



## FRIDAY MAILING

3/20/98

### INCLUDED IN THIS MAILING ARE:

- Closure Fund Management Report
- Graph: Pounds of Uranium Discharged to Great Miami River in 1998
- Letter from Jim Saric to Johnny Reising (re: Missed Milestones OU1)
- Technical Report Summary: Site-Specific Advisory Board Initiative 1997 Evaluation Survey Results
- Special Report Summaries: Preliminary Injunction WCS vs. DOE (Brief for Appellants, Brief for Appellee, and Reply Brief for Appellants)
- Newsclippings

### CAB MEETINGS:

- OFF-SITE COMMITTEE MEETING:** The Off-Site Committee will meet on Monday, April 13, 1998, at 6:30 p.m. in the Jamtek Building, 10845 Hamilton-Cleves Highway.
- ON-SITE COMMITTEE MEETING:** The next meeting of the On-Site Committee will be held on Wednesday, April 15, 1998, at 6:30 p.m. in the Jamtek Building.
- EFFICIENCY COMMITTEE MEETING:** The Efficiency Committee will meet on Wednesday, April 15, 1998, at 7:30 p.m. in the Jamtek Building.

### OTHER MEETINGS:

- SILOS PROJECT PUBLIC WORKSHOP:** On Wednesday, April 1, 1998, a workshop will be held to discuss (1) the technical requirements document and (2) the evaluation criteria and (3) the statement of work for the accelerated waste retrieval project request for proposal. The workshop will be held from 6:30-8:30 p.m. in the Alpha Building, Classroom D.
- COMMUNITY REUSE ORGANIZATION MEETING:** The next CRO meeting will be held on Tuesday, April 7, 1998, at 6:30 p.m. at the Ross High School Media Center, 3425 Hamilton-Cleves Highway.
- APRIL MONTHLY PROGRESS BRIEFING:** The April Monthly Progress Briefing will be held on Tuesday, April 14, 1998, at 6:30 p.m. in the Alpha Building, 10967 Hamilton-Cleves Highway.

### QUESTIONS:

Please call John at [REDACTED] or Doug at [REDACTED] with questions or concerns.

You may also fax or e-mail us at:

John Fax: 281-3331

E-Mail: [john.applegate@law.uc.edu](mailto:john.applegate@law.uc.edu)

Doug Fax: 648-3629

E-Mail: [REDACTED]

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**Department of Energy**  
Washington, DC 20585

December 16, 1997

The Honorable Ted Stevens  
Chairman  
Committee on Appropriations  
United States Senate  
Washington, D.C. 20510

Dear Mr. Chairman:

As directed by provisions of Public Law 105-62, Appropriations for Energy and Water Development for the Fiscal Year Ending September 30, 1998, enclosed is a copy of the Closure Fund Management Plan.

Congress, as part of its fiscal year 1998 budget deliberations, has taken steps to facilitate the completion of a group of contaminated sites by expansion of a high priority budget category, termed the Closure Fund. This will remove a number of administrative obstacles related to the flow of adequate funding to these projects. This report describes the Department's management approach aimed at accelerating these projects to completion prior to or during fiscal year 2006. I would be happy to provide a briefing to the Committee members and/or staff on this report.

I would also like to take this opportunity to express my appreciation to you and the other Members of the Committee for demonstrating both foresight and creativity in establishing the Closure Fund. We plan to expand on this concept in the FY 1999 submission.

If you have further questions, please contact me or have a member of your staff contact Mr. Steve Lerner, Office of Congressional and Intergovernmental Affairs, at (202) 586-5470.

Sincerely,

Alvin L. Alm  
Assistant Secretary for  
Environmental Management

Enclosure

cc: The Honorable Robert C. Byrd  
Ranking Minority Member



## Closure Fund Project Management Plan

### EXECUTIVE SUMMARY

The Closure Fund represents a reassignment of the Environmental Management budget by the Congress to achieve cleanup at two large sites where DOE would have no further activities. In expanding the Closure Fund, the Appropriations Committee also requested a report on how the Department would manage the two closure sites, Rocky Flats and Fernald. This report details the Department of Energy (DOE) management approach to the Closure Fund projects and highlights the most recent improvements in the management of all Environmental Management projects, including those within the Closure Fund.

The Closure Fund is consistent with the Environmental Management (EM) vision of cleaning up most of the Department of Energy sites by the year 2006. In order to succeed in this endeavor, EM recognized the need to change management systems in a fundamental way. To achieve the objectives of the 2006 vision, EM created a proactive, streamlined management system called the Integrated Planning, Accountability and Budgeting System (IPABS).

IPABS was designed to speed cleanup by focusing on projects and achievement of results. IPABS, along with associated management reforms, encompasses the following concepts:

- focusing on completion of projects as the basic element of work,
- eliminating "stove-pipe" funding and management,
- decentralizing operational responsibility,
- creating matrixed headquarters teams to support field work, and
- resolving issues in an expedited manner.

In order to achieve the 2006 goal, several additional initiatives will be necessary:

- plutonium must be moved from Rocky Flats in the near future, involving actions by other DOE field and headquarters offices,
- depleted, normal, and low-enriched uranium at Fernald must be disposed of prior to 2000,
- future contracts must be structured to support site closure,
- some materials must be transported from site to site in an expeditious and predictable manner,
- low level and mixed low level waste must have suitable disposal options,
- The Waste Isolation Pilot Plant (WIPP) must open in 1998, and
- adequate and stable funding must be available.

Success in these projects will require management support and rapid decision-making to problems. It will not require day-to-day micro management. Periodic communications regarding closure sites has been elevated to the Assistant Secretary and lead Deputy Assistant Secretaries, including weekly telecommunications with the responsible field managers, monthly face-to-face interaction with the field office managers, and quarterly, results-oriented progress and issue reviews. Headquarters and field teams, have been established for the closure sites to expedite actions that cannot be solved solely at the sites.

## INTRODUCTION

One of the major strategic goals of the Department of Energy (DOE) is the completion of the environmental cleanup of the legacy from the production of nuclear materials and weapons. The Environmental Management (EM) program within DOE has focussed its efforts on completing as much cleanup as possible by the year 2006. The 2006 strategy targets sites for rapid completion, in order to sharply reduce future funding demands and minimize risk to workers and the public.

As part of its FY 1996 DOE appropriations, the Congress created a new budget category -- termed the Closure Fund. As directed by committee language associated with Public Law 105-87, Appropriations for Energy and Water Development for the Fiscal Year Ending September 30, 1996, the Department's management structure aimed at accelerating these closures by the close of fiscal year 2006. The Congressional report requirement is as follows:

The Department is directed to provide the House and Senate Committees on Appropriations within 60 days of enactment of this bill with a detailed plan outlining a proposed project management structure which reduces the numerous layers of Federal bureaucracy through which closure projects must report.

The Closure Fund would be applied to large contaminated sites which no longer have a role in the future plans of the weapons program or any of DOE's other active programs. In FY 1996, the fund supports cleanup of the former Fernald, Ohio, and Rocky Flats, Colorado, production plants. DOE intends to request the expansion of this list in subsequent budgets as more sites approach the 2006 goal of closure and completion.

This report is structured into four major sections:

- I. 2006 Vision/Plan and Need for an Integrated Management System
- II. Management Approach
- III. Challenges to be Overcome to Meet 2006 Closure Goals
- IV. Conclusion

### I. 2006 Vision/Plan and Need for Integrated Management System

In June 1996, EM established a vision to speed up clean-up of the weapons complex, reducing both economic and environmental liabilities over the long term:

*Within a decade, the Environmental Management program will complete cleanup at most sites. At a number of sites, treatment will continue for the few remaining legacy waste streams. This unifying vision will drive budget decisions, sequencing of projects, and actual actions to meet program objectives. This vision will be implemented in collaboration with regulators, Tribal Nations and stakeholders.*

EM has refined the original vision statement in collaboration with Tribal Nations, regulators, State and local governments and stakeholders and began the process of developing a draft 2006 plan. In June 1997, EM issued a discussion draft as an initial blueprint for clean-up of the weapons complex. In February, EM intends to present a Draft 2006 Plan to Congress. That Draft will provide an additional opportunity to gain public input.

A critical management tool of the 2006 planning process is the Integrated Planning, Accountability and Budgeting System (IPABS), which was established to implement the 2006 vision. IPABS will restructure and streamline formerly independent management systems into a single cohesive and integrated system.

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This system supports the 2008 strategy of accelerating the site cleanup and focusing on completing work at as many sites as possible by 2008.

The IPABS relies on the 2008 goals as a starting point. The overall goal will be captured in 2008 plans at each of the OCE sites. The aggregate 2008 plan will be a strategic document designed to guide the program in the future. The annual budgets will be fashioned around the objectives of the 2008 Plan. Once the budget is enacted, project management commitments are entered into the management tracking system to ensure achievement of objectives each year. These commitments are subject to regular management reviews.

The 2008 Vision and IPABS have created a strong focus on closure of sites and the corresponding management approach necessary to achieve closure. Clean-up of the Closure Fund projects identified in the FY98 budget authorization and appropriation are complex and involve the stabilization and consolidation of Special Nuclear Materials (SNM); processing, storage, and disposal of radioactive and hazardous wastes; and the remediation of literally hundreds of contaminated areas. Additionally, DOE must resolve all of the unique administrative and social issues involved in the release of sites for other public uses and the transition of very large work forces from the production of nuclear weapons and materials to the cleanup and closure of the sites.

## II. Management Approach

EM has initiated a planning process that focuses on site/project closure and acceleration. The 2008 planning process establishes projects, performance metrics, and a budget structure which is consistent with site/project closure. Keys to the success of this plan include the development of Waste and Material Disposition Maps; the development of technically sound baselines which tie to the Disposition Maps; the identification of critical path projects/activities; and the identification of programmatic risk. These initiatives are fundamental elements in the development of Site and National 2008 Plans, which enable the EM program to focus on site/project closure and acceleration.

