



RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION  
GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA

## INFORMATION SESSION

GM POWERTRAIN BEDFORD PLANT  
BEDFORD, INDIANA

JANUARY 28, 2004



## AGENDA

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION  
GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA

- INTRODUCTION
- STATUS OF CORRECTIVE ACTION INVESTIGATION
- ELEMENTS OF REMOVAL ACTION
- STATUS OF REMOVAL ACTION
- COMMUNITY RELATIONS ACTIVITIES
- QUESTIONS AND ANSWERS



## STATUS RCRA CORRECTIVE ACTION

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### Investigation 2004

- Groundwater results were submitted to the U.S. EPA and IDEM at the end of 2003.
- Additional wells will be installed.
- Additional soil sampling will be conducted on-Site.
- Dye Tracer Studies are planned for 2004.
  - Done to evaluate groundwater flow in karst
  - Involves injecting harmless dye into groundwater and then checking seep, springs, and wells to see where dyed groundwater flows
  - The color is usually green and may be visible in surface water during testing
- Test Pits on-Site and off-Site.



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### Interim Measures

- RFI soil and groundwater data is currently being evaluated to determine Interim Measures.
  - Interim Measures options are being evaluated with agencies. Hope to begin on-Site Interim Measures in 2004.



## ELEMENTS OF REMOVAL ACTION

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- Administrative Order on Consent (AOC), Docket No. V-W-03-C-747, became effective on July 31, 2003.
- Severson Environmental Services is the contractor conducting the creek cleanup activities.



## ELEMENTS OF REMOVAL ACTION

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### Schedule for Planning and Implementation

Stage	Area	Target Schedule
1	Upstream Parcels/ Parcel 22	ongoing
2	Downstream Parcels	Summer 2004 to Summer 2005



## ELEMENTS OF REMOVAL ACTION

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### Elements of Removal Work

- Control of impacted seeps and springs along creek;
- Removal of sediment in creek to attain the 1 ppm cleanup criterion;
- Removal of floodplain soil to attain the 1.8 ppm cleanup criterion;
- Test to verify cleanup requirements have been met;
- Backfilling and re-planting; and
- Soil staging area construction.



## ELEMENTS OF REMOVAL ACTION

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### Implementation

#### Site Setup

- Support facilities – support facilities have been constructed
- Clearing of trees and brush





## ELEMENTS OF REMOVAL ACTION

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### Water Handling

- Divert creek temporarily in short sections to establish dry working conditions
- Rain or spring water that collects in the work areas is being collected and treated prior to discharge back into the creek



## ELEMENTS OF REMOVAL ACTION

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### Floodplain Soil/Sediment Removal

- Impacted floodplain soil/sediment areas is being excavated and removed.
- Re-sampling is being performed in the excavated areas to ensure the cleanup standard has been met.
- The materials with PCB concentrations greater than 50 ppm is disposed off-Site while excavated materials with PCB concentrations less than 50 ppm will be stockpiled on-Site or disposed of off-Site.



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### Backfilling and Re-Planting

- Excavated areas will be backfilled and graded with imported material.
- Implement erosion control measures.
- Area will be re-planted in the first planting season following creek cleanup.



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Typical soil backfilling and re-planting



**GM** STATUS OF REMOVAL ACTION

GENERAL ELECTRIC CORPORATION BEDFORD PLANT BEDFORD, INDIANA

Project Status

- Upstream Work Plan
  - The Upstream Removal Action Work Plan was approved July 23, 2003.
  - Access Agreements were signed with all property owners in the Upstream Work Plan area.
  - Tree removal has been completed on the area north of AOI 4.
  - Excavation has begun on the area north of AOI 4 and area east of GM discharge.

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Upstream Parcels

ANTICIPATED WORK AREA AND TREE CUTTING LIMITS

**GM** STATUS OF REMOVAL ACTION

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Area North of AOI 4

ANTICIPATED WORK AREA AND TREE CUTTING LIMITS

**GM** STATUS OF REMOVAL ACTION

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Looking west from AOI 4 to the partially cleared south bank of Parcel 401



## STATUS OF REMOVAL ACTION

КЕРА ГОРЕКТИВНОГО АКЦІОННОГО ПРОГРАМИ ВИМОВКИ АКЦІОННОГО

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Looking north towards excavation area (northern tributary)  
– north of AOI 4 and south side of Parcel 401



## AOI 4/Parcel 401

КЕРА ГОРЕКТИВНОГО АКЦІОННОГО ПРОГРАМИ ВИМОВКИ АКЦІОННОГО

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South embankment along property line of Parcel 401. Test Pit 002 being excavated.



