Marianne Heiskell, who led the transition team.

Mr. Nelson reported he had met with DOE representatives from Richland, Idaho, Rocky Flats, and Savannah River in Washington last week to discuss the Office of Management and Budget (OMB) guidance for fiscal year (FY) 2000. The Oak Ridge Environmental Management program target is $100 million less than requirements for FY 2000. Mr. Nelson noted that there are major discrepancies between budgetary needs as identified in the *Accelerated Cleanup Paths to Closure* document and the OMB targets. He said that environmental problems on the Oak Ridge Reservation are as significant, if not worse, than those at other sites that are receiving increased funding. A peer review group is being established to visit each site and validate cost estimates. Based on the peer review group's findings, the Secretary of Energy will request additional funding. The peer review group (representatives from DOE Headquarters, field offices, OMB, and the Chief Financial Officer) will be in Oak Ridge in late April or early May.

Mr. Nelson and Jim Hall met last month with Earl Leming and Justin Wilson of TDEC to discuss the State's rejection of the FY 1998 TSCA Incinerator Burn Plan. TDEC agreed to work with other states that are faced with health and safety concerns if waste cannot be shipped to the TSCA Incinerator for treatment.

DOE-ORO Ex-Officio: Ms. Heiskell said that she and Sheree Black are identifying ways to improve administration of the ORREMSSAB. She added that DOE has responded to seven of the nine outstanding ORREMSSAB recommendations and is developing a system to respond more quickly in the future.

TDEC: John Owsley said TDEC has provided written responses on the two ORREMSSAB recommendations approved at the February Board meeting. TDEC has also received the four recommendations approved at the March Board meeting, but has not yet provided written responses to the ORREMSSAB. He has been providing copies of pertinent correspondence to the ORREMSSAB (e.g., documents related to the Federal Facility Agreement, the TSCA Incinerator, and the planned waste disposal facility). This correspondence is available in a notebook kept by Ms. Black (Board members are notified of available correspondence and may contact Ms. Black for copies.)

EPA: Dr. John Stockwell recommended that the ORREMSSAB fill the positions left open by recent resignations so as to best address environmental justice concerns and the need for diversity on the board. He said that EPA must demand that the community is fully represented.

Dr. Stockwell said that EPA plans to share its environmental media sampling strategy with all stakeholders in June; however, EPA cannot provide the names of individual citizens associated with the original request.

Motions and Recommendations

M[1]04/01/98.1 A motion was made by Pat Rush and seconded by Charles Washington to approve the business agenda. Bill Pardue amended the original motion, requesting that agenda Item VIII.I, New Business, be revised to include a discussion of adding new ORREMSSAB members. Mr. Pardue made an amendment to add Item X.A, Letter to Regulators, and Item X.B, SSAB Chairs Conference Call, to the agenda. The business agenda was **unanimously approved** as amended.

M04/01/98.2 Pat Rush moved to approve the April 1, 1998, meeting minutes. Steve Kopp seconded the motion. Pat Rush amended the original motion to correct the dates 4/23/98 to 4/24/98 to 3/23/98 to 3/24/98 in Action Item No. 9 on page 6. Bob Peelle further amended the original motion to delete Action Item No. 5 on page 6. Steve Kopp seconded the amendment. The minutes were **unanimously approved** as amended.

R[2]04/01/98.10 Mr. Peelle moved to submit to DOE a letter (Attachment 1) regarding "Accuracy in Describing the Relationships Among the Oak Ridge Reservation, the City of Oak Ridge, and the Surrounding Areas." Ms. Rush seconded the motion. The motion was **unanimously approved** on the condition that Mr. Peelle verify that the entire Oak Ridge Reservation is within the City of Oak Ridge and revise the letter as necessary.

R04/01/98.11 Peter Hillis, Budget and Prioritization Co-Team Leader, requested that the ORREMSAAB approve the Team's Recommendations (Attachment 2) on the draft document Accelerating Cleanup Paths to Closure for submittal to DOE. Ms. Rush seconded the motion. Five amendments were made to the motion: (1) Mr. Peelle made an amendment to revise the second bullet under Appendix I on page 15 by replacing the first sentence with "The DOE must soon come to agreement with the State on issues raised by the State." Ms. Rush seconded the amendment. The amendment was **unanimously approved**. (2) Mr. Peelle made an amendment to revise Issue No. OR-5-97 on page 16 by deleting the second sentence. Joe Alexander seconded the amendment. The amendment was **unanimously approved**. (3) Mr. Peelle made an amendment to revise Issue No. OR-8-97 on page 17 by deleting the second sentence and changing "The" in the second sentence to "Many." Ms. Rush seconded the amendment. The amendment was **unanimously approved.** (4) Mr. Peelle made an amendment to revise Issue No. OR-9-97 on page 17 by deleting the last sentence. Ms. Rush seconded the amendment. The

[1] Motion
[2] Recommendation

amendment was **unanimously approved**. (5) Mr. Peelle made an amendment to revise Issue No. OR-21-97 on page 18 by deleting the last sentence. Ms. Rush seconded the amendment. The amendment was **unanimously approved. Unanimous consensus** was reached in favor of the main recommendation as amended on the condition that the project team also incorporate editorial comments received from Mr. Peelle.

M04/01/98.4 Mr. Washington moved for the ORREMSSAB to send four representatives to the FY 1998 International Conference on Incineration and Thermal Treatment Technologies, May 11-15, in Salt Lake City, Utah, at a total cost not to exceed $10,000. Ms. Rush seconded the motion. Mr. Peelle amended the motion to send three representatives at a total cost not to exceed $7,500. Ms. Rush seconded the amendment. The amendment was **unanimously approved**. The main motion, as amended, was **unanimously approved**.

M04/01/98.5 Mr. Peelle moved to approve a letter (Attachment 3) from the ORREMSSAB to EPA and TDEC thanking them for their participation in the March 25 public meeting on the Bear Creek remediation and the on-site waste disposal cell and the March 26 discussions on improving the dialogue between agencies and the public. Ms. Rush seconded the motion. The motion was **unanimously approved**.

Respectfully submitted,
Peter Hillis, Secretary

PH/pj

Attachments (3)

Action Items
April 1, 1998 Board Meeting

(1) All Board members are to arrive 15–20 minutes early at the May Board meeting to have their photographs taken. Sheree Black will send a reminder to the members.

(2) Rikki Traylor will contact Bob Peelle regarding incorporation of his comments into the revision of the Standing Rules, which will be submitted to the ORREMSSAB for approval at the May 6 meeting.

(3) Board members who have comments on the draft revised Standing Rules should contact Rikki Traylor prior to the next By-Laws Committee meeting.