### Focus on Projects

One of the fundamental tenets of the 2008 plan and IPABS is the reorganization of all EM activities into projects, including those "level-of-effort" activities not traditionally thought of as projects. Each project is made up of a group of similar or associated activities, each of which has a defined scope, a schedule, and a cost estimate that supports a defined end state. This "projectizing" helps clearly define the connections between and among the planning, budgeting and management execution elements in the EM management structure.

By focusing on projects, the desired end states and other outcomes related to closure are emphasized. The management focus on projects is designed to increase efficiency, reduce costs, and provide a more stable and understandable reporting structure. From experience, EM has discovered that focus on projects reduces costs, speeds cleanup and provides a clear set of objectives for project staff.

The basic building block of the EM budget, 2008 plan and IPABS is the Project Baseline Summaries (PBSs). A PBS has been developed for each project with information pertaining to cost, scope, schedule to achieve the project end state. For the PBSs on the Rocky Flats and Female sites, the goal for the end state is closure by 2008. Performance metrics are identified at the PBS level which provides management a solid tool to measure progress towards closure and completion.

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### Eliminating Stopgap Funding

The EM program is now in a position to focus on closure and completion of the cleanup work. The old way of doing business — where budgets are developed and allocated on a program basis (i.e., environmental restoration, waste management, nuclear materials and facility stabilization) — has been restructured in our FY 98 budget process to one that emphasizes and supports completion and closure. Congress has clearly indicated support for the Closure Fund and the focus on site budgets. The site orientation of the closure fund gives the maximum funding flexibility at sites to ensure that the goals of closure by 2006 at Rocky Flats and Fernald are met.

### Budget Structure

In coordination with the Office of Management and Budget and congressional staff, EM is developing a new budget structure aimed at facilitating and focusing on completion and site closure. This restructuring of the budget accounts expands and supports the intent of Congress in the creation and emphasis of the Closure fund. The new budget structure will be proposed in the President's FY 1999 budget.

- Closure Account - This account, encompassing the current Closure Fund, includes sites on a path to close by 2006 where there are no other DOE missions beyond 2006. The Closure Account will be expanded to include other sites that meet the same definition such as Weldon Springs.
- Project Completion Account - This account will include projects and/or sites where the environmental cleanup work will be finished by 2006, but where other DOE missions and programs continue to exist. This account includes work at the National laboratories, for example, where DOE has a continuing mission.
- Post 2006 Account - This account will include projects that will continue beyond 2006. This account will include many projects at the larger sites, e.g., Hanford, Savannah River, Idaho and Oak Ridge.

Substantial savings are possible at sites where DOE has no continuing mission because overhead and support costs are dramatically reduced or eliminated. For example, cleaning up Rocky Flats by 2006, large savings result from avoiding future support costs. To illustrate the magnitude of these savings, the 1995 Baseline Environmental Management report estimated costs to clean-up Rocky Flats at \$37 billion over 40 years. The current estimate to clean-up this site is of \$8 to \$7 billion over 10 years.

By speeding up clean-up at sites where DOE has a continuing responsibility, savings are also possible, although they are less dramatic. Nevertheless, by focusing on clean-up by 2006, both economic savings and reduction of risk are possible.

### Clarification of Field and Headquarters Responsibility

Starting in late 1995, improvements were initiated in DOE organizational structures and in both business and management practices. These operational changes are contributing to a more efficient approach to Closure Fund management. The EM organization has been "flattened" by eliminating branches and divisions to achieve Departmental and EM Strategic Alignment goals. The supervisor to employee ratio has been reduced and the number of headquarters employees have been reduced from over 750 to less than 450. These changes have directly reduced layering of the EM organization, although at the expense of losing some important technical talent.

In addition, the 2006 vision and IPABs shifts the focus on management and execution of projects to the field where the work towards closure is accomplished. The overall strategy for managing the Closure Projects is for the field to manage the planning, programming, and execution of its projects. Headquarters

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personnel will work with the sites in preparing cleanup plans and, in partnership with the site, will assist in achieving cleanup objectives.

EM Headquarters has many roles for providing assistance to the field. In its role of site advocacy, Headquarters personnel are responsible for working within the Department, the Office of Management and Budget, and the Congress to obtain appropriate budget levels. They develop and implement cross-complex solutions for material consolidation, and waste storage, treatment, and disposal; and establish necessary policies for the effective execution of cleanups. EM Headquarters staff serve as facilitators across Department Headquarters offices and other agencies to assist the sites with meeting their performance commitments. Finally, they coordinate with stakeholders at the national level.

The field offices are responsible for getting the job done, including award of contracts, oversight of contractors and assurance of the health and safety of workers. Other responsibilities include developing project structure and definition; establishing project baselines; conducting performance assessments; and working with elected officials, Federal/State/local regulators, tribal nations, other governmental agencies, stakeholders, and the public to implement the sites' cleanup program.

#### Eliminating Management Stovepipes

In order to succeed with the closure projects, a compact, dedicated group of program managers has been selected to carry out the Headquarters functions for each Closure Fund site. Each is headed by a Deputy Assistant Secretary who functions as a single point of contact and is staffed by a small, married team of dedicated individuals focused on the goal of closure of these sites. The Headquarters teams provide site-specific advocacy and expedited problem resolution in critical areas such as material consolidation and disposition, contracting, environmental safety and health, legal affairs, financial management, and safeguards and security. To achieve the 2006 goal at closure sites, rapid decisions by Headquarters will be necessary on a range of policy issues. Also, Headquarters will need to be active in assuring disposal options from materials and water stored at these sites.

Key to the success of the Closure Fund projects is the real-time engagement of senior field and Headquarters managers in the identification and resolution of issues. A number of initiatives to assure this engagement have already been executed and/or have been planned. These include:

**Lead Site Coordinators** - The Deputy Assistant Secretary for Nuclear Material and Facility Stabilization has been designated the lead EM manager for the Rocky Flats closure. Similarly, the Deputy Assistant Secretary for Environmental Restoration has been designated as the lead EM manager for the Fernald closure. The lead manager concept provides a single focal point for Headquarters closure project efforts. Consistent with this lead office concept, EM staff members representing the principal program functions (waste management, environmental restoration, nuclear materials and facility stabilization, technology development, and budget support) are matrixed to the lead offices to provide an integrated team approach supporting site closure. The teams will also include members from other DOE offices that affect project closure, such as legal, procurement, and health and safety and economic transition. The lead Deputy Assistant Secretary for each site will be empowered to resolve issues that will have adverse impacts on the closure of Rocky Flats or Fernald. Those that cannot be resolved by the Deputy Assistant Secretary will be brought to higher level management as discussed below. Weekly teleconferences between the lead EM headquarters managers and the Deputy Field Office Managers have been established to review issues and progress.

**Senior Management Involvement in the Closure Project** - Monthly meetings will occur between Headquarters and field staff at the Closure site. The Assistant Secretary for Environmental Management and other key senior staff, including other program secretarial officers, will meet with

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field personnel to resolve issues within their purviews and to recommend courses of action to the Secretary when required. Dedicated points-of-contact from other DOE headquarters organizations will be named to assure that issues requiring assistance outside of EM are promptly resolved. These specialists are part of the team but are not full time members of the matrix organization. This avoids formation of layers of bureaucracy, yet establishes these specialists as valued and committed team participants.

**The Entire Team is Committed to Results -** The Assistant Secretary for Environmental Management and the Site Managers will reach a yearly agreement that commits each site to accomplishing a defined scope of work. These management commitments include major milestones for the Closure Fund projects. These commitments will be tailored to individual sites and a tiered approach to determining critical program expectations and assessing progress. Meeting key programmed and high visibility project objectives. To enhance accountability, commitments will be incorporated into the field managers' performance appraisals.

### III. CHALLENGES TO BE OVERCOME TO MEET 2008 CLOSURE GOALS AT ROCKY FLATS AND FERNALD

Key to successful implementation of closure sites/projects is the field's ability to continue to make progress and stay the course on the critical path towards closure: find ways to accelerate work; establish receiver sites available to accept materials and wastes; and protect the health and safety of the workers, the public, and the environment. Other management activities such as reaching decisions on future land use, cleanup levels, acceptable risk and economic development opportunities need to be completed in support of the final closure of sites in the Closure Fund. These activities involve interacting with the affected communities to ensure that implementable decisions are made, to avoid potential misunderstandings, and to garner needed stakeholder support for cleanup efforts.

In order to achieve the 2008 goal, several additional initiatives will be necessary:

- plutonium must be moved from Rocky Flats in the near future, involving actions by other DOE field and headquarters offices;
- depleted, normal, and low enriched uranium at Fernald must be disposed of prior to 2000;
- completion contracts must be established in the future to support site closure;
- transportation of materials from site to site must not create delays,
- low level and mixed low level waste must have suitable disposal options,
- WIPP must open in 1998, and
- adequate and stable funding must be available.

#### Finding a Home for the Nuclear Material and the Waste

Timely closure of Rocky Flats and Fernald depends strongly on our ability to consolidate special nuclear materials at other sites. The movement of plutonium metals and oxides, plutonium fluorides, scrub siley, and sand, slag and crucible material from Rocky Flats is critical to achieving the risk and mortgage reduction objectives. If these materials cannot be moved, the entire Rocky Flats cleanup will be delayed because removal is critical to achieving the critical path. Consolidation of special nuclear materials will significantly reduce overall risk, dramatically reduce life cycle costs, and enable accelerated closure of the Rocky Flats Site by 2008. The final disposition of depletes, normal, and enriched uranium at Fernald is critical to the completion of site remediation and closure. Numerous options are being evaluated to develop the most reasonable and cost effective alternatives.

One of the most critical crosscutting initiatives has been the establishment of a cost-effective, integrated path forward for the disposition of wastes generated in order to expedite the cleanup effort. EM is

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undertaking a major review of integration possibilities. The goal of this effort is to achieve consensus on the configuration of waste and nuclear material management activities to ensure cost-effectiveness and public acceptance. As part of this effort, DOE is examining its procurement strategies for treatment and disposal of waste with low levels of radioactivity, including potential complex wide contracts.

