

U.S. DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT

Soil & Water Projects Public Worksho

August 7, 1997

Name: Joe Hertel

Affiliation (optional): _____

Address: _____

Telephone: _____

946

5-704

Name: Edwa Yacum

Affiliation (optional): FRESH Inc

Address: _____

Telephone: _____

Name: Pom Dana

Affiliation (optional): _____

Address: _____

Telephone: _____

Name: Lisa Crawford

Affiliation (optional): _____

Address: _____

Telephone: _____

U.S. DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Soil & Water Projects Public Workshop

August 7, 1997

Name: Rob Jenke

Affiliation (optional): DOE

Address: _____

Telephone: _____

Name: Dennis Carr

Affiliation (optional): _____

Address: _____

Telephone: _____

Name: Lisha Patton

Affiliation (optional): _____

Address: _____

Telephone: _____ 

Name: _____

Affiliation (optional): _____

Address: _____

Telephone: _____

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FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

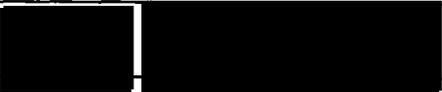
Soil & Water Projects Public Workshop

August 7, 1997

Name: Jim Chawdler

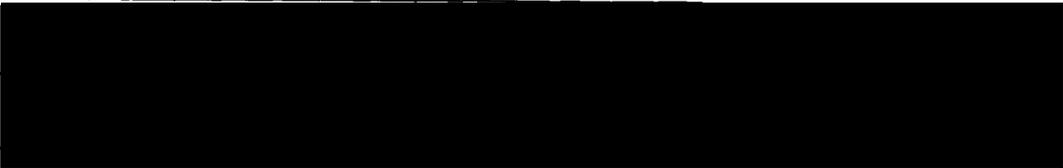
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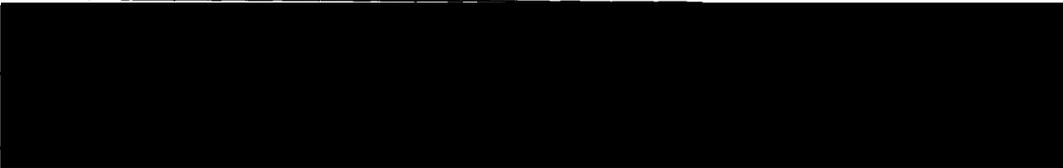
Address: _____

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Name: LOUIS C. BOGAR

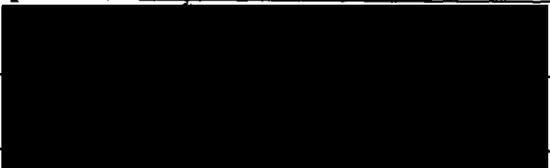
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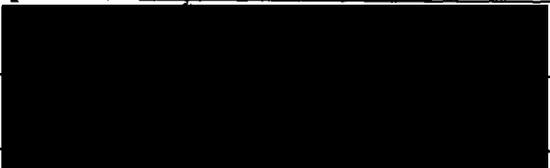
Address:  _____

Telephone:  _____

Name: Bill Hentel

Affiliation (optional): FOE

Address:  _____

Telephone:  _____

Name: CAROL SCHROER

Affiliation (optional): FRESH

Address: _____

Telephone: _____

U.S. DEPARTMENT OF ENERGY
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Soil & Water Projects Public Workshop

August 7, 1997

Name: Norm Reeves

Affiliation (optional): FDF

Address: _____

Telephone: _____

Name: John Kappa

Affiliation (optional): DOE

Address: _____

Telephone: _____

Name: Jack Hughes

Affiliation (optional): FDF

Address: _____

Telephone: _____

Name: Ev Henry

Affiliation (optional): FDF

Address: _____

Telephone: _____

U.S. DEPARTMENT OF ENERGY
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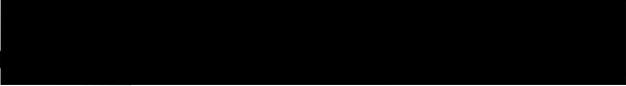
Soil & Water Projects Public Workshop

August 7, 1997

Name: Kevin Walz

Affiliation (optional): _____

Address: 

Telephone: 