(4) Board members who plan to attend the tour of ETTP on April 18 should submit their completed registration forms to Sheree Black. *Completed 4/1/98*

(5) The Waste Cell Management Special Project Team and the Equity Issues Project Team are to develop and distribute their statements of work.

(6) Bill Pardue will contact Sandra Reid, Janice Stokes, and Mary Bryan by letter or telephone to ask that they reconsider their decisions to resign or submit letters of resignation. The Board will vote at the May 6 Board meeting in accordance with Standing Rules, IV. Removing Board Members, A. Process to remove Board members because of chronic absences.

(7) Joe Alexander will distribute a letter to team leaders to start budget process for FY 1999.

(8) Bob will submit a copy of editorial changes on the "Accelerating Cleanup Paths to Closure" recommendation to Peter. *Completed 4/1/98*

(9) The FY 98 Mixed Waste Focus Area Mid-Year Program Review Meeting has been rescheduled. The Technology D&D Project Team has budget authorization for three people to attend the meeting. This will be brought before the Board when the meeting is scheduled.

(10) Sheree will schedule a Bylaws Committee meeting and put on SSAB Information Line. *Meeting scheduled for April 20, 1998, Monday, 4:00 pm, IRC*

(11) Board members are to review the Public Outreach Team list of organizations for presentations and provide comments to Sheree.

Attachment 1

AK RIDGE RESERVATION

Environmental Management

April 6, 1998

Mr. Rod Nelson
Assistant Manager for Environmental Management
DOE/ORO/EM
P.O. Box 2001
Oak Ridge, TN 37831

RE: Accuracy in Describing the Relationships Among the Oak Ridge Reservation, the City of Oak Ridge, and the Surrounding Populated Areas

Dear Mr. Nelson:

The Oak Ridge Reservation (ORR) of the Department of Energy (DOE) borders against Knox and Loudon counties and lies almost entirely within the City of Oak Ridge and the counties of Anderson and Roane. The basic situation has not changed since the City incorporated in 1959, though some areas have been annexed and the populations of the counties continue to rise.

Many documents prepared for the DOE's Oak Ridge Operations Office (DOE/ORO) speak in some way of the distance from the reservation to nearby Oak Ridge, and reflect other cities as dots on compressed maps. While occasional flaws are anticipated in draft documents, populations near the reservations need to be properly represented.

Maps in documents that one might use when considering the possible spread of contamination from the ORR do not represent the location of nearby populations either inside or outside the City of Oak Ridge. For example, the populated portion of the city closest to the ETTP, annexed several years ago, has yet to appear on DOE or DOE contractor maps.

Some of the persons having residences in this ("Westwood") area live about half the distance from the ETTP suggested by the available DOE illustrations of the nearest off-ORR part of Oak Ridge, and thus might expect to receive greater air concentration from air emissions originating in the ETTP area than would a person living in the areas shown. (The average concentration from air dispersion of any contaminant depends on relative altitude and the effect of hills as well as the distance and direction from the source, so the effect of reduced distance might not yield the increased air concentration that would be anticipated if the terrain were flat.)

Recommendation 04/01/98.10

P.O. Box 2001 • Mail Stop EW-91 • Oak Ridge, TN 37831 • (423) 241-3665

Reports that involve municipal utilities have sometimes badly misreported the connections between City utilities and those belonging to the DOE. In the future, public entities may own and operate electric power, water, and waste water systems at East Tennessee Technology Park (ETTP) and ED-1. Furthermore, the City of Oak Ridge codes, regulations, and ordinances apply to construction and modification by private lessees on the ORR to the extent that federal primacy permits.

To correct the first problem, the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) recommends that DOE/EM routinely notify contractors of the actual geographic boundaries of the ORR and the City of Oak Ridge. On an appropriate scale, the geographical extent of nearby cities should also be shown. Accuracy is required in describing the relation of operations on the ORR to any municipal entity.

As for properly representing the relationship of any ORR release points to the surrounding population, basic population maps need to be prepared. Broader scale maps showing the smallest census units could be shaded to illustrate the varying population density. Enlarged fine-scale maps could roughly represent streets and/or dwelling units, providing approximate shading related to population. At every map scale an appropriate wind rose should be printed, obtained at a stated position and altitude, to indicate the prevailing air movement patterns. In any case the reader should be encouraged to appreciate the density of the nearby population. Streams should also be clearly indicated.

The ORREMSSAB looks forward to your responses to these suggestions and a corresponding improvement in future documents.

Sincerely,

William M Pardue

William M. Pardue, Chair

WMP/sb

cc: Marianne Heiskell, DOE/ORO
Earl Leming, TDEC
John Hankinson, USEPA Region IV
Karol Hazard, DOE/HQ
Susan Gawarecki, LOC
ORREMSSAB Members

AK RIDGE RESERVATION

Environmental Management

April 7, 1998

Mr. Rod Nelson
Assistant Manager for Environmental Management
DOE/ORO
P.O. Box 2001
Oak Ridge, TN 37831

Dear Mr. Nelson:

The February 1998 draft "Accelerating Cleanup Paths to Closure" was reviewed by the Budget and Prioritization Team of the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB). The attached general and specific comments on the document were approved by the ORREMSSAB at its April 1, 1998 meeting.

Although the comments appear extensive, the goal of the reviewers was to help the Department of Energy Environmental Management Program provide the interested public with an understandable planning document for remediation of contaminated areas. We realize how difficult it is for those actively involved in such a multifaceted program to produce an integrated document, particularly when milestones and budgets are continually changing.

The comments are both substantive and editorial. The substantive comments draw attention to the content of the document. The editorial comments simplify and/or clarify ideas and sentences. In addition, a mark up of the document is enclosed; please use it in conjunction with the attached general and specific comments.

If there are questions about the comments, please contact Lorene Sigal, Budget and Prioritization Project Team Leader, telephone 482-4125.

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Thank you for your continued support of the ORREMSSAB.