#### **Contract Innovation is Critical to Performance**

Contracts at closure sites need to maximize efficiencies and incentives for early completion. EM will enlist Headquarters specialists to assist the sites in developing streamlined procedures to improve contracting and to eliminate unnecessary reporting requirements. Contracting strategies and contract reform will be used to speed Closure Fund activities. To support the 2006 plan, EM has undertaken an initiative to improve its efficiency through the implementation of a comprehensive plan that evaluates the current state of contract performance and administration, and establishes targets to enhance the performance of work.

Aggressive contracting strategies will need to evolve and be implemented through the Closure Fund projects. The Closure Fund sites have adopted new contracting principles that place incentives on their contractors to accelerate work scope. In addition, the sites are using contract restrictions that penalize contractors for slipping work scope from one fiscal year to another. This "push-pull" approach is crucial to the overall goal to make accelerated closure a reality. Additionally, EM expects to develop contracting strategies that focus not only on completing the work but also on completing it in a more efficient and effective manner. Eventually each of the Closure Fund sites will reach a stage when the final closure activities can be fully quantified and a final competitive, fixed price contract can be awarded, much like the recent contract at the Mound site in Ohio.

#### **Issues Related to the Transportation of Nuclear Material and Waste must be Resolved**

Transportation of the materials for offsite treatment, storage, and disposal have several obstacles or issues that affect the ability of the closure sites to be successful. Some of the issues include complex and differing requirements for emergency response for different waste types; and differing notification procedures and risk assessments and emergency response requirements depending on waste type. Creating a predictable regime of transporting materials will be necessary to create State and local support.

#### **Timely Opening of WIPP is Critical to the Success of Rocky Flats Closure**

One of the cornerstones of the Rocky Flats cleanup, as well as clean-up at other sites, is the disposition of transuranic waste currently stored at the site. The Waste Isolation Pilot Plant is designed and engineered to permanently dispose of transuranic waste and transuranic mixed waste left stored at sites such as Rocky Flats. Intensive efforts are under way within DOE, the Environmental Protection Agency to open WIPP in 1998. These efforts must succeed in order to meet the 2006 closure goals at Rocky Flats.

#### **Stable and Adequate Funding**

Closure of sites by 2006 requires an aggressive schedule that could result in substantial savings. These savings can be devoted to clean up of sites that will take longer, such as Hanford, Idaho, Oak Ridge and Savannah River, thus reducing total costs and speeding up clean-up of the entire weapons complex. Investments made in the near term can result in large amounts of funds that can be devoted to other sites. In order to achieve these savings, stable funding is necessary, particularly since success is so dependent on achieving the objectives of the critical path.

Clean up of the wastes that resulted from over 60 years of weapons production represent a national liability devoted to preserve the security of the United States and its democratic allies. This liability can be

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reduced through prudent investments in clean up of the weapons complex. The liability will not go away, but its cost and risk can be reduced.

#### IV. Unique Challenges at Rocky Flats and Fernald

Rocky Flats and Fernald are models of the overall approach envisioned in the 2008 Plan. Both sites were focused on closure at an earlier time. They are the two largest sites for which no further DOE mission would exist. In both cases, early closure would save billions of dollars. For example, in 1995, Rocky Flats clean-up was estimated to cost \$37 billion over a forty-year period. The closure strategy would cost \$8 to \$7 billion over 10 years. In 1995, Fernald was estimated to cost \$5.9 billion over a five year period. The current estimate is \$2.5 to \$3 billion over a 9-year period.

To succeed at both of these sites, stable funding must be programmed, making a Closure Fund particularly advisable. At both sites, a critical path needs to be established and achieved to succeed. These attributes make it critically important to break down stovepipes and provide resources and discretion to the field office. Both sites need off-site disposal options in order to clean-up the sites.

Rocky Flats poses substantially greater challenges because of its size and complexity. The Lead Site Coordinators and Senior Management reviews are necessary to solve complex-wide problems. The 2008 clean-up goal cannot be achieved without finding a disposal site for plutonium metals and oxides, plutonium fluorides, scrub alloy and sand, slag and crucible material. This material will ultimately either be immobilized or be converted to mixed oxide fuel. Only through concerted efforts by many elements of the Department will it be possible to develop a storage and disposition strategy.

The Fernald site poses fewer challenges, since the site is almost identical to the Weldon Springs facility which is close to completion. Nevertheless, the site faces technological challenges in disposing of site wastes and requires a large quantity of wastes to be shipped off-site. Stable funding has been necessary to keep the clean-up on track. Close management attention has been required to both on-site clean-up and on assuring off-site disposal options are available.

In essence, DOE needs to decentralize day-to-day operations to the field, but maintain tight management oversight and accountability at Headquarters for these Closure projects. Under the previous system of budgeting by program area and day-to-day Headquarters management, it would have been impossible to achieve this focus. In addition, all relevant Headquarters offices need to assist the field in assuring quick resolution of issues and in developing disposition strategies. Special attention to these sites through a Closure Fund helps provide that management focus and sense of accountability.

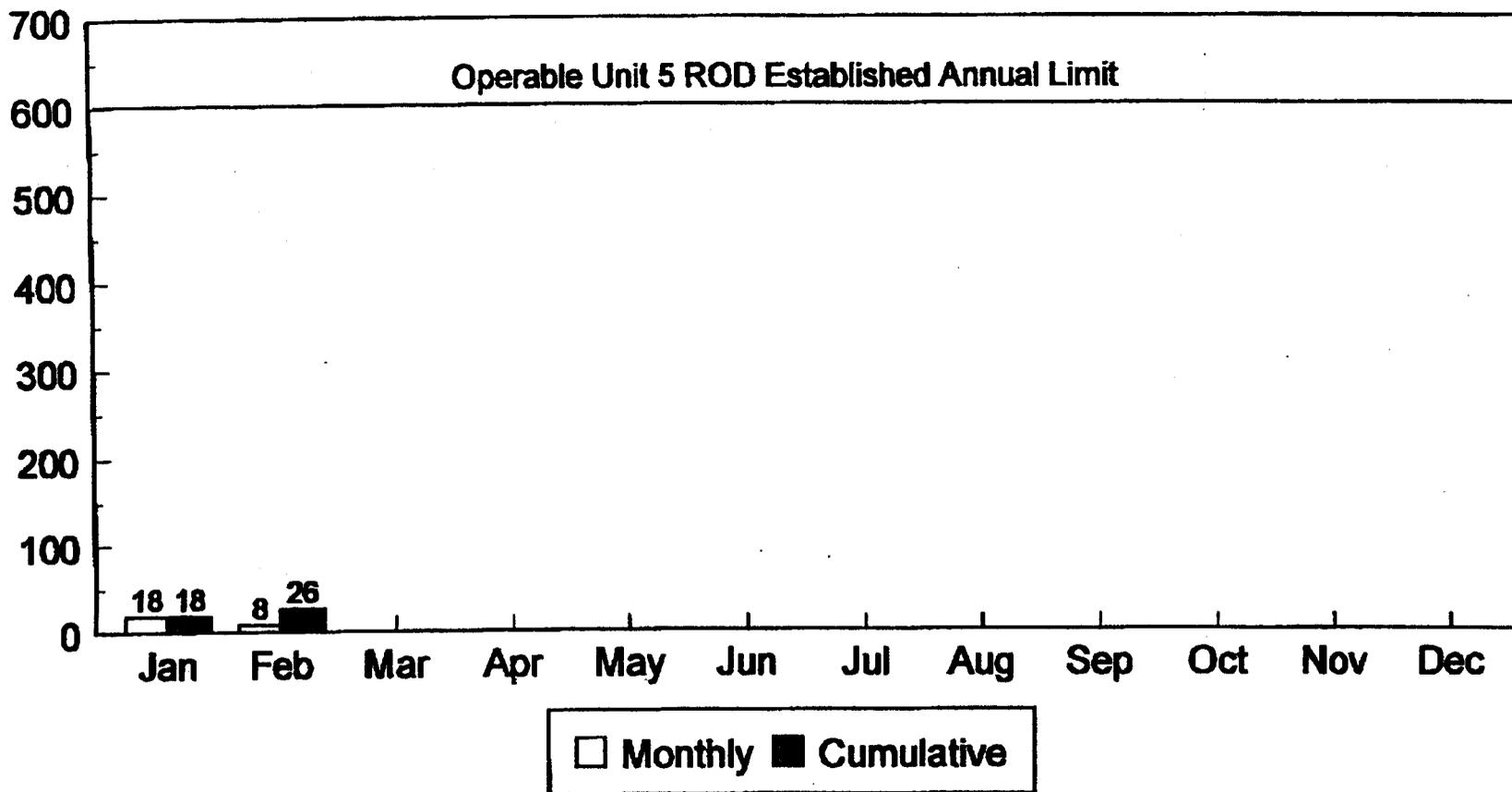
#### V. Conclusion

Achievement of the 2008 vision requires entirely new management systems: Initially, the cleanup program was created from a level-of-effort production effort. The new system, envisioned in IPASS, is based on a focus on projects, matrixed organization designed to solve problems (rather than micro-manage) and strong, cooperative management systems. Layers of management review and approval need to be replaced by a system designed to assist the field in overcoming obstacles to achievement.

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Achieving clean-up of the Closure Fund projects is key to the overall 2000 vision. The Appropriations Committee rightly understands that different management techniques will be necessary to succeed. The Department plans to work closely with the Congress in pursuing the management initiatives discussed in this report.

# POUNDS OF URANIUM DISCHARGED TO GMR IN 1998



Sum of monthly discharges may not always agree with cumulative total because of rounding differences.

ATTACHMENT A

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5  
77 WEST JACKSON BOULEVARD  
CHICAGO, IL 60604-3590

= 1345

REPLY TO THE ATTENTION OF:

MAR 09 1998

Mr. Johnny W. Reising  
United States Department of Energy  
Feed Materials Production Center  
P.O. # 398705  
Cincinnati, Ohio 45239-8705

SRF-5J

RE: OU 1 Milestone Issue

Dear Mr. Reising:

Thank you for submitting your February 26, 1998, letter regarding the potential impact on Operable Unit (OU) 1 milestones, as a result of an injunction issued in the United States Department of Energy (U.S. DOE) litigation with Waste Control Specialists (WCS).