Name: Mike Strimbu

Affiliation (optional): FDF

Address: _____

Telephone: _____

Name: MAC M^c CULLOUGH

Affiliation (optional): _____

Address: _____

Telephone: _____

Name: _____

Affiliation (optional): _____

Address: _____

Telephone: _____

U.S. DEPARTMENT OF ENERGY
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Soil & Water Projects Public Workshop

August 7, 1997

Name: Ted S. Riestenberg

Affiliation (optional): _____

Address: _____

Telephone: _____

Name: _____

Affiliation (optional): _____

Address: _____

Telephone: _____

Name: _____

Affiliation (optional): _____

Address: _____

Telephone: _____

Name: _____

Affiliation (optional): _____

Address: _____

Telephone: _____

U.S. DEPARTMENT OF ENERGY
FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Soil & Water Projects Public Workshop

August 7, 1997

Name: Tom Outko

Affiliation (optional): Ohio EPA

Address: _____

Telephone: _____

Name: ^{renee baum}
GERALD TENENBAUM

Affiliation (optional): FCWOL DANIEL

Address: _____

Telephone: _____

Name: _____

Affiliation (optional): _____

Address: _____

Telephone: _____

Name: _____

Affiliation (optional): _____

Address: _____

Telephone: _____

SOIL & WATER PROJECTS WORKSHOP

August 7, 1997

Evaluation Survey

Thank you for attending the workshop to discuss projects in the Soil & Water Division. Please take a few minutes to answer the questions below:

1. Did you receive a notification postcard of this workshop? ^{Yes} If not, you are probably not on our key stakeholder mailing list. If you want to be added to the list, please ask at the registration table for a Mailing List Request form.
Already on it!
2. Was the presentation on the Aquifer Restoration Project adequate and understandable?
*Yes! good : concise - good slides w/ photo's!
good speaker - John*
3. Was the presentation on Wastewater adequate and understandable?
*yes! good : concise - " " " "
good speaker - Dave.*
4. Was the presentation on Soils Remediation adequate and understandable?
*yes! " " " " " "
good speaker - Dennis*
5. How satisfied were you with responses to questions asked this evening?
fine - good answers.
6. Do you have any other constructive comment/criticism about tonight's meeting?
No! Just keep us up to date re. issues w/ any New news!

Optional:

Name

Lisa Crawford

Phone

*after 5:30*

SOIL & WATER PROJECTS WORKSHOP

August 7, 1997

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2. Was the presentation on the Aquifer Restoration Project adequate and understandable?

YES

3. Was the presentation on Wastewater adequate and understandable?

YES

4. Was the presentation on Soils Remediation adequate and understandable?

YES

5. How satisfied were you with responses to questions asked this evening?

YES

6. Do you have any other constructive comment/criticism about tonight's meeting?

Optional:

Name Jim Chandler Phone 

SOIL & WATER PROJECTS WORKSHOP

August 7, 1997

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2. Was the presentation on the Aquifer Restoration Project adequate and understandable?
yes

3. Was the presentation on Wastewater adequate and understandable?
yes

4. Was the presentation on Soils Remediation adequate and understandable?
yes

5. How satisfied were you with responses to questions asked this evening?
yes

6. Do you have any other constructive comment/criticism about tonight's meeting?

Optional:

Name Edwa Jacum Phone _____

SOIL & WATER PROJECTS WORKSHOP

August 7, 1997

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2. Was the presentation on the Aquifer Restoration Project adequate and understandable?
yes

3. Was the presentation on Wastewater adequate and understandable?
yes

4. Was the presentation on Soils Remediation adequate and understandable?
yes

5. How satisfied were you with responses to questions asked this evening?
yes satisfied

6. Do you have any other constructive comment/criticism about tonight's meeting?

Optional:

Name

Carl

Phone

SOIL & WATER PROJECTS WORKSHOP

August 7, 1997

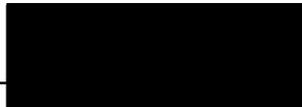
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2. Was the presentation on the Aquifer Restoration Project adequate and understandable?
This was my first night and I was late, so it was all new to me.
3. Was the presentation on Wastewater adequate and understandable?
4. Was the presentation on Soils Remediation adequate and understandable?
5. How satisfied were you with responses to questions asked this evening?
The others knew what was going on.
6. Do you have any other constructive comment/criticism about tonight's meeting?

Thanks for having this meeting!