Sincerely,

William M Pardue

William M. Pardue, chair

WMP/sb

Enclosure

cc: Barbara Brower, DOE/ORO
Marianne Heiskell, DOE/ORO
Karol Hazard, DOE/HQ
John Hankinson, USEPA Region IV
Earl Leming, TDEC
Susan Gawarecki, LOC
ORREMSSAB Members

GENERAL COMMENTS ON THE *ACCERLATING CLEANUP PATHS TO CLOSURE*
February 1998

- Paths to Closure must be written to be understandable by an interested stakeholder. Greater care is needed with acronyms and abbreviations.
- Tables and figures should be self explanatory to facilitate their use out of context.
- Avoid use of jargon (e.g., outsourcing, scope)
- Consider discussion of institutional controls/stewardship where appropriate in Paths to Closure. Since stakeholder end use recommendations include leaving some wastes in place, the issue of stewardship/institutional controls is paramount. DOE must come to terms with this issue as it develops its watershed strategy. Furthermore, the State has gone on record in regard to DOE's plans for stewardship/institutional controls. In addition, DOE should say something about the fact that some contaminants remaining in place will be radioactive/hazardous beyond 2070. DOE must be prepared to respond to stakeholders on these issues at the public meeting scheduled for Mid-April.
- The waste management assumptions in Appendix A should be revised for clarity, particularly parts III. A., B., and C.
- The City of Oak Ridge is very sensitive about the fact that most of the ORR is within the City boundaries. Can the maps in Appendices B and C be improved to clearly reflect this condition?
- The maps in Appendices B and C for the ORR <u>must</u> be revised and improved. They are misleading: Please see specific comments.
- Although Appendix D "EM Program Subprojects Scopes" was not reviewed, project managers should review the text to ensure it is representative of current plans.
- The text in Appendix G that accompanies the OR waste and material disposition maps should be reviewed for clarity and rewritten. Text for all disposition maps should follow a similar pattern and the level of detail should be similar throughout. A single author might reduce the disparities. Please ensure that acronyms/abbreviations are spelled out the first time used and also included in the list of abbreviations on page ix.
- The prioritized list of subprojects in Appendix H does not match the 2/19/98 ranking list. Please ensure that the final iteration of Paths to Closure has the most current prioritization list.

Specific Comments on the
Accelerating Cleanup Paths to Closure
February 1998

Page	Paragraph	Comment
xi	1st	Delete "accelerating" since there is no reference against which the "acceleration" can be compared.
	2nd	Find other descriptor (e.g., projects, activities) for "new scope." It is jargon.
	3rd	Does this include reindustrialization?
	After 3rd	Add descriptions of EM-30, EM-40, and EM-60
	11th	Spell out nCi/g someplace, either following abbreviation or in the abbreviation section
xiii	1st	Change second sentence to read "The name was changed in response to . . "
	2nd	Reference to the rivers that have been contaminated - sounds as if it is all DOE's fault - rewrite; see also on pages 2-5 and 4-2
	2nd	Last sentence, no explanation of how Paducah relates to Oak Ridge which is the topic of balance of paragraph.
	4th	Delete "for sustainment" - poor use of words and unnecessary
	4th	Last sentence, "centerpiece" - this is an overly optimistic statement
xiv	3rd	Delete "efficiencies" after "surveillance and maintenance"; insert "decreased" or "reduced" in front of "surveillance and maintenance"
	Last heading	Change "documents" to "document is"
	7th	Add "s" to action" in next to last line
xv	3rd Bullet	This doesn't seem consistent with the Glossary, page xi

Page	Paragraph	Comment
xvi	1st	Under Compliance, 2nd sentence, delete "achievement of compliance at the"
	2nd	What does this mean?
	4th	Second line, "...funding <u>from</u>" sounds better
	5th	See suggested revision in document
xviii	Table ES.2	Future use assumptions for ORNL, ETTP, and Y-12 do not agree with End Use Working Group's future use recommendations. Note: Y-12 and ETTP recommendations are in progress and will be completed by the time *Paths to Closure* is finalized.
	1st	Add "d" to "enhance"
	1st	Second sentence, insert "annual" before enhanced
	Bullets 2 & 3	Can you find a better word(s) - "outsourcing" is jargon!
	Bullet 5	Use of "subcontractors to provide support (e.g., health and safety)" will raise the hackles of some stakeholders! See also page 4-7.
	Bullet 6	Not clear
xix	Bullet 2	Does not make sense ". . . before remediation on D&D and escalation"
	Bullet 2	Last part of sentence, beginning with "surveillance and maintenance..." is not clear
	Bullet 5	What is "cost reduction support?"
	1st	Bullets 2 & 3, what are these?
	Last	Replace "This documents the culmination of . . . " with "Paths to Closure is . . . "
1-1	1st	See suggested change for page xiii, first paragraph
	3rd	Last two sentences are a good description of the "life cycle effort"
	5th	Second sentence, change "scope is" to "activities are" - "scope" is jargon and meaningless to the lay reader.

Page	Paragraph	Comment
1-1	5th	Fourth sentence, delete "that constitute the specific, individual locations."
1-4	Bullet 2	Is this for all three plants with UF_6 and consistent with EIS?
	Bullets 3&4	Confusing
	3rd Section 1.3.2	Second sentence, Did "uranium enrichment" continue to 1993?
1-8	4th	The planning, including costs, for institutional controls must extend beyond 2070 if wastes remain in place.
	Section 1.7.2	See comment for page 3-8. Suggest you incorporate paragraph 3, page 3-8 here.
	Section 1.7.3	Please provide additional information on length of delays. Please modify Table 1.2 to show original completion data and delayed completion date. How much will declining budgets affect delays? Please provide estimate.
1-9	1st	Suggest rewrite.
	2nd	Last sentence revised to read "The Paths to Closure is a living document that will be revised annually to reflect the life cycle baseline." This document begs the question of how the ORO share of the total $5.75B annual EM budget for DOE is determined.
2-1	1st Section 2.1	First sentence, what does "Following the confirmation of a release ..." mean?
	2nd	Second through fifth sentences, suggested revision, "The end use categories described in Table 2.2 are used for purposes of the life cycle baseline. Once an end use is identified, human health and environmental risk assessments are used to determine acceptable cleanup levels. These risk-based levels are the basis for selecting remedial actions." Appendix B . . .
	3rd	First sentence, "Following remediation, the end state of the Oak Ridge Reservation is estimated to be . . . ."

Page	Paragraph	Comment
2-1	3rd	Third and fourth sentences, "The Site Specific Advisory Board convened the End Use Working Group to develop end use recommendations to guide . . . Actual end states will be identified in watershed or . . . "
2-2 & 2-3	Table 2.1	Revise table to reflect current decisions. • Use of ISV for disposal pits and trenches (see also page A-8. Some stakeholders question use of ISV.) • Where are the mercury-contaminated soils in Bethel Valley? • Surface impoundment sediments isolated in a consolidation cell?? I thought the proposed plan said removal! • Long-term stewardship has more requirements/activities than listed in Table 2.1 (e.g., recordkeeping, access, education, research). • Page 1-8 says, the period of institutional controls has been extended to 2070. This table says 22 years (FY 2020). Reconcile times and dates throughout document. Also define "institutional controls" and "long-term stewardship" and ensure consistent use throughout. • Section Bethel Valley D&D, "The Oak Ridge National Laboratory Graphite Reactor will be preserved as a national landmark" is redundant. • Bullet 4 is redundant.
2-7	GOOD STEWARDSHIP WRITE UP!	
	4th	First sentence "The End Use Working Group and the Friends of Oak Ridge National Laboratory have . . ." Why is "Strategy" in Section 3? Parts of it sound as if they should be up front.
3-1	Section 3.1.1	"Vision. Revitalization of scientific infrastructure at ORNL." What does this mean, what is wrong with it now?
3-2		Add a bullet to the list at the top of the page "• establish stewardship programs for sites where wastes remain in place." Punctuate previous bullets appropriately.
3-2	Bullet 1	DOE-ORO can't do this alone.