U.S. EPA agrees that this situation merits attention, but understand that U.S. DOE is obligated to comply with approved workplans for OU 1. Therefore, U.S. DOE should proceed with design and build activities for the OU 1 waste pit remediation.

U.S. EPA is interested in knowing more about the status of the litigation with WCS and its impacts on the remediation of OU 1. For example, has the court established a litigation schedule? If not, when does U.S. DOE anticipate resolution of the litigation?

Since this situation may affect U.S. DOE sites other than Fernald, we have notified our Headquarters Office of Federal Facilities and suggested that they monitor the litigation. It would be helpful if you could identify a U.S. DOE Headquarters person to serve as a contact for our Headquarters on this issue. However, Region 5 will continue to look to U.S. DOE Fernald for updates about the specific impact of the litigation on the Fernald cleanup.

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Please contact me at (312) 886-0992 if you have any questions regarding this matter.

Sincerely,



James A. Saric  
Remedial Project Manager  
Federal Facilities Section  
SFD Remedial Response Branch #2

cc: Tom Schneider, OEPA-SWDO  
Bill Murphie, U.S. DOE-HDQ  
John Bradburne, FERMCO  
Terry Hagen, FERMCO  
Tom Walsh, FERMCO



### What is the Site-Specific Advisory Board Initiative 1997 Evaluation Survey?

This is the second annual survey of participants in the USDOE, Environmental Management Site-Specific Advisory Board (SSAB) Initiative. In 1996, eleven sites were evaluated, in 1997 the number increased to twelve. Two versions of the survey, a long version and a short version, were developed to obtain the opinions of SSAB participants, members of the public who have attended SSAB meetings, DOE staff, and other SSAB support staff. The survey was designed to evaluate the six goals of the SSAB Initiative and the ability of the SSABs to function as groups. The goals evaluated were:

- Goal 1: Establish processes and procedures to provide an effective forum for exchange of information and viewpoints regarding DOE site issues.
- Goal 2: Facilitate interaction and exchange of information and viewpoints regarding DOE site issues.
- Goal 3: Provide useful advice and/or recommendations to DOE.
- Goal 4: Improve DOE's site decisions and decision-making process.
- Goal 5: Leads to more acceptable actions by DOE.
- Goal 6: Contribute to public's trust and confidence in DOE.

### What were the results of the survey?

Overall the results of the 1997 survey, were similar to those obtained in 1996.

- Goals 1, 2, and 3 are being met, according to long survey respondents.
- Goals 4, 5, and 6 show room for improvement, according to all survey respondents.
- Overall, the respondents felt that the Boards are functioning more effectively as groups than in 1996.
- Results show that respondents feel the SSAB Initiative is a good use of funds and that participation in the Initiative is worthwhile. However, respondents expressed concern that public awareness is low and that DOE-HQ is not supportive.
- Respondents to the short survey are generally less positive and more uncertain than the long survey respondents. Short surveys were usually given to members of the public and DOE support staff. Long surveys were given to Board and ex-officio members.
- Results vary among sites.
- With the exception of items related to DOE-HQ involvement, all statistically significant changes between 1996 and 1997 were in the positive direction.

### What were the results from the Fernald participants?

Respondents associated with the Fernald SSAB viewed the SSAB Initiative as successful in almost all items. These respondents indicated that:

- The SSABs goals were effectively achieved.
- The Board is functioning very effectively.
- The public is aware of the role of the Board.
- It is a positive experience to be a member of the SSAB.
- The SSAB Initiative is a good use of funds.

The respondents from Fernald were more positive than all other sites combined in both 1996 and 1997. The percentage of favorable responses did decrease slightly at Fernald in 1997, but these changes were not significant. Fernald had some areas of concern, but in general the site was less negative than all other sites combined. These concerns include:

- DOE's timeliness in requesting advice.
- The Board's support for DOE's actions.
- DOE-HQ guidance and consideration of SSAB advice.



### What is the purpose of this legal brief?

This brief outlines DOE's arguments to obtain an appeal from the injunction originally given by the Fifth Circuit Court in the case of Waste Control Specialist vs. USDOE.

### What are DOE's main arguments against the injunction?

In order to obtain a preliminary injunction, the plaintiff must show: substantial likelihood that it will succeed on its merits, irreparable harm without the injunction, harm to the plaintiff outweighs harm to the defendant, and the injunction will not undermine the public interest.

DOE feels that WCS is unlikely to succeed in its case because:

- There is no "final agency action" and thus the district court lacks jurisdiction in this matter. Although DOE did not accept the proposal, the concept of the proposal is under consideration. DOE must evaluate complex policy issues associated with this type of regulatory arrangement. In order for an action to be considered final under the law, it must be an action by which "rights or obligations have been determined" or from which "legal consequences will flow."
- The DOE policy judgment is "committed to agency discretion by law" under the Administrative Policies Act (APA) and is therefore not reviewable by the district court.
- No federal law requires that DOE implement WCS's proposal. WCS states in the original case that the proposal is "nothing but a suggestion." DOE cannot be required by law to implement a party's suggestion. DOE does not dispute that it has the legal ability to accept the proposal.

In addition, other legal problems exist in the WCS argument:

- The court has also erred in its findings with respect to WCS's willingness and ability to take permanent title to DOE's low-level radioactive waste. The RFP specifically states that the waste be transferred to and held by the contractor. WCS is not willing to assume permanent responsibility for the waste. Additionally, the RFP is not the basis for this lawsuit.
- WCS will not suffer irreparable harm without the preliminary injunction. WCS's claims that it will suffer from not being awarded future contracts for which there are no RFPs are purely speculative.
- However, DOE will suffer more than minimal harm and the public interest is not served by the injunction. Delay in awarding the contract at Fernald could result in over \$10 million in excess costs for the fiscal year 1998 and schedule delays could result in additional fines. Delays will also result in additional environmental damage and risk to the public.
- The injunction in itself is an inappropriate remedy for DOE's allegedly arbitrary response to WCS's novel regulatory proposal. Generally, this type of case would result in a remand for the agency to reconsider the matter. When injunctions have been issued, they have been directed against the agency itself and not at future contract solicitations.
- The district court may have abused its discretion by imposing a minimal injunction bond (only \$10,000) when evidence shows substantial monetary and other damage will result from the injunction. The court gave no justification in setting this amount.



**FERNALD  
CITIZENS  
ADVISORY  
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**What is the regulatory basis for DOE waste disposal?**

Under the Low-Level Radioactive Policy Amendments Act of 1985 (LLWPAA), DOE is responsible for disposal of low-level radioactive waste that it owns or has generated. This waste "shall be disposed of on the site at which it is generated, if practical, or ... at another DOE disposal facility." DOE may make exemptions to this policy for new practices that are based on appropriate documented safety, health protection, and economic analyses. Under DOE's current policy, DOE will use a non-DOE disposal facility if it complies with "applicable Federal, State, and Local requirements, and thus has the necessary permits, licenses, and approvals." Likewise, the Atomic Energy Act requires the licensing of activities concerning by-product material by all organizations except DOE and NRC. The NRC also does not require licensing of DOE contractors and may relinquish its licensing ability to the states. Texas has received such regulatory power from the NRC and has decided that private facilities may not receive a license to dispose of low-level wastes.

**How did WCS propose getting around the inability to obtain a state license?**

WCS would be operated in effect under a contract with DOE (i.e., "It would not be a private commercial facility but rather a DOE facility, regulated solely by the agency.") Therefore, in WCS's view, it would not need to be licensed by the state. WCS proposed that DOE perform its oversight through a group consisting of Texas Tech University and other organizations. At the end of the operational phase, the land and waste would be transferred back to DOE.

**How did DOE react to the WCS proposal?**

DOE stated that they would examine the use of a non-traditional regulatory arrangement, as they are hoping to increase competition. However, the current policy would need to be examined and the bid would have to be reopened to all potential bidders at the time. The RFP had specifically stated that a state or NRC license and willingness to take title of waste were required. DOE encouraged WCS to bid on future contracts.

**Special Report Summary:**

**Preliminary Injunction: WCS vs. USDOE  
Brief for Appellants, December 19, 1997**



**FERNALD  
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### What is the purpose of this legal brief?

In this brief, WCS (Waste Control Specialist)'s responds to DOE's arguments contained in the Brief for Appellants. The Brief for Appellants outlines the reasons DOE feels the injunction should be repealed.

### What are the issues outlined in this brief?

- Whether DOE's rejection of WCS's December 20, 1996 proposal constitutes final agency action under the Administrative Procedures Act (APA).
- Whether DOE's disqualification of WCS's bid on the Fernald Request for Proposal constitutes final agency action under the APA.
- Whether the district court's finding is clearly erroneous in stating that WCS is likely to succeed at trial on the merits of its APA claim that DOE's final agency action is "arbitrary, capricious, abusive of discretion and/or contrary to law."
- Whether DOE unlawfully denied WCS the right to compete for contracts for the disposal of DOE's low-level and mixed radioactive wastes.
- Whether the district court's findings are clearly erroneous in stating that:
  - WCS's Fernald bid was consistent with DOE bid specifications related to the offeror accepting the title to DOE wastes.
  - WCS will suffer irreparable harm absent the preliminary injunction.
  - The preliminary injunction will not cause DOE any significant harm.
  - The injunction will serve the public interest.
- Whether the preliminary injunction unlawfully interferes with a matter committed to agency discretion.
- Whether the court abused its discretion in setting the amount of the injunction bond.

### What are WCS's main arguments?

- Since DOE contractors do not need a license under either the Atomic Energy Act (AEA) or the Low-Level Waste Policy Amendments Act of 1985, WCS would not need a license to operate a disposal facility under contract with and for DOE.
- DOE's rejection of the WCS bid was final agency action, and thus, reviewable under the APA. A final agency action must not be tentative or interlocutory in nature, and must determine rights or obligations from which legal consequences will flow. The WCS proposal was rejected finally, even though DOE's reasoning behind this rejection has changed several times. Now DOE claims that a policy change may come sometime in the future allowing for proposals similar to that of WCS. DOE's arguments do not adequately explain why the action was not final.
- When a district judge enters his findings, they become formally his and are measured by the normal standard of review, thus DOE cannot meet the burden of establishing that the district court's findings are erroneous. Therefore, WCS did meet the necessitated items for the issuance of an injunction.
- The court found that the use of a third party to oversee a waste site on DOE's behalf is required by law for DOE's use of a private site. DOE possesses no authority under the AEA to relinquish its responsibilities to these wastes regardless of whether the operator has a state license.