Optional:

Name Ted S. Rieckenberg Phone 

SOIL & WATER PROJECTS WORKSHOP

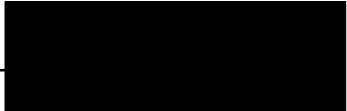
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2. Was the presentation on the Aquifer Restoration Project adequate and understandable?
yes
3. Was the presentation on Wastewater adequate and understandable?
yes
4. Was the presentation on Soils Remediation adequate and understandable?
yes
5. How satisfied were you with responses to questions asked this evening?
FINE
6. Do you have any other constructive comment/criticism about tonight's meeting?
NO

Optional:

Name PAM DUNN Phone 

**South Plume Removal Action
Summary Fact Sheet
August 1997**

- ▶ In 1993, five groundwater extraction wells were installed at the leading edge of the off-property South Plume as part of the South Plume Removal Action (SPRA).
- ▶ The SPRA well system began pumping in August 1993.
- ▶ The primary intent of this well system is to prevent the further migration of the off-property portion of the groundwater uranium plume.
- ▶ Recovery Well 5 was taken out of service in 1995 as it is not required to maintain capture of the contamination plume.
- ▶ The original diameter of each well was 12 inches, except for RW-4 which is 16 inches. Recovery Wells 1 and 3 have since had new smaller (i.e., 10 inch) screens installed inside of the original screen because of holes in the original screens.
- ▶ The pumps in each well have a range of operation from approximately 250 gpm to 500 gpm. Individual pumps are currently operating at 300 gpm to 400 gpm. The current target pumping rate for the four wells combined is 1,400 gpm.
- ▶ Groundwater from each well is combined into a single discharge line where it is pumped on-property for treatment/discharge to the Great Miami River.
- ▶ The SPRA represents a key component of the overall groundwater restoration program.
- ▶ Total gallons pumped from August 1993 through June 1997 was 2.3 billion gallons.
- ▶ Uranium removed from the aquifer from August 1993 through June 1997 was 334 pounds.
- ▶ The average concentration of uranium extracted from each recovery well between January 1, 1997 and June 30, 1997 was:
 - ▶ Recovery Well 1 - 42 ppb
 - ▶ Recovery Well 2 - 28 ppb
 - ▶ Recovery Well 3 - 11 ppb
 - ▶ Recovery Well 4 - 1.2 ppb

**AQUIFER RESTORATION AND
WASTEWATER TREATMENT PROJECTS**

Summary Fact Sheets

August 7, 1997

- ▶ The 2,900 gpm AWWT Facility treatment design capacity represents (on an annual average):
 - ▶ 750 gpm design surface water treatment capacity and 600 gpm nominal through put.
 - ▶ 2,150 gpm design groundwater treatment capacity and 1,720 gpm nominal through put.

**South Field Extraction System
Summary Fact Sheet
August 1997**

The South Field Extraction System (SFES) is comprised of two phases -- Phase I and Phase II.

SFES Phase I:

- ▶ SFES Phase I consist of ten wells which were installed on-property in the vicinity of the Southfield/storm sewer outfall ditch (SSOD).
- ▶ Each well was designed and constructed in an above grade configuration, with piping and controls above ground surface.
- ▶ The ten extraction wells are designed to remove contaminated groundwater from the Southfield area of the FEMP where uranium groundwater contamination levels, are in places, greater than 1000 ppb.
- ▶ The inside diameter of each of the ten extraction wells is 12 inches.
- ▶ Remaining Phase I work includes the installation of new electrical high voltage power service, approximately 6,000 feet of trenching, and the placement of 12,000 feet of HDPE piping.
- ▶ Each well will have a variable speed submersible pump with a pumping capacity of 100 gpm to 300 gpm per well.
- ▶ Gravel roadways will be installed to allow easy access to the Phase I wells.
- ▶ Each well will have a well house to provide for the associated instrumentation and controls.
- ▶ Discharge piping from each well will direct extracted groundwater to either treatment or the Great Miami River through a double-header piping assembly associated with each well.
- ▶ The SFES Phase I design work was completed in June 1997 with the construction contract scheduled to be awarded in August 1997. Construction activities are scheduled to be complete by April 1998.
- ▶ After construction activities and systems testing are complete, a standard startup review (SSR) will be conducted to ensure all operations preparations are in order, including procedures and maintenance plans.
- ▶ SFES Phase I start-up is scheduled to begin operations on September 30, 1998, as outlined in the OU-5 Final Remedial Action Work Plan for Aquifer Restoration.