Page	Paragraph	Comment
3-8	3rd	This paragraph explains my question marks on page 1-8 in Section 1.7.2 about removal of the assumption "...return of waste management responsibility to the generators. . . ." Suggest you incorporate this in Section 1.7.2.
3-8	3rd	Second sentence, "through 2070" and 3rd sentence, "After 2013" - are these contradictions?
3-11	4th	Fifth line from the bottom, what/where is "Table 0.9.1 of the site summary level . . . "?
3-12	1st	Middle of paragraph "Table 0.9.2 of the site summary level . . . "
	3rd	Spell out abbreviations here or in the abbreviation section.
	4th	"Table 0.9.3 of the site summary level . . . . "
	5th	Third sentence, insert "Site Specific Advisory" in front of "Board"
3-13	Table 3.1.	Spell out RA here or in the abbreviation section or use footnotes to the table for RA, D&D, WAG, and DNAPL. My preference is that a table or a figure should be able to stand alone since they are often used out of context.
3-15	Section 3.6.2	First bullet on use of the TSCA incinerator is in jeopardy given the State's attitude on importing wastes.
	Bullet 2	"Oak Ridge capabilities available to other DOE sites. Oak Ridge lead site for National scrap metal reuse/recycle program" Will State regulators buy into this? What commitment do we have from other sites to date or in the works?
	Last bullet	Explain why Oak Ridge is chosen site (it has 80% of the waste) - - how will it be reused - will regulators accept off site waste.
3-16	Section 3.7	If applicable, is the potential cost for long-term institutional control/stewardship factored into the mortgage reduction methodology? If not, it should be. If not applicable to a particular case, it should be so stated.

Page	Paragraph	Comment
3-17	Section 3.8.1.	"Contracting Strategy." Public participation is being encouraged in all other aspects of the clean up. Will the SSAB or public be allowed or encouraged to give input on review of contractor performance objectives relating to fee awards? OR Any public input to determination of M&I Contractor fees for performance?
3-18	3rd	Is there a mechanism/plan/procedure for existing subcontractors to retain staff during the change to the M&I and the competition for subcontracts? Please address this issue in the document.
3-19	item 1.	Spell out "m^3" here or in the abbreviation section.
	item 2.	"RCRA hazardous waste" into the onsite waste management facility? Is this issue resolved? Please clarify in the document.
		"TSCA waste"; document states elsewhere that TSCA incinerator waste would be returned to generator. Not clear what is meant here. Please clarify.
4-1	1st	If applicable, need to include institutional control/stewardship into the life cycle baseline of projects/subprojects.
	Section 4.3	Fifth line, change "criteria" which is plural to the singular "criterion"
		Add "Site Specific Advisory Board members" to the list of ex-officio members.
4-2	Section 4.5	Please address institutional controls/stewardship costs in paragraph two. If DOE does not want to include such costs, it must explain: (1) why not, (2) how such costs will be managed, and (3) who is/will be responsible for the costs.
4-3	4th	What is "level 6"? Not clear to the reader.
4-4	Figure 4.1	Finally see the note to Figure 4.1 that gives the first clue to annual institutional control/stewardship costs through 2070. Given the current interest in the issue by stakeholders, I believe DOE should be more "upfront" with the plans, management, and costs for an institutional controls/stewardship program for the Oak Ridge Reservation.

Page	Paragraph	Comment
4-5		"DOE-ORO Risk reduction score table." ETTP and Y-12 scores drop off significantly over the next several years as opposed to ORNL. Why is this? Prioritization and sequencing ranking of projects?
4-7	Bullets 8, 9, 11, and 14	See comments for page xviii
4-8	2nd	Middle of paragraph, more "outsourcing"!!
		"Decreased landlord costs at ETTP; reduction in general use facilities and utility systems." Clarify on utility systems. Is it related to removal of specific buildings or general reduction of utility systems?
4-9	Figure 4-4	"ACP" should be changed to Paths to Closure (two places). Once again it would be helpful to the reader and those who might want to use this figure if the abbreviations were spelled out in footnotes or in the title of the figure. At least, ensure that BEMR, ACP, PAD, PORT, GDPs, GCEP, STUs, D&S, and WSSRAP are spelled out in the abbreviation table.
5-1	2nd	Second line, "... funding <u>from</u>..." sounds better. (I bet the managers of such programs are delighted to hear this not once, but twice. See page xvi.)
5-3	Section 5.2	The line between NEPA assessment and CERCLA for the onsite waste management facility is probably not settled/drawn as far as some stakeholders are concerned. The third sentence may give such stakeholders additional "ammunition" for their cause. Perhaps DOE could revise this sentence to briefly explain why the onsite waste management facility is a CERCLA project and not a project subject to NEPA review and documentation.
	Section 5-3	The ORREMSSAB requests a stakeholder seat on the ORR Natural Resource Trustee Council.
		Provide more information about the Council's role and report. SSAB or EUWG might benefit from participation on the Council.
6-1	2nd	Fourth and fifth sentences, "As issues are resolved, Paths to Closure and subsequent documents will be modified."
		Delete last sentence; it is redundant.

Page	Paragraph	Comment
6-2	Last paragraph	Suggested rewrite. Original paragraph is not accurate. "The Budget and Prioritization Team of the Oak Ridge Reservation Site Specific Advisory Board is dedicated to understanding DOE's prioritization and budgeting systems. This includes learning about . . This group will gain an understanding of how DOE plans on making the most of its shrinking pool of funds, and will provide advice and recommendations to the DOE-ORO EM Program through the Site Specific Advisory Board."
6-2	Last paragraph	DOE has been responsive to the public's need for input into this process and we commend them. Please continue the process so that the public may assess and comment at the earliest opportunity.
Appendix A		
A-4	item A	The last sentence is not clear. What is meant by "provided"? Is "land" given to the private sector or is it provided for use during the term of the lease? Please clarify.
A-5	item J	These budget targets do not agree with current estimates. Please revise and include a date (e.g., The February 4, 1998 budget targets are as follows:).
A-6	C.	ORR Assumptions. The waste management facility (waste cell - Bear Creek Valley?) Please clarify what types of waste and from where and from what activities.
A-7	E.	Remedial investigation. What are "data quality objectives"?
A-7	item f	"No Further Action (NFA) decisions are made as part of the five major RODs." Unclear what is meant. Please revise.
	item h, no. 1	Why is the portion of contaminated groundwater in the sumps and drains expected to increase? Please explain.
		"The federal government acknowledges its responsibility for these activities in perpetuity." These are nice words but stakeholders will want to know more - where written, who ensures, who funds, who oversees. In other words, does DOE have a plan/program?
A-8	item h. no. 7	There are stakeholders with a consuming interest in criticality risks on the Reservation. The ORREMSSAB suggests that you provide more information (e.g., Where are these deposits? What is the status of the risk? Who will do the work? Have there been any criticality events in the buildings?)