**Special Report Summary:**

**Preliminary Injunction: WCS vs. USDOE  
Brief for Appellee**



FERNALD  
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- WCS is fully prepared to take title to DOE wastes, although WCS contends that it would be appropriate legally for DOE to take possession of the site after decommissioning. DOE would always be responsible for this waste under CERCLA. Because this waste will remain radioactive for hundreds of years, it should remain on land owned by the federal or state government, as a private operator may have gone out of business by that time. Title would be transferred for a time to WCS and then transferred back to DOE. WCS has never asserted that it is not fully prepared to take title to the waste, but has informed DOE that it feels this approach is not wise from a policy standpoint.
- DOE's change in policy could take several years, at which point the majority of the wastes will have been disposed of at Envirocare. Without the injunction, WCS would be prevented from bidding on these future contracts.
- DOE is required under the Department of Energy Organization Act to promote private competition.
- The district court found that WCS's proposal did not in any way alter the terms of the Fernald bid.
- The Fernald RFP states that the offeror must have or show the ability to obtain "the proper Federal, State, and local permits and licenses for the permanent disposal of Low Level Radioactive Wastes generated by federal facilities." Since no license is needed to dispose of DOE wastes according to the AEA, WCS should be able to bid on the contract without any further modifications to the RFP.
- Nothing in the injunction requires DOE to delay, suspend, or cancel any bid or contract. Therefore, no monetary damages can be incurred by DOE.
- The \$10,000 injunction bond is reasonable since DOE presented no arguments that it would incur damages from the injunction.

## Special Report Summary:

Preliminary Injunction: WCS vs. USDOE  
Brief for Appellee



### What is the purpose of this legal brief?

This DOE brief responds to arguments outlined by WCS (Waste Control Specialists) in the Brief for Appellee. This brief explains why WCS's arguments are incorrect and why the injunction should be appealed.

### What are DOE's arguments?

- A party can only win a government contract by being the lowest bidder that satisfies the terms of the RFP. Envirocare is a licensed facility under the state of Utah and is the lowest bidder satisfying the RFP. Existing waste disposal contracts with Envirocare and Envirocare's performance under those contracts are irrelevant to this case. DOE's waste shipments to Envirocare and Envirocare's investigation for criminal activities do not make DOE's denial of the WCS proposal into final agency action nor do the items associated with Envirocare provide a basis to award a contract to WCS.
- The district court erred in concluding that WCS is likely to succeed on the merits of its case. DOE has consistently stated that it is considering a policy change to encompass regulatory structures such as those proposed by WCS. Therefore, no final agency action has occurred. Since the WCS proposal is without precedent, it is unreasonable to assume that DOE would accept it without thorough review. DOE has the right not only to decide to use commercial facilities, but to decide which type of facilities to use.
- DOE's response to WCS's suggestion is not reviewable by the district court. WCS concedes that DOE has the right to choose to use commercial facilities. Therefore, it follows that DOE has the right to decide to use facilities that are licensed. The Atomic Energy Act (AEA) does not state that licenses are not required for any disposal facilities utilized by DOE, as WCS contends. In addition, DOE is required to promote private competition under the law, but that does not mean that DOE is precluded from deciding to dispose of wastes only at licensed facilities.
- The AEA does not require implementation of WCS's proposal. The subchapters of the AEA on which WCS is making its case do not even deal with disposal facilities, but rather with production and utilization facilities. DOE may use its own disposal facilities without license since it is exempt from the licensing requirements of the AEA. The act does not require that DOE regulate the commercial facilities that it uses. Even if the act did state that commercial disposal facilities did not need licenses, the act would still allow DOE to decide as a matter of policy that licenses are required.
- WCS's Fernald bid was not properly represented to the court. The court has said that the action was not a bid protest, yet WCS is making the bid the subject of the suit. The injunction effectively revises the RFP to make licenses and holding title to wastes not required.
- The district court did not evaluate the harm to WCS correctly. WCS spent over \$50 million in developing its whole facility, not just its low-level waste facility. Any expenditures that WCS did make were at its own risk, knowing that it could not obtain a state license.
- The injunction harms DOE because, although it does not technically keep DOE from enjoining contracts, it effectively does so. DOE cannot disqualify WCS on the grounds the company does not satisfy the terms of the Fernald RFP. Thus, the next to last step cannot be completed – determining which bidders are qualified and which are not. The court should have at least required WCS to pay a bond that is equal to the damages DOE has shown exist because it is unable to award any RFPs for low-level waste disposal.

**March 2, 1998**  
**Weapons Complex Monitor**

**Page 19**

**"At Fernald.....Silos Supplemental EIS To Be Approved"**

**1345**

**AT FERNALD ..... SILOS SUPPLEMENTAL EIS TO BE APPROVED**

A supplemental analysis to the environmental impact statement for Operable Unit 4 has determined that the Silos 1 and 2 Accelerated Waste Retrieval project will

not result in a substantial change in project scope or environmental impact. The analysis was expected to be approved by the Ohio Field Office by today (March 1).

March 2, 1998

Weapons Complex Monitor

Page 19

"At Fernald.....Workshop Will Create Format For Citizens' Input"

**AT FERNALD . . . . . WORKSHOP WILL CREATE FORMAT FOR CITIZENS' INPUT**

Representatives from the Department of Energy and Fluor Daniel Fernald will offer an outreach strategy to get the public involved in the Fernald Silos Project, at a March 4 workshop in Harrison, Ohio. "We're trying to maintain a consensus on a strategic path forward," explained Fernald Area Office spokesman Gary Stegner.

"But we're not at the point yet where we're seeking alternatives to vitrification, or anything like that." The project includes Silos 1 and 2 (the K-65 Silos), Silo 3 (the metal oxide Silo), the unused Silo 4, and ancillary activities such as the Vitrification Pilot Plant. (See *Calendar for more on the workshop.*)

March 4, 1998  
 The Harrison Press  
 Front Page  
 "Trustees seek help"  
 By: Tina O'Connell

1345

# Trustees seek help

By Tina O'Connell  
 Staff Writer

Crosby Township trustees have decided to seek a temporary part-time township administrator.

The workload of trustees Gary Storer, Melba Guard and Jane Harper has increased, prompting them to seek a professional to assist with administrative duties, said trustee Jane Harper.

Harper said that rewriting the township's zoning codes, added paperwork associated with Fernald and the building of a new senior center is providing the trustees with more work than they can effectively handle.

The trustees work full or part-time, limiting their ability to take care of township business during working hours, she said.

"An administrator can go to every meeting to answer questions," said Harper. "If something comes up, they can take care of it within 24 hours, something we can't always do."

The ideal candidate would be available for 10-15 hours a week and have a background in finance and township

Continued on Page 14A

## Trustees

Continued from Page 1A

administration, she said.

Trustees intend to advertise for applicants and would like to fill the position within the month, said Harper.

"We appreciate that this would be a major expenditure for the township and would like to hire someone who would utilize township dollars most efficiently," she said.

To complicate matters, township legal counsel Don Meyer has informed the trustees that he would like to reduce his attendance at township meetings.

"It takes too much time away from my family to go to every meeting," said Meyer. "My duties will not be reduced, I will still be available for legal advice on an as-needed basis."

The trustees anticipate that the part-

time administrator will be available to offer professional advice at township meetings, said Harper.

March 4, 1998

The Harrison Press

Opinion/Page 2B

"Much going on in Crosby Township"

By: Gary Storer

# Much going on in Crosby Township

Governor George Voinovich has proclaimed March 22 through March 28, as "Ohio Tornado and Flood Safety Awareness Week." The Hamilton County commissioners and Crosby Township trustees urge all citizens in Hamilton County to familiarize themselves with tornado and flood safety rules, to understand the meaning of the outdoor warning siren signals, and to take necessary actions to safeguard their home and families.

Tornado and flood safety information is available through the Hamilton County office of Emergency Management Agency at 851-7080. In order to assist and donate to those in need in the aftermath of the Florida tornados, call 1-800-HELP-NOW.

The following is a brief summary of some of the activities of the trustees in between the regular meeting dates during the month of February.

Feb. 2 - the board of trustees met with Eric Fryer, senior project manager for the Center of Public Management and Regional Affairs, to discuss and implement an integrated pay schedule for Crosby Township employees.

Feb. 3 - trustees Gary Storer attended the monthly Fernald Community Reuse Organization (CRO). Discussions included the public participation plan, proposed use of the site as a burial site for native American remains, the status of grant applications, and a process for assessing the commercial potential of a 23-acre industrial site.

Feb. - 5, 6, and 7 - the trustees attended the winter convention of the Ohio Township Association in Columbus.

Feb. 9 - the trustees met with Mike Dichtl, senior vice president of Star Bank to review funding options and rates for purchase of an ambulance and/or pumper and construction of the senior administrative complex.

Feb. 10 - trustees Jane Harper and Storer attended the February clean-up progress briefing. All major clean-up projects were discussed.

Feb. 12 - trustees Harper and Storer attended the 7th annual meeting of the Hamilton County Engineers and Township Authorities. The evening included engineer projects and a slide presentation of historic bridges of Hamilton County.

Feb. 18 - the trustees met to discuss advantages and disadvantages of banking with Star Bank vs Fifth-Third, as preparations are made for major purchases and loans.

Trustees Harper and Melba Guard attended a hearing of the Crosby Township Zoning Board of Appeals.

Feb. 19 - trustees Harper and Storer attended the Crosby Township Historical meeting. Robert Terwilliger, of the Greater Cincinnati Storytelling Guild, presented a program about storytelling.

Feb. 26 - the trustees participated in the 13th annual trustees tour of the Fernald Environmental Management project (FEMP). The trustees have toured the facility each year since 1985 in order to better monitor the clean-up effort at the site. I want to thank our guide, Jeannie Foster, for an informational tour. I also express gratitude to Fluor-Daniel for the opportunity. We look forward to our tour next year to witness even more progress. Highlights this year included the new boiler plant, railroad spur construction, thorium disposal cell construction, thorium overpacking and storage pads.