## Parcel 3

КЕРА ГОРЕКТИВНОГО АКЦІОННОГО ПРОГРАМИ ВИМОВКИ АКЦІОННОГО

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Parcel 3 cleared looking at Outfall 002



## Parcel 3

КЕРА ГОРЕКТИВНОГО АКЦІОННОГО ПРОГРАМИ ВИМОВКИ АКЦІОННОГО

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Excavated channel looking west to Outfall 002





Parcel 3

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Excavated channel looking west to Outfall 002



Parcel 3

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Excavated channel looking west to Outfall 002;  
Test trench 1 with safety fence



Parcel 3

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Excavated channel looking east from Outfall 002;  
Test trench 1 with safety fence



Parcel 3

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Excavated channel looking east from Outfall 002;  
Test trench 1 with safety fence





### Parcel 4

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1.15.2004.10:40

Excavated channel looking east on Parcel 4



### Parcel 4

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1.30.2004.16:18

Excavated channel looking east from Parcel 3



### AOI 4

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9.11.2003

Air sampling stations of northern edge of Zipp lot



### AOI 4

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9.11.2003

Construction of soil staging pad located east of the Zipp lot on AOI 4



## AOI 4

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Covered soil pile on soil staging pad on AOI 4



## STATUS OF REMOVAL ACTION

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### Project Status (con't)

- Parcel 22 Removal Action Work Plan
  - The Parcel 22 Removal Action Work Plan was approved July 23, 2003.
  - Access Agreement was signed with the property owner.
  - Tree removal and excavation will occur sequentially as work progresses downstream.



## STATUS OF REMOVAL ACTION

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### Project Status (con't)

- Site Source Control Work Plan
  - The Site Source Control Work Plan was submitted August 21, 2003.
  - Implementation details are currently being installed or will begin shortly.
  - Currently installing seep controls near Outfall 002 and at AOI 4. Additional seep/spring controls will be added as identified during removal action.



## Parcel 3

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Intersection of stream channel and test trench





### Parcel 3

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Test trench 2



### Parcel 3

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Excavated channel looking east from Outfall 002;  
Test trench 1 with safety fence



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Site Source Control - Outfall 002 Area



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#### Site Source Control

- SSC construction activities to the north and northeast of AOI 4 will be initiated in Winter 2004.





## STATUS OF REMOVAL ACTION

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### Project Status (con't)

- Downstream Removal Action Work Plan
  - Submitted to the U.S. EPA October 29, 2003.
  - Final details on the draft document and associated detailed construction drawings are currently being finalized.



## STATUS OF REMOVAL ACTION

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### Wetlands

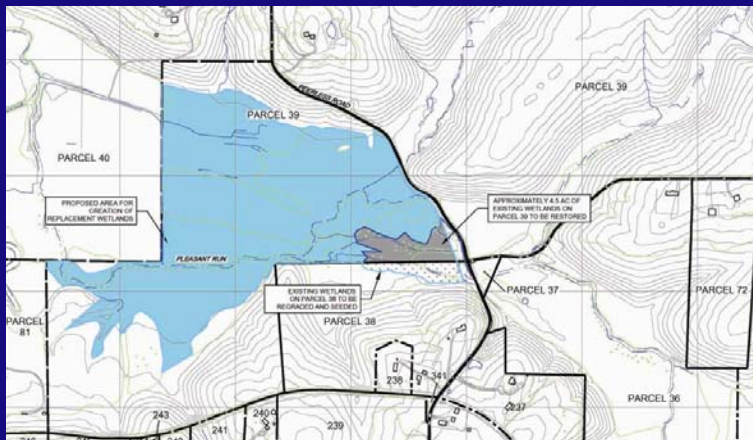
- New wetlands need to be created whenever construction occurs within wetlands.
- The current approach will involve the construction of a single large wetland in the downstream area.



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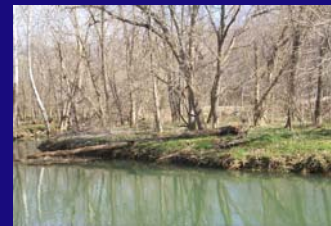
### PROPOSED WETLAND ON PARCELS 38/39



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### Parcel 39







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### Indiana Bat Evaluation

- Indiana Bat is an endangered species.
- The bat mist-netting survey conducted in at the end of July resulted in the capture of one male Indiana Bat in the downstream area.
- Evaluation of the impact on the Indiana Bat will be performed for the downstream area.



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### Archeological Assessment

- Archeological Assessment was previously performed for areas in proximity to the GM Bedford Powertrain Plant as part of the RCRA Permit.
- Will continue to assess archeological issues as we move downstream.



## COMMUNITY RELATIONS ACTIVITIES

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- Meetings with select residents to discuss access issues;
- Donated 2 duplexes to Charity Chapel;
- December 12, 2003, project update meeting with the Community Liaison Panel;
- Community meetings are held on a quarterly basis
  - The last meetings were on October 2 and 3, 2003
  - The current meetings are scheduled for:
    - January 27, 2004, project update meeting with residents in proximity to creek;
    - January 28, 2004, project update meeting with the general public; and
- February 6, 2004, project update meeting with the Community Liaison Panel.



## COMMUNITY RELATIONS ACTIVITIES

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- Project website at:  
[www.BedfordPowertrainCorrectiveAction.com](http://www.BedfordPowertrainCorrectiveAction.com)
- GM Community Relations Contact person is Becki Akers. The toll-free number remains (866)223-0856
- Public Information Repository (GM Plant) - Currently by appointment.
- Public Information Repository (Library)
- Community Liaison Panel (CLP)
- Periodic information sessions
- Periodic Project Fact Sheets



# QUESTIONS AND ANSWERS

ENERGY EFFICIENT ACTION PROGRAM / ENERJİ VERİMLİLİK AKTİYON PROGRAMI

ÜNİVERSİTE KAMPUSU İÇİN ENERJİ VERİMLİLİK AKTİYON PROGRAMI / ÜNİVERSİTE KAMPUSU İÇİN ENERJİ VERİMLİLİK AKTİYON PROGRAMI

## Q & A SESSION