Page	Paragraph	Comment
A-8	item h. no. 7	What will be done with uranium deposits? How much? Is this a major or minor task? You probably should say something about the group that oversees criticality risk on the Reservation.
	item i, no. 4	Although can not find the page, believe it was said the Graphite Reactor will be maintained as an historic landmark. What is meant by decommissioning it? Please clarify.
A-8	item i, no. 7	Not yet accepted "with in situ vitrification."
A-9	item i, no. 8	The subsurface grout sheets will require stewardship/institutional controls for a very long time. Perhaps you should say so here to help waylay comments.
	item I, no. 9	Why "left in place"?
A-9	item j, no. 6	Change "The sources of contaminated…" to "The sources that contribute to contaminated…".
A-10	item 3, no. b	Revise to read "The area of the Oak Ridge Reservation subject to CERCLA is reduced by 85% by the end of FY 2000."
A-14	III. A. 1.	Unclear. Are you talking about waste volumes, waste costs. Please rewrite sentence.
	III. B. 3.	Unless you mean "treated and dispositioned", the final phrase about "no residues" being returned is unnecessary.
A-15	III. B. 4.	What are "burden-of-proof schedule requirements"? Are they described elsewhere in the document; if so, please give reference.
	III. B. 5.	How can funding for "<u>nonmixed</u>" waste be "…provided by the <u>Mixed</u> Waste Type Project." ? Please revise sentence to clarify.
	III. B. 7.	This is a politically sensitive issue since according to the State, the1998 burn plan for the TSCA incinerator (which the State rejected; see the Oak Ridger, March 11, 1998) grants permission for out-of-state sites to ship waste to Tennessee. Thus, it appears that this statement does not agree with the 1998 burn plan. Please resolve because when these kinds of important issues are at cross-purposes, DOE looses credibility quickly. (See also item C.13. on page A-16)

Page	Paragraph	Comment
	III. C. 1.	Insert "storage" in front of "operations" at the end of line one. Would help to add "MLLW waste storage will be consolidated at ETTP."
	III. C. 2.	Last sentence, "at all three sites" is unclear change to "at the X-10, Y-12, and ETTP".
	III. C. 6.	Last sentence is unclear. Please revise.
	III. C.7	"documentto" should be "document to"
A-16	III. C. 10.	Would help to give a few examples of what the projection includes (e.g., solid wastes, sludges, ???).
	III. C. 11.	Where is the "small fraction of the current storage capacity needed"? at ORNL, Y-12, ETTP?
	III. C. 13.	See comment for item III. B. 7. on page A-15. These items must agree with each other and with any related statements in the document.
A-17	III. D. 10.	The nature of the "Mixed Waste Type Project" is unclear. (see comment for item III. B. 5.). Can you resolve this so the reader understands why this project funds so many different activities?
A-18	III. E. 11.	Add "storage or disposition on" to first sentence because out-of-state TRU waste may be targeted for treatment on the ORR.
Appendix B		ORR Current Use It is not clear that the ORR is mostly within the boundary of the City of Oak Ridge. Suggest you change "City of Oak Ridge" title in upper middle of maps to "Oak Ridge Residential area", and somehow unscramble the City of Oak Ridge Boundary and the DOE-Owned Boundary. This also applies to the ORR Maps in Appendix C.

Page	Paragraph	Comment
Appendix C		ORR Current State Environmental Remediation This map is misleading! It looks as if most of the ORR is the responsibility of EM and that remediation is required but not complete on almost the entire ORR. I think you are trying to show that most of the ORR is currently a NPL site, and the next map is showing the hoped for 85% reduction, and the next map is a future end state when EM has completed its tasks. Somehow you must clarify the message of the maps in the titles. Furthermore, there will continue to be use restrictions for many of the EM sites well into the future because wastes will remain in place. Your end state map should show such restricted areas and not mislead the public into thinking they will be able to freely roam the Reservation at some time in the future.
Appendix D		The "EM Program Subproject Scopes" was not reviewed. However, it was called to our attention that item 1.X.06.10.01.12 suggests that in situ vitrification will be used in the pits and trenches in Melton Valley. Please revise if this text is in error.
Appendix E		
E-3	1st	See editorial changes on document.
	Bullet 3	Add description of EM-50 to third bullet. Also add to Glossary on page xi.
	Last bullet	Unclear statement. Be more specific about <u>who</u> is doing <u>what</u> to <u>whom</u>.
E-4		Please see editorial comments for the section "Barriers to Implementation".
Appendix F		What do the numbers in parenthesis mean (e.g., [1,3,1]) ? Please describe in title or in footnote.
Appendix G		Impossible to read information in some of the black blocks. Too many unknown abbreviations/acronyms.
G-21	1st	See editorial changes to clarify this paragraph.
	4th	Is it certain that Envirocare can accept the waste?
	3rd & 5th	These paragraphs are confusing. Please revise.
	6th & 7th	Please revise.

Appendix H

Ranking of subprojects does not match the 2/19/98 ranking list. Please ensure that the most current list is included in the final iteration of Paths of Closure.

Appendix I

The ORREMSSAB Budget and Prioritization Team reviewed the Stakeholder Issues/Action Plans (particularly the Resolution Approach and Stakeholder Involvement parts) and is providing the following evaluation of DOE's actions. Specific comments are found in the accompanying table.

- As applicable, the action plans should be updated to reflect current information and decisions.

- The DOE must soon come to agreement with the State on issues (raised by the State) that are roadblocks to remediation and waste management on the Oak Ridge Reservation (e.g., institutional controls, interim RODs, excavation of uranium.)

- Items that are the responsibility of DOE-HQ can not be resolved by DOE-ORO; however, it is important that DOE-ORO understands stakeholder concerns and factors them into its negotiations with Headquarters.