Feb. 26 - the trustees attended a dinner meeting for local officials, sponsored by Cincinnati Bell, in order to commemorate 125 years of telecommunication services, and celebrate the 1 Millionth access telephone line. Cincinnati Bell has the largest internet access and has 75,000 miles of fiberoptics in the Cincinnati region. They took the opportunity to demonstrate future technologies.

Fluor-Daniel announced that the sewage plant will be completed in two weeks. The onsite disposal facility maintenance includes storm water pumping, chain link fence installation. Low level waste shipments to Nevada test site (NTS) have been placed on hold pending investigation of recent incidents of leaking containers.

The criminal investigation section of the Hamilton County Sheriff's Department reports that three cases were assigned for investigation and no cases were closed. There was a \$3,000 in stolen property recovered during the month of January.

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## Crosby Corner

Gary Storer

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Hamilton County Environmental Services announced that the 1997 fourth quarter incentive award for Crosby Township is \$475.61. Thank you for recycling and continue to use those red bins. Area companies can save hundreds, even thousands of dollars using waste exchanges. A waste exchange is a specialized service providing a network of link companies with reusable items with other companies that can reuse or recycle them.

Generally, waste exchanges provide networks for a wide variety of materials ranging from plastics to construction materials to laboratory chemicals. A waste exchange coordinator serves as a third party between the waste producer and the waste re-user or recycler. A local coordinator is available at Waste-link at 248-0012.

In March, the board of trustees will meet on the March 9 and 30. See you there. Other important March dates are: Girl Scout Day, March 12; St. Patrick's Day March 17 and the first day of spring, March 20.

Crosby Corner is written by Gary Storer in an effort to improve communication between the trustees and the citizens of Crosby Township.

More than 230 million tons of cargo are transported by barge on the Ohio River each year. Coal and petroleum products make up almost 70 percent of this cargo.

*"Most people see what is, and never see what can be."*

- Albert Einstein

March 9, 1998

Weapons Complex Monitor

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"DOE Must Decide Soon To Renew or Re compete Several Site Contracts"

<sup>1 of 2</sup>  
1345

## DOE MUST DECIDE SOON TO RENEW OR RECOMPETE SEVERAL SITE CONTRACTS

*No Decision on WIPP; WIPP to Be Recompeted?*

The Department of Energy must decide soon whether to renew several site-management contracts, with probably the most controversial decision looming at the Idaho National Engineering and Environmental Laboratory. Idaho Ops Manager John Wilcynski has already initiated an overall evaluation of the performance of Lockheed Martin Idaho Technologies Co., whose contract expires at the end of FY99 (*see table*). The contract does allow for a five-year extension. A decision to re compete must be made by late May in order to have a new contractor in place by October 1999.

Notably, DOE headquarters has yet to divulge whether the Lockheed Martin contract at Sandia National Laboratories will be renewed—it expires in September of this year. The lack of a headquarters' decision has confounded DOE Albuquerque officials overseeing Sandia. The only actions now feasible are either a full five-year renewal or an extension of the current contract to allow for a re competition of the procurement.

March 9, 1998

Weapons Complex Monitor

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"NTS LLRW Disposal Volumes"

## NTS LLRW Disposal Volumes

The Nevada Test Site accepted 12 shipments totaling 12,027 cubic feet of low-level radioactive waste in February, while deliveries from the site's greatest supplier, Fernald, continue to accumulate in Ohio pending resolution of the contractor-oversight problems that led to the Dec. 16 shipment leak (*WC Monitor*, Vol. 9 No. 6). NTS has received 105 shipments totaling 130,082 cubic feet of LLRW from 11 sites in FY98. ◀

### WASTE MANAGEMENT PROJECT FY 98 RADIOACTIVE WASTE SUMMARY

DOE Approved Generators	Disposal Location	W/E 01 Mar 98			FY 98 TOTAL			WMP TOTAL	
		No. of Shipments	(Cu.Ft.)	Volume (Cu. M.)	No. of Shipments	Volume (Cu. Ft.)	Volume (Cu. M.)	Volume (Cu. Ft.)	Volume (Cu. M.)
Aberdeen	Area 3	0	0	0.00	0.0	0	0.00	120	3.40
	Area 5	0	0	0.00	1.0	448	12.69	66,504	1,883.19
Allied Signal	Area 5	0	0	0.00	0.0	0	0.00	413	11.69
Bechtel Nevada	Area 3	0	0	0.00	0.0	0	0.00	204,945	5,803.39
	Area 5	1	943	26.70	1.0	943	26.70	15,081	427.05
	Mixed	0	0	0.00	0.0	0	0.00	163	4.62
FERMCO	Area 3	0	0	0.00	26.0	46,923	1,328.71	3,158,736	89,455.29
	Area 5	0	0	0.00	19.0	15,962	452.00	2,473,156	70,031.86
General Atomic	Area 3	0	0	0.00	0.0	0	0.00	138,096	3,910.44
	Area 5	0	0	0.00	5.0	6,745	191.00	432,545	12,248.30
IT Corporation	Area 3	0	0	0.00	0.0	0	0.00	419	11.87
	Area 5	0	0	0.00	0.0	0	0.00	7,676	217.36
ITRI	Area 5	0	0	0.00	0.0	0	0.00	5,055	143.14
LNLL, CA	Area 3	0	0	0.00	0.0	0	0.00	66,101	1,871.77
	Area 5	2	592	16.76	13.0	10,569	299.27	43,189	1,222.97
MOUND	Area 3	0	0	0.00	0.0	0	0.00	13,550	383.69
	Area 5	0	0	0.00	11.0	15,375	435.38	1,587,697	44,958.49
PANTEX	Area 5	0	0	0.00	1.0	1,208	34.21	105,925	2,999.45
RMI	Area 5	0	0	0.00	0.0	0	0.00	33,657	953.06
ROCKETDYNE	Area 3	0	0	0.00	0.0	0	0.00	105	2.97
	Area 5	0	0	0.00	8.0	4,485	127.01	41,207	1,166.85
Rocky Flats	Area 5	1	1,172	33.19	18.0	26,027	737.01	2,166,881	61,359.15
	Mixed	0	0	0.00	0.0	0	0.00	283,372	8,024.19
SANDIA Ntl Lab, CA	Area 3	0	0	0.00	0.0	0	0.00	2,287	64.76
	Area 5	0	0	0.00	0.0	0	0.00	15,703	444.67
SANDIA Ntl Lab, NM	Area 5	0	0	0.00	0.0	1,395	39.51	10,920	309.23
Inactive offsite waste generators	Area 3	0	0	0.00	0.0	0	0.00	89,980	2,547.95
	Area 5	0	0	0.00	0.0	0	0.00	38,654	1,094.56
Inactive onsite waste generators	Area 3	0	0	0.00	0.0	0	0.00	8,211,495	232,523.26
	Area 5	0	0	0.00	0.0	0	0.00	76,538	2,167.31
<b>GRAND TOTAL</b>		<b>4</b>	<b>2,707</b>	<b>76.65</b>	<b>105</b>	<b>130,082</b>	<b>3,683.49</b>	<b>19,290,171</b>	<b>546,235.92</b>

Total waste volume received in FY 98 = 120,119 Cu. Ft.; 3,646.83 Cu. M.  
Total onsite waste received in FY 98 = 943 Cu. Ft.; 26.70 Cu. M.

Onsite waste comprises approximately 33.85% of the total waste inventory.  
(Onsite waste comprises approximately 48.15% of the total waste inventory.)

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March 11, 1998

Journal-News

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**"Fluor Corp. Gets top ranking"**

1345

## Fluor Corp. gets top ranking

Journal-News staff report

ROSS TOWNSHIP

Fortune magazine has declared Fluor Corp., parent company of Fluor Daniel Fernald, the principal cleanup contractor at the former Fernald uranium processing plant, "the world's most admired public company" in the construction and engineering industry.

The rating, which came out in the magazine's March 2 issue, marks the fifth consecutive year the company has received the recognition.

Peter Fluor, Fluor Corp. chairman, said, "We are very proud to have been selected again as America's most admired engineering and construction company. Our employees work very hard to

deliver value to Fluor's two most important constituencies — our clients and our stakeholders — and this designation recognizes their efforts."

John Bradburne, Fluor Daniel Fernald president, said, "I am very proud of all Fluor Daniel employees for adding to the success of Fluor Corp. Fluor Corp. is successful when thousands of projects located throughout the world are successful — including Fluor Daniel Fernald."

The criteria used by Fortune to rate the company included innovation, quality of management, investment value, products and services, financial soundness, talent, corporate responsibility and use of assets.

March 9, 1998

The Energy Daily

Page 3

*"Argonne Looks To Build Waste Solution With Ceramicrete"*

The inventors of a new material designed to solidify radioactive and hazardous wastes for safe disposal knew their invention might have other uses. But even they were surprised to learn it had the potential to do everything from fixing potholes to fireproofing high-rise buildings.

The material, called ceramicrete, was invented by a team of scientists led by Arun Wagh at the Energy Department's Argonne National Laboratory. Though ceramicrete still is being tested to determine if it can contain radioactive wastes, a Chicago startup company called Bindan Corp. already has licensed it for three commercial applications: repairing roads, binding mosaic flooring to a subsurface and protecting steel beams from fires in high-rise buildings. Ceramicrete is a phosphate ceramic made at room temperature by a process similar to concrete mixing. However, it is harder and denser than regular cement. And ceramicrete binds to nearly any solid object, including itself. It is formed by mixing magnesium oxide (a common, inexpensive powder used in the ceramic industry) and soluble phosphate powders (such as those used in detergents and fire retardants) with water.

When treating radioactive and mixed wastes, the ceramicrete ingredients combine with the wastes to form a thick slurry that can be poured into storage drums, where it sets to form a hard, dense and nonleachable ceramic waste form.