**South Plume Optimization
Summary Fact Sheet
August 1997**

- ▶ The purpose of the South Plume Optimization Extraction Wells, together with the existing SPRA wells, is to restore the off-property portion of the Great Miami Aquifer plume at Fernald as quickly and cost effectively as possible.
- ▶ The South Plume Optimization Project is comprised of two extraction wells (i.e., RW- 6 and RW-7) located on private property immediately south of the FEMP.
- ▶ A potential third extraction well (RW-8) has been identified as a contingency extraction well to be utilized in the future if conditions warrant (see the Baseline Remedial Strategy Report, April 1997 outlining the necessary conditions).
- ▶ To minimize landowner disruptions and inconveniences, the optimization wells will be installed as "flush mount" wells, meaning that the top of the well head assembly will be flush with the surrounding ground surface.
- ▶ Design of the South Plume Optimization Project was completed in May 1997. The construction sub-contract is scheduled to be awarded in August 1997.
- ▶ Construction activities include drilling two extraction wells, approximately 800 feet of trenching, and placement of 1,800 feet of HDPE piping.
- ▶ Each extraction well will have a submersible pump, capable of pumping at a rate of approximately 250 gpm. It is anticipated that the discharge line from each well will be tied into the existing South Plume Force Main.
- ▶ Electrical service will be provided to each extraction well via underground utilities.
- ▶ Piping and electrical service will be constructed such that the contingency extraction well (RW-8) can be more easily installed if necessary.
- ▶ A new valve house may be installed in the South Plume area to house control valves and flow meters.
- ▶ Construction activities are scheduled to be complete by April 1998.
- ▶ After construction activities and systems testing are complete, a standard startup review (SSR) will be conducted to ensure all operations preparations are in order, including procedures and maintenance plans.
- ▶ Start-up of operations on September 1, 1998 is identified as a milestone in the OU-5 Final Remedial Action Work Plan for Aquifer Restoration.

**South Field Re-Injection System
Summary Fact Sheet
August 1997**

- ▶ The South Field Re-Injection System will only be implemented if the Re-Injection Demonstration Project is successful.
- ▶ This module includes the re-injection wells planned to enhance uranium removal from the South Field Area.
- ▶ The project is anticipated to include the installation of five injection wells and converting four extraction wells to injection wells.
- ▶ Construction of this project also includes a 100 horsepower pump, approximately 4,000 feet of trenching and placement of HDPE piping, instrumentation, and controls.
- ▶ The size of the wells will be determined upon knowledge gained from the Re-Injection Demonstration Project.
- ▶ Treated groundwater will be used as the source water for re-injection.
- ▶ The construction contract for this project is scheduled to be awarded by December 2002 with construction activities scheduled for completion by August 2003. Operations are scheduled to begin in October 2003.
- ▶ After construction activities and systems testing are complete, a standard startup review (SSR) will be conducted to ensure all operations preparations are in order, including procedures and maintenance plans.

**Plant 6 Area Extraction System
Summary Fact Sheet
August 1997**

- ▶ Plant 6 Area Extraction System will recover contaminants in the Great Miami Aquifer located beneath and east of Plant 6, which is located in the southeastern portion of the FEMP's former production area.
- ▶ This project is anticipated to consist of two extraction wells located in the Plant 6 area with each well pumping at a maximum rate of 300 gpm.
- ▶ This project will be initiated after the D&D of Plant 6 and excavation of underlying contaminated soils has been complete.
- ▶ Construction of this project is anticipated to include installation of two extraction wells, 3,300 feet of trenching and placement of HDPE piping.
- ▶ Each well is anticipated to be equipped with a submersible pump and electrical service to power the pumps.
- ▶ Both wells are designed to be installed in an above grade configuration meaning that most piping and controls will be above ground surface.
- ▶ Each well may have its own well house to house the instrumentation and controls.
- ▶ The diameter of each well is anticipated to be 12 inches.
- ▶ The construction contract for this project is scheduled to be awarded by March 2003 with construction activities scheduled for completion by August 2003. Operations are scheduled to begin in October 2003.
- ▶ After construction activities and systems testing are complete, a standard startup review (SSR) will be conducted to ensure all operations preparations are in order, including procedures and maintenance plans.