Evaluation of the Status of Stakeholder Issues/Action Plans in Appendix I

Issue number	Status[1]	Comments
OR-1-97	+	• Resolved to the satisfaction of interested stakeholders. EM deserves compliments.
OR-2-97	0	• No apparent progress at HQ on the questions of planning and funding for activities/facilities that presently are not the responsibility of EM but may become EM responsibilities in the future.
OR-3-97	-	• This action plan should be updated. The issues of reduction of environmental liability and diversion of resources from higher risk activities are not addressed satisfactorily.
OR-4-97	-	• Although DOE may be doing everything it believes is necessary for reindustrialization at ETTP, some stakeholders continue to be dissatisfied with levels of contamination, worker safety, CROET's approach to leasing, and the adequacy of the NEPA EA. The DOE must try to resolve such issues during the CERCLA process leading to the ROD.
OR-5-97	-	• Unresolved. An important issue is the preparation of "other CERCLA decision documents . . . in addition to watershed RODs." What are the effects on scheduling and funding?
OR-6-97	+	• Interested stakeholders are satisfied with DOE's process for estimating costs of environmental remediation and waste management. But as always, estimates are subject to change. As long as DOE continues to inform and involve stakeholders, confidence should remain high.

[1] +, resolved; -, unresolved; 0, Headquarters initiative.

OR-7-97	-	• As long as institutional controls, if needed, are planned for within the CERCLA process and included in the RODs, we see no need for NEPA review. Addressing Reservation-wide institutional control under NEPA would be time consuming and costly. For greater benefits would result from devoting such time and money to the development of an institutional control/stewardship program/plan.
OR-8-97	+	• The State and DOE must come to agreement on this issue. Many stakeholders support the facility and want no more delays.
OR-9-97	-	• Unresolved. The State and DOE must work together to resolve problems associated with movement of wastes to and from the ORR. The Governor's panel determined the use of the TSCA incinerator was safe.
OR-10-97	0	• HQ is responsible for the National Action Plan and Dialogue. This is not really a local issue.
OR-11-97	-	• See comment for OR-9-97.
OR-12-97	+	• Appears to be resolved. However, the ORREMSSAB believes a stakeholder (s) should be appointed to the ORR Trustee Council.
OR-13-97	+	• Resolved. See page 3-8.
OR-14-97	-	• Unclear what this is all about. Please revise, update, and rewrite.
OR-15-97	+	• Resolved.
OR-16-97	+	• The schedule for watershed RODs is ambitious and may suffer some delays along the way. Nevertheless, stakeholders, EPA, and the State must work together with DOE to expeditiously complete the CERCLA process so that remediation can proceed.
OR-17-97	+	• Resolved. DOE agrees to collect additional data if DOE, EPA, and the State decide they are necessary.

OR-18-97	+	• Resolved. However, stakeholders may continue to ask why the onsite waste management will not/cannot be designed to accept RCRA waste as well as CERCLA waste.
OR-19-97	0	• HQ is responsible for plans related to disposal of non-defense TRU waste and determination of the waste acceptance criteria for WIPP.
OR-20-97	-	• Appears unresolved until the Melton Valley Watershed CERCLA process is completed.
OR-21-97	-	• Unresolved.
OR-22-97	0	• The targets for enhanced performance and productivity improvements are program goals. Stakeholders may consider them unrealistic but we also should encourage DOE to try to reach the goals. We ask that DOE honestly evaluate its progress toward reaching the targets and report to the public.

AK RIDGE RESERVATION

Environmental Management

April 6, 1998

Mr. Richard D. Green, Acting Director
Waste Management Division
U.S. Environmental Protection Agency Region 4
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303-3104

Mr. Earl Leming, Director
U.S. DOE Oversight Division
Tennessee Department of Environment and Conservation
761 Emory Valley Road
Oak Ridge, Tennessee 37830-7072

Gentlemen:

On behalf of the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB), I want to express our appreciation for your agencies' participation, along with DOE, at the March 25 public meeting in Oak Ridge on Bear Creek Valley remediation and the on site waste disposal cell. The subsequent March 26 discussions on improving the dialogue between the agencies and the public were also productive and, we believe, lay the groundwork for improved interaction among the involved parties. The citizens of Oak Ridge strongly believe that the opportunity for early and extensive discussions with the regulators, prior to formal comment on the Proposed Plan, will improve the quality of CERCLA decisions. We believe that the complex remediation decisions will benefit from this informed input, resulting in high quality, acceptable records of decision.

The ORREMSSAB is especially pleased with the commitments made to: (1) hold a DOE/EPA/TDEC public workshop on waste acceptance criteria for the waste disposal cell, and (2) involve a citizen representative in the tri-party working group discussing long term stewardship issues.

P.O. Box 2001 • Mail Stop EW-91 • Oak Ridge, TN 37831 • (423) 241-3665

We look forward to continued interactions on the important matters relating to successful clean up of the Oak Ridge Reservation.

Sincerely,

William M Pardue

William M. Pardue, Chair

WMP/sb

cc: Rod Nelson, DOE/ORO
D. McCoy, TDEC
C. Warren, USEPA Region IV
E. Carreras, USEPA Region IV
S. Gawarecki, LOC
ORREMSSAB Members

PLEASE SIGN IN

Paducah Gaseous Diffusion Plant

Site Specific Advisory Board

8 Regular members present

NAME	AFFILIATION
Jeannie Brandoletter	En Safe / Pub Affairs
Shelley Hawkins	Jacobs
David Fuller	OCAW
Linda [illegible]	SSAB member
Kenneth Davis	Jacobs EM Team
Edmena L. Crome	Bechtel Jacobs Company LLC
J. Raúl Castañeda-Hernández	DOE
[illegible]	SSAB
[illegible]	SSAB
[illegible]	DOE
David Dollins	DOE
Carl Froede Jr.	U.S. EPA Region 4
Todd Adams	State Radiation Lab
Bill Tanner	SSAB
Victor Jones	SSAB
[illegible]	Bechtel Jacobs
Craig [illegible]	SSAB
Mark Donham	SSAB
Debora R. Tolley	Bechtel Jacobs Co.
Gary Hettler	DOE

May 21, 1998

PADUCAH GASEOUS DIFFUSION PLANT
SITE SPECIFIC ADVISORY BOARD

Chartered under the Federal Advisory Committee Act

CO-CHAIRS

Mark Donham
Route 1
Brookport, Illinois 62910
mdonham@igc.org

Vicki Jones
1131 Hamburg Road
Kevil, Kentucky 42053
jonesvw@ornl.gov

BOARD MEMBERS

Nola Courtney
14299 Wickliffe Road
Kevil, Kentucky 42053

Edward Dulf
5134 Old 45
Paducah, KY, 42003

David Fuller
670 Springwell Lane
Paducah, Kentucky 42001

Ronald Lamb
10990 Ogden Landing Road
Kevil, Kentucky 42053
CHCE@LDD.net

Lynn W. Lane
P.O. Box 145
Wickliffe, KY, 42087

Linda Long
10625 Ogden Landing Road
Kevil, Kentucky 42053

Ray McLennan
2931 Mayfield Road
Paducah, Kentucky 42001

Craig Rhodes
3883 Mt. Pleasant Rd.
Brookport, Illinois, 62910

Connie J. Sykes
705 N. 24th Street
Paducah, Kentucky 42001

Bill Tanner
6072 Rosebud Road
Metropolis, Illinois 62960

Rev. Gregory Waldrop
4141 Buckner Lane
Paducah, Kentucky 42001

MEMORANDUM
SITE SPECIFIC ADVISORY BOARD

TO: SSAB Members
Ex Officio Members

FROM: Mark Donham
Vicki Jones

DATE: May 11, 1998

SUBJECT: **MEETING REMINDER**

The next SSAB meeting with be May 21, 1998, at 5:00 p.m. in the VanBuren Room at the Executive Inn. The following is the tentative agenda and actions items:

Tentative agenda for the May 21, 1998, meeting:

- Minutes
- Information (Handouts)
- EMEF Project Updates
  - Northwest Plume Five-Year Review
- DOE Response to SSAB Recommendations (15 minutes)
- Bechtel Jacobs Management and Integration Contract Presentation (30 minutes)
- Comments on the 2006 Plan (30 minutes)
- Administrative Plans for the Board
  - Office Equipment and Computer (10 minutes)
  - Lease Agreement (10 minutes)
  - Board Evaluation (10 minutes)
  - Review of the SSAB Draft Work Plan (10 minutes)

Action Items

- Provide SSAB with correspondence between the state and the DOE concerning the uranium burial grounds
- Provide SSAB with software alternatives (such as NT Work Station) and printer alternatives and prices for a computer
- Provide SSAB with information on the Paducah Area Community Reuse Organization

Printed on recycled paper

PADUCAH GASEOUS DIFFUSION PLANT
SITE SPECIFIC ADVISORY BOARD
CONSENSUS RECOMMENDATION

DATE: June 20, 1997

NUMBER: 97-1

RESPONSE REQUESTED BY (date): June 27, 1997

REGARDING: Regarding the Federal Facilities Agreement

TO: Jimmie Hodges, DOE
Carl Froede Jr., EPA
Tuss Taylor, KDEP

CC: Dr. John Volpe, Radiation Control Branch
Wayne Davis, Kentucky Department of Fish & Wildlife Resources
Regular members — Nola Courtney, Tommy Fletcher, David Fuller, Rev. W. G. Harvey, William Kressenberg, Ronald Lamb, Linda Long, Connie Sykes, Rev. Gregory Waldrop,

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RECOMMENDATION:

The PGDP SSAB recommends that the parties to the Federal Facilities Agreement interpret the agreement to provide public participation in the planning process to the maximum extent possible.

CO-CHAIRS

Mark Donham
Route 1
Brookport, Illinois 62910
mandk@midwest.net

Vicki Jones
1131 Hamburg Road
Kevil, Kentucky 42053
jonesvw@ornl.gov

COMMENT NO. & REF.	COMMENT	RESPONSE TO COMMENT
75.	The PGDP SSAB recommends that parties to the Federal Facilities Agreement interpret the agreement to provide public participation in the planning process to the maximum extent possible.	Public participation will occur, at a minimum, in accordance with the provisions of CERCLA, the NCP, and RCRA/KRS 224. There are several provisions incorporated into the FFA and CERCLA that provide for public participation during the planning process at both the program and project level. For example, Section XVIII of the FFA requires DOE to develop and submit an annual SMP no later than November 15 of each year. From a programmatic perspective, the SMP will propose site priorities for the remedial action program and will identify work activities for FY, FY+1, and FY+2, which will be the basis for defining enforceable commitments under the FFA. Additionally, the SMP will also contain long-term projections for completing work that is planned beyond FY+3 and will serve as a dynamic document that is updated every year. In accordance with Section XXXIII (Public Participation) of the FFA, it is the Parties intent to disseminate SMP-related information to the SSAB for early input prior to finalizing work scope and priorities each year. From a project perspective, Section XXXII of the FFA requires DOE to develop and maintain an AR for each project, in accordance with CERCLA. Subpart I (40 CFR 300.815(a) of CERCLA requires DOE to establish an AR file upon commencement of the remedial investigation phase to ensure the public has sufficient opportunity to get involved early in the remedial process. Additionally, DOE would also be willing to provide briefings during the development of RI/FS work plans, should the SSAB desire involvement at that stage. Finally, in addition to the above actions required by the FFA, DOE plans to continue the public workshops and information sessions that have been routinely held in the past.

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PADUCAH GASEOUS DIFFUSION PLANT
SITE SPECIFIC ADVISORY BOARD
CONSENSUS RECOMMENDATION

DATE: Sept. 8, 1997

NUMBER: 97-2

RESPONSE REQUESTED BY (date): Sept. 30, 1997

REGARDING: Accelerated Cleanup Plan

TO: Jimmie Hodges, DOE

CC: Carl Froede Jr., EPA
Tuss Taylor, KDEP
Dr. John Volpe, Radiation Control Branch
Wayne Davis, Kentucky Department of Fish & Wildlife Resources
Regular members — Nola Courtney, Tommy Fletcher, David Fuller, Rev. W. G. Harvey, William Kressenberg, Ronald Lamb, Linda Long, Ray McClennan, Connie Sykes, Bill Tanner, Rev. Gregory Waldrop

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At a special meeting of the Site Specific Advisory Board (SSAB) held Sept. 4, 1997, the board identified several concerns in the draft document "Accelerating Cleanup: Focus on 2006."

COMMENTS:

1. The SSAB is concerned that not enough characterization has been performed to know the extent of the contamination at Paducah and that the schedule and funds identified in this document could be very unrealistic. The SSAB is concerned that once these funding numbers and schedule are published in final form, that changes will be difficult if not impossible to implement.

2. The SSAB does not feel comfortable with DOE making numerous assumptions in order to

CO-CHAIRS
Mark Donham
Route 1
Brookport, Illinois 62910
mandk@midwest.net

Vicki Jones
1131 Hamburg Road
Kevil, Kentucky 42053
jonesvw@ornl.gov

fit a pre-determined schedule. The SSAB wants the cleanup activities to be completed regardless of the time required to finish. The SSAB is concerned that as funds and schedules become tight, that the effectiveness of the cleanup activities could easily be sacrificed.

3. The SSAB is concerned that since the Paducah plant is part of the Oak Ridge complex, that Paducah's contamination problems will be overshadowed by Oak Ridge's contamination problems.

4. The Paducah SSAB did not have an opportunity to provide input to the prioritization process as a whole and has numerous questions on how the projects were ranked.