Water, the final ingredient in forming ceramicrete, is used in varying degrees depending on the waste stream. When treating solid waste, contaminated wastewater—a common by-product at most sites—can be substituted for regular water, increasing efficiency by 20 percent. When treating liquid wastes and sludges, the water might be left out completely, since the water already in the waste stream can provide sufficient liquid to cause the other ingredients to react.

This flexibility also makes the process completely self-contained, since the water used to clean the equipment between batches can be added to the next barrel.

#### Private Company Licenses Ceramicrete

The characteristics that make ceramicrete such a promising substance for treating waste also make it an excellent tool for repairing roads.

A license was issued last year to allow Bindan Corp. to do just that. The company plans to market ceramicrete as a monopatch material that can be spread over a crack in the road or poured into a pothole, repairing the damage in a matter of hours.

"It makes an ideal road repair [substance]," said Bindan president Tom Lally, "because it is harder than

## Argonne Looks To Build Waste Solution With Ceramicrete

BY ERIK HOLM

patches will hold up better than the original roadway against winter's freeze-and-thaw cycle," Lally said.

But Argonne's Wagh cautioned that ceramicrete likely will never be a large-scale substitute for concrete because of its high initial cost. "But for applications like road repairs, it can do things that cement cannot, and it can do them quickly."

A second application Bindan is pursuing is aimed at protecting the steel girders in high-rise buildings from fire. Present building codes require coating steel structures to protect them against heat.

During fires, Lally said, intense heat on the lower floors can soften and deform the steel skeleton that holds up the building. "Because of ceramicrete's excellent binding properties, it can be sprayed or patched onto the beams, where it will harden into a brick-like 'refractory' that insulates the beams from the heat."

Finally, Bindan intends to market ceramicrete as an agent for binding terrazzo flooring to a subsurface.

#### Idaho Lab Plans Full-Scale Demonstration

Even though the commercial applications of the technology are promising, its potential use in treating radioactive wastes throughout the DOE weapons complex is what drives Wagh. His team currently is fine-tuning the ceramicrete formulation to the needs of the waste ash generated at the Idaho National Engineering and Environmental Lab in preparation for a full-scale demonstration scheduled for late 1998.

Combustible radioactive waste from throughout the DOE complex is shipped to Idaho for incineration. If the demonstration goes as planned, the process will be used to treat the backlog of ash generated by the incinerator, as well as ash from as-yet-untreated waste.

The current plan calls for the ash to be treated 200 days a year. Each day, workers would treat four 55-gallon drums, with approximately 300 pounds of ash going into each drum. The facility would operate until at least 2007.

Wagh and his team also are investigating the possibility of using ceramicrete on plutonium-contaminated ash at Rocky Flats, incinerator ash at Savannah River and waste from Fernald's silos.

"The projects that we are working on right now may soon give us a good idea of what the Department of Energy thinks about this technology," Wagh said.

—Holm is the editor of *Nuclear Remediation Week*, a sister publication.

cement and it binds extremely well to the road material—cement, gravel, rocks, everything."

Ceramicrete also is lighter than cement and more impervious to water. "This means that

# Fernald RADIATION & RISKS

*'This proves what we've been trying to show'*

# Fernald will cause 85 cancer deaths



The Cincinnati Enquirer/Michael Snyder

Dr. Owen Devine with the Centers for Disease Control and Prevention explains the methodology of a study to forecast possible cancer rates among those living near the former Fernald uranium-processing plant.

## Risk study projects illnesses

BY TIM BONFIELD  
The Cincinnati Enquirer

HARRISON — About 85 people are expected to die from lung cancer because they lived near the Fernald uranium-processing plant during its 38 years of production, a federal health report estimated Wednesday.

Results from the Fernald Risk Assessment Project, conducted by the federal Centers for Disease Control and Prevention (CDC), were released at an evening press conference in Harrison.

Neighbors have wondered for decades about the health risks caused by pollution from the giant uranium works, which closed in 1989 to become Greater Cincinnati's biggest environmental cleanup project.

Now they are finally getting some answers — some of the first solid data on health effects ever provided

### Lung cancer deaths

The estimated total of lung cancer deaths that may be related to Fernald plant exposures, compared with the estimated normal number of lung cancer deaths, 1951 through 2008:

	Fernald exposure	Normal
Entire population	85	2,601
Ever smokers	65	2,302
Never smokers	20	299
Males	49	1,682
Females	35	889

for any part of America's nuclear-weapon complex. Yet, experts warned that even this study does not provide all the answers.

"These estimates were derived using the best science we have. But they are estimates. They are not counts," said Dr. Owen Devine, chief of the CDC's risk-assessment division.

The study estimated lung cancer deaths based on an estimated 40,000 to 53,000 people who lived within 10

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Fernald will cause 85 cancer deaths"  
By: Tim Bonfield

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 By: Tim Henfield

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# Fernald: Lung cancer will kill 85

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kilometers (6.2 miles) of the plant from 1951 to 1988. The study also includes expected deaths up to the year 2088.

The study looked only at lung cancer deaths, because that's the primary result of radon gas exposure, which previous studies have determined to be the biggest health threat from the plant.

Among the findings:

► Fernald caused an estimated 85 lung cancer deaths above the 2,601 deaths that would be expected for the population that lived within 10 kilometers of the site. That's a median estimate; the studies estimate that deaths attributable to Fernald could range from 25 to 309.

► People who lived closer to the plant had higher death rates, especially if they lived downwind. People who lived immediately south-east of the plant had a 12 percent higher than normal lung cancer death rate, while people living close to the northwest fence line had a 3 percent increased death rate.

► People who smoked were more likely to suffer, with 65 of the 85 projected deaths among smokers.

► Males were more likely to die of Fernald-related lung cancer than females, with 49 estimated male deaths and 36 estimated female deaths. The reason: Historically, male smoking rates were higher than female rates.

► Slightly more than half of the people who will die from Fernald-related lung cancer already have died. An estimated 39 of the 85 deaths will occur between 2000 and 2088.

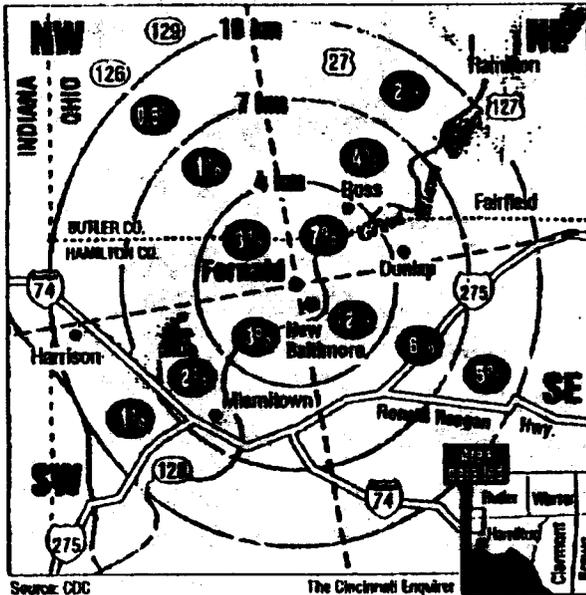
"As you know, we've been very closely monitoring the situation at Fernald," said a spokesman for U.S. Rep. Rob Portman, R-Cincinnati. "He's extremely disturbed by the information he received today."

U.S. Rep. Steve Chabot, R-Cincinnati, asked the Centers for Disease Control and Prevention to expand its study to include neighboring communities previously excluded.

"The draft report demonstrates

## Fernald lung cancer deaths

This chart shows the percent increase in expected lung cancer deaths linked to pollution from Fernald. Death rates were highest closest to the downwind side of the plant.



Source: CDC

The Cincinnati Enquirer

that there are serious health risks associated with the release of radioactive material from Fernald," he said. "The CDC and other government agencies must work closely with the community to address the issues raised in this report."

Study authors emphasized this is not an actual count of people who got cancer. Instead, it is an estimate based on a mathematical model that links historical population data with detailed estimates of radiation exposure.

Essentially, experts now have their best estimate of how much pollution came from Fernald. They also studied how many people lived near the plant during its production years. From that they calculated an estimated dose of cancer-causing radon. And from that, an estimate of how many people probably got or will get lung cancer.

"I think this certainly gives a good picture of the impact (of Fernald) on the entire community," said Dr. Joseph Farrell, chair-

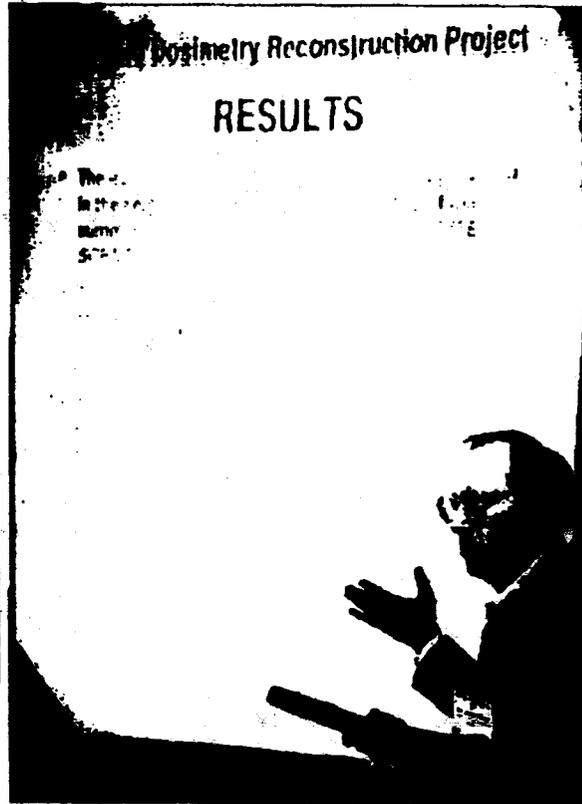
man of the Fernald Health Effects Subcommittee.

Construction at Fernald began in 1951 with full-scale production starting in 1953. The plant closed in 1989.

Over the years, the plant released thousands of tons of uranium dust into the air, soil and water. But experts reported that the most serious health threat from the plant actually comes from radioactive waste still stored at the Fernald's K-65 silos. Those silos contain 20 million pounds of radium-laced sludge that for many years emitted radon gas directly into the airstream through open vents in the storage tanks. Those vents were capped in 1979.

In fact, continued monitoring has shown that radon gas no longer escapes the plant in measurable amounts. That means the risk of cancer for people who moved to the area after 1979 has been dramatically reduced, Dr. Devine said.

There are several things the report doesn't say. For example:



The Cincinnati Enquirer/Michael Snyder

Dr. James Smith of the Centers for Disease Control and Prevention gives a quick overview of the findings in the cancer risk study.

► It cannot confirm or predict which individuals died of lung cancer because of Fernald vs. other causes, such as smoking.

► The assessment does not address risks to workers, who got doses of radon on the job.

► It misses as many as 8 percent of lung-cancer deaths that were not recorded as such on death certificates. It also will miss residents who died after moving away.

► It does not address kidney cancer, bone cancer, infertility, miscarriages, birth defects and other problems that have worried neighbors.

► It does not address the health risks posed by large amounts of non-radioactive toxic chemicals

that were used at the plant.

Wednesday's study was a draft report. "We are looking for community and scientific comment on this," Dr. Devine said.

In terms of public health, nothing can be done to eliminate the health risks posed by the Fernald exposure, said Dr. Susan Penney, a lung cancer expert and member of the health effects subcommittee. The good news is that new radon exposure from Fernald has stopped.

Longtime Fernald neighbors can reduce their odds of developing lung cancer by avoiding other known lung cancer risks, she said, by quitting smoking or having their homes tested for indoor radon gas.

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 By: John Hopkins

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The Cincinnati Enquirer/Michael Snyder

Lisa Crawford of FRESH, left, and Betty McKay, an area resident, listen to a report on the CDC findings.

# Residents still have questions

## Risk assessment highly technical

BY JOHN HOPKINS  
 The Cincinnati Enquirer

About 40,000 to 53,000 people lived in the immediate area of the former Fernald uranium processing plant between 1951 and 1989 — the plant's operating years.

A handful of those residents were among about 90

people who showed up Wednesday to hear representatives from the Centers For Disease Control and Prevention (CDC) present draft findings on the health risk of the plant.

And perhaps even fewer residents — at the meeting or back in the communities surrounding Fernald — will understand the highly technical risk assessment by CDC, said Lisa Crawford, president of Fernald Residents for Environ-

mental Safety and Health (FRESH).

"Interpreting it and understanding it is the hard part for us," she said. "My challenge to CDC is to put it in a way that I can understand it."

Becky Robinson's father was diagnosed last year with cancer. He lived in nearby Ross for three or four years.

From kindergarten to the 11th grade, Ms. Robinson lived near the plant and her mother still works there after 20

years. Her sister and several aunts also work there, she said.

She now wonders if she will be able to explain the CDC's risk assessment to family back home.

"I don't think they'll understand it," she said after the meeting. "I don't think it's (the report) an accurate guess. They're guessing."

The purpose of the study is (Please see RESIDENTS, Page A6)

## Residents: Results leave questions

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to evaluate Fernald's effect on the health of those people who live in communities surrounding the facility, an area within a 6.2-mile radius of the plant.

Gene Braham, a member of the Fernald Subcommittee and a worker at Fernald for 46 years, was dismayed that the study failed to include the actual risk to workers at the plant.

"This is a residents study and it excludes — and I want to be very emphatic about this — it excludes the workers. Over the years, there have been thousands of workers at Fernald," he said.

Edwa Yocum, a resident, understands the difficult task CDC will ultimately have in educating the public about the study. It took her years to understand, she said.

"I've been in this for 14 years and I have learned something new every

time CDC brings out a new report," she said. "I understand where they're coming from, but it took self-education and a couple of years to understand their formula. But we do try to tell CDC to put it in a form that the average resident or citizen can understand."

Compared with the population size, the number of potential at-risk residents was low. Nonetheless, it adds to the general feeling that Fernald was a serious risk for many years.

"I was glad to hear about it, that there was an increase (above the normal number) of cancer cases for the area," said Ms. Crawford. "This proves what we've been trying to show in the area — that there are health concerns here and that the DOE (Department of Energy) has to be accountable for their actions."

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"A Fernald health chronology"

## A Fernald health chronology

► **1951:** Construction begins on the Fernald Feed Materials Plant about 18 miles northwest of Cincinnati. The giant complex will employ more than 7,000 people to process uranium ore into fuel for atomic bomb production.

► **1984:** The Department of Energy admits that radioactive leaks have contaminated off-site residential wells. Neighbors later learn that plant officials had known about the contamination since 1981.

► **1989:** Fernald closes and becomes a national Superfund cleanup site. Meanwhile, a class-action lawsuit for Fernald neighbors is settled for \$78 million. The money is for lost property value, emotional distress and long-term medical monitoring. The case was based on public fear of health damage, not actual illnesses. By 1996, more than 9,400 people had been tested. The federal government also agreed to pay for installing municipal water service to people depending on well water.

► **1994:** Fernald workers' class-action suit is settled for \$15 million, the first legal victory by any group of atomic workers. The settlement is to pay for emotional distress plus lifelong medical monitoring. Individuals are also free to pursue workers' compensation claims.

► **June 1996:** A government study concludes that Fernald workers suffered higher-than-average death rates from lung cancer and respiratory disease because of radiation exposure.

► **August 1996:** A six-year, \$4 million dose-reconstruction study by the Centers for Disease Control and Prevention (CDC) reports that longtime nearby residents faced increased cancer risk from Fernald. The results surprise experts because radon gas from K-65 silos is cited as the biggest health risk, rather than uranium dust in the air or groundwater.

► **February 1997:** A 14-member National Research Council committee challenges the dose study, saying it overestimated cancer risks. But a few months later, the council withdraws its criticism.

► **March 18, 1998:** The CDC releases the first-ever estimate of how many Fernald neighbors might have developed cancer. Experts note that the study is based on mathematical models, not actual counts of people with cancer.

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"Fernald may boost cancer risk"  
By: Nicholas G. Jonson

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# Fernald may boost cancer risk

By Nicholas G. Jonson  
Journal-News

HARRISON TOWNSHIP

People who lived around the former Fernald uranium processing plant during the plant's production years face a higher than average risk of developing lung cancer, according to a federal study released Wednesday.

Using computer models, researchers with the Centers for Disease Control estimated that 20 to 309 lung-cancer deaths will occur among the 40,000 to 53,000 people who lived around the plant at any time from 1951 to 1988.

That number includes lung-cancer deaths that may have already occurred among the population as well as deaths that may occur through the year 2088 as the population ages.

For smokers who lived near the site, the chance of developing lung cancer jumped an additional 3 percent.

The study also concluded that the potential number of lung-cancer deaths was likely to be higher for people who lived closer to the site or those who lived downwind.

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## Fernald

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"We need to re-emphasize that these are estimates," said Dr. Owen DeVine, chief of the CDC's risk assessment branch, at a meeting of the Fernald Health Effects Subcommittee.

"We don't know the exact dose (residents may have received). We don't know the risk associated with that dose. And we are uncertain of the number of people who experienced that dose.

"These (numbers) are an application of the best knowledge available on the risk of lung cancer," he said.

The CDC study builds on data gathered in an August 1996 study by the Radiological Assessments Corp. of South Carolina. That study concluded the greatest health threat to residents living within six miles of the plant came from the inhalation of radon gas.

The gas was produced from decaying radium stored in two silos in the western half of the site.

Because corrective measures were taken in 1979 to better seal the silos, the risk of lung cancer for people born after 1979 or those who moved to the area after 1979 is considerably less, DeVine said.

"There's nothing we can do

about those exposures from 1951 to 1988," DeVine said, referring to the years that Fernald processed uranium. "But because we are a public health agency, we believe there are things that can be done."

DeVine recommended that people who worked at or lived near the plant stop smoking. In addition, residents should check their homes for naturally occurring radon.

Information about reducing the level of naturally occurring radon in the home can be obtained by calling the Ohio Environmental Protection Agency at (800) 523-4439 or the Ohio Department of Health at (614) 466-0061.

A final version of the CDC study is scheduled for release later this year, DeVine said.

Dr. James Farrell, chairman of the Fernald Health Effects Subcommittee, said the federal study "gives us a picture of the impact on the entire population.

"But we're still left with the individual trying to assess his personal risk after seeing this data," he said.

DeVine said CDC researchers will work with the subcommittee to assess other possible health outcomes that may be related to exposure to Fernald emissions.

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"Texas lawsuit could influence Fernald cleanup process"

By: Nicholas G. Jonson

# Texas lawsuit could influence Fernald cleanup process

By Nicholas G. Jonson  
Journal-News

## ROSS TOWNSHIP

A lawsuit filed against the U.S. Department of Energy by a waste management company in Texas may impact the cleanup at the former Fernald uranium processing plant.

The lawsuit, filed late November by Waste Control Specialists LLC of Pasadena, Texas, alleges the DOE reduced the company's chances of receiving a contract to dispose of about 1 million tons of low-level radioactive waste from Fernald.

DOE issued a request for bids last year to dispose of the waste, which is stored in six pits, a clear well and burn pit in the northwest corner of the site.

The chances of WCS receiving the contract were greatly diminished because DOE had not licensed the company as a commercial disposal facility before bids were requested, the company alleges.

Only a few vendors applied for the contract, according to Dave Lojek, DOE Operable Unit 1 team leader. Lojek oversees the cleanup of the waste pit area for the DOE.

Lojek said during a recent Fernald meeting that DOE plans to move ahead with plans for treatment and transport of the waste despite not having a final disposal site.

"We're going full speed ahead, but we know there's a brick wall out there somewhere," Lojek said.

In October, DOE chose International Technology Corp. of Pittsburgh to treat the waste. On March 6, the company submitted its draft

design for waste treatment to the federal and state environmental protection agencies.

The company's transportation and disposal plan

must be submitted by April 30. Lojek said the lawsuit could possibly delay the cleanup for one year or more.

"If it starts to affect the cleanup schedule, it could push back the end date," Lojek said, referring to the project's scheduled May 31, 2005, completion date.

"A one-year delay could cost between \$15 million to \$20 million," he said.

The first mass shipment of waste to its final disposal site is scheduled to begin March 1, 1999.