5. The SSAB would also like to know what type of NEPA review was performed on the plan.

Comment No.	Comment	Source	Response
168	The SSAB is concerned that not enough characterization has been performed to know the extent of the contamination at Paducah and that the schedule and funds identified in this document could be very unrealistic. The SSAB is concerned that once these funding numbers and schedule are published in final form, that changes will be difficult if not impossible to implement.	PGDP Site Specific Advisory Board Comments dated September 8, 1997	The 2006 Plan is a flexible planning document intended to outline a long-term strategy for expediting site remediation. While the facility has not completed all characterization activities currently scheduled, a significant amount of data is available to adequately identify the primary source areas, contaminants of concern (e.g., TCE, TC-99, PCBs), geologic conditions, and exposure pathways. The 2006 Plan is a dynamic document that will be updated on a routine basis to reflect new data as site characterization progresses. As new data is generated, the technical and funding assumptions will be revised accordingly. It should be noted that the 2006 Plan is not intended to replace the CERCLA process for source-specific areas, but merely to provide a programmatic framework for prioritizing work activities, streamlining response actions, and developing cleanup standards using realistic assumptions.
169	The SSAB does not feel comfortable with DOE making numerous assumptions in order to fit a pre-determined schedule. The SSAB wants the cleanup activities to be completed regardless of the time required to finish. The SSAB is concerned that as funds and schedules become tight, that the effectiveness of the cleanup activities could easily be sacrificed.	PGDP Site Specific Advisory Board Comments dated September 8, 1997	The assumed scope to be accomplished by the EM Program, or "what needs to be done," was the starting point of the 2006 Plan. Once this scope was defined, then an estimate and schedule for each subproject was developed. Only then was the annual budget assumption introduced so that the subprojects could be sequenced to determine the overall timing of the EM Program.

OAK RIDGE OPERATIONS 2006 DISCUSSION DRAFT COMMENT/RESPONSE DOCUMENT

Comment No.	Comment	Source	Response
170	The SSAB is concerned that since the Paducah plant is part of the Oak Ridge complex, that Paducah's contamination problems will be overshadowed by Oak Ridge's contamination problems.	PGDP Site Specific Advisory Board Comments dated September 8, 1997	The assumed scope to be accomplished by the EM Program, or "what needs to be done," was the starting point of the 2006 Plan. Once this scope was defined, then an estimate and schedule for each subproject was developed. Only then was the annual budget assumption introduced so that the subprojects could be sequenced to determine the overall timing of the EM Program. The subprojects for PGDP are sequenced in accordance with the project priorities established by the Paducah Site Management Plan.
171	The Paducah SSAB did not have an opportunity to provide input to the prioritization process as a whole and has numerous questions on how the projects were ranked.	PGDP Site Specific Advisory Board Comments dated September 8, 1997	Presentation on prioritization has been made to the Paducah SSAB.
172	The SSAB would also like to know what type of NEPA review was performed on the plan.	PGDP Site Specific Advisory Board Comments dated September 8, 1997	No NEPA review was performed. Since the 2006 Plan is a planning document and not a decision document, a NEPA review is not necessary or appropriate. For decision documents, the appropriate regulatory reviews are planned.

PADUCAH GASEOUS DIFFUSION PLANT
SITE SPECIFIC ADVISORY BOARD
CONSENSUS RECOMMENDATION

DATE: Sept. 30, 1997

NUMBER: 97-3

RESPONSE REQUESTED BY (date): ???????

REGARDING: Community Relations Plan

TO: Jimmie Hodges, DOE

CC: Carl Froede Jr., EPA
Tuss Taylor, KDEP
Dr. John Volpe, Radiation Control Branch
Wayne Davis, Kentucky Department of Fish & Wildlife Resources
Regular members — Nola Courtney, Tommy Fletcher, David Fuller, Rev. W. G. Harvey, William Kressenberg, Ronald Lamb, Linda Long, Ray McClennan, Connie Sykes, Bill Tanner, Rev. Gregory Waldrop

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At a regular meeting of the Site Specific Advisory Board (SSAB) held Sept. 18, 1997, the board identified comments on the PGDP's "Community Relations Plan for the Environmental Management and Enrichment Facilities Program."

COMMENTS:

1. If DOE proposes an action that affects a particular group of citizens, then that group of citizens should be notified specifically.

2. The SSAB questions the plan's date given for the discovery of groundwater contamination.

CONTINUED...

CO-CHAIRS
Mark Donham
Route 1
Brookport, Illinois 62910
mandk@midwest.net

Vicki Jones
1131 Hamburg Road
Kevil, Kentucky 42053
jonesvw@ornl.gov

3. DOE should place ads or articles in media around the region giving an address and phone number where citizens can get on the mailing list to receive notices about the cleanup at the plant.

4. DOE should appoint a full time public affairs officer at Paducah.

5. The CRP should indicate the methodology used to do the community interviews and to make them statistically accurate in representing the community point of view. Also, when the CRP is updated next year, the community interviews should be done in a scientifically accepted methodology to accurately reflect the community's attitude toward the cleanup.

COMMENT RESPONSE SUMMARY
Community Relations Plan

Reviewer: SSAB			
1	General	If DOE proposes an action that affects a particular group of citizens, then that group of citizens should be notified specifically.	Statement inserted after 3rd sentence of last paragraph on page 6-1.
2	Page 2-4, Sec 2.2 Page 2-5, Table 2.1	The SSAB questions the plan's date given for the discovery of groundwater contamination (8/88).	No documentation can be found to support a different date, therefore, the 8/88 date will remain.
3	Page 6-4, Sec 6.2.2	DOE should place ads or articles in media around the region giving an address and phone number where citizens can get on the mailing list to receive notices about the cleanup at the plant.	Efforts for adding new members to the mailing list are provided in Section 6.2.2. Added a sentence within the text which tells readers who to contact to be included on the list. DOE will continue to provide citizens with the opportunity to join the mailing list. The SSAB can be instrumental in supporting this effort.
4	General	DOE should appoint a full time public affairs officer at Paducah.	This comment addresses a programmatic issue that is not within the scope of the CRP. Although LMES maintains responsibility for running the local site office, a DOE Public Affairs Officer in Oakridge oversees activities of public affairs in Paducah. This issue will be brought to the attention of DOE officials at Oak Ridge.
5	General	The CRP should indicate the methodology used to do the community interviews and to make them statistically accurate in representing the community point of view. When the CRP is updated next year, the community interviews should be done in a scientifically accepted methodology to accurately reflect the community's attitude toward the cleanup.	Interviews are not required to be statistically accurate, but rather are required to gather insight from stakeholders and other randomly sampled individuals on general opinions of the community. CRP updates are not required on an annual basis. However, next time the interviews are conducted, DOE will consider conducting a survey using scientifically accepted methodology.