

INFORMATION SESSION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA

AUGUST 5, 2004



- WELCOME/INTRODUCTION
- PROJECT BASICS
- STATUS OF RCRA CORRECTIVE ACTION
- STATUS OF CERCLA REMOVAL ACTION
- PROPERTY ISSUES
- COMMUNITY RELATIONS ACTIVITIES
- QUESTIONS AND ANSWERS



Welcome to the 3rd Quarter 2004 Public Information Session

- Team Introduction
- History of the GM Bedford Powertrain Facility
- Overview of the project



- Facility located on 152.5 acres and is approximately 1,000,000 square feet
- Approximately 1,000 employees





RCKA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

RCRA Corrective Action

- Conducted under the Resource Conservation and Recovery Act (RCRA) Corrective Action under a performance-based agreement with the U.S. EPA Region V. The agreement was signed on March 20, 2001 and amended on October 1, 2002.
- On-Site and off-Site investigation
 - Soils
 - Test Pits
 - Groundwater
- Groundwater Investigation
- Interim Measures
 - On-Site
 - Off-Site
- CERCLA Removal Action
 - Bailey's Branch and Pleasant Run PCB cleanup of creek sediments and floodplain soil.
 - Conducted through an Administrative Order on Consent (AOC) that has been entered into voluntarily by the U.S. EPA Region V and GM to expedite the cleanup activities, effective July 31, 2003.



RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Investigation Activities for 2004

- RCRA Facility Investigation (RFI) Work Plan: Addendum No. 3 has been completed. This work plan included:
 - The advancement of 34 soil borings, including the installation of one shallow groundwater monitoring well
 - The collection of 49 soil samples and one groundwater sample
 - The confirmation and delineation of three historical drainage areas on the GM Plant property
 - Data are pending and will be summarized in a technical addendum this fall.





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Investigation Activities for 2004

- RCRA Facility Investigation Work Plan: Addendum No. 4 have been completed. This work plan included:
 - Test pits east of GM Drive in known, or suspected, fill areas
 - Off-site at test pits were completed at three areas suspected of being historically filled with materials from the GM Plant
 - One additional historical suspected fill area will be investigated through the use of soil borings, based on the owners request of a less intrusive investigation tool





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Investigation Activities for 2004 (cont'd)

- RFI Work Plan: Addendum No. 5 has been partially completed.
 - Additional wells have been installed, developed, and sampled along the creek;
 - PCB samples have been collected; and
 - Background fluorescence samples have been collected
- A dye trace study will be performed in September 2004. Dye Tracer studies:
 - Are conducted to evaluate groundwater flow in karst,
 - Involve injecting harmless dye into groundwater and then analyzing groundwater by tracing where it comes to the surface (seeps/springs and wells), and
 - May result in water that appears fluorescent green or red in color and may be visible in surface water during testing.





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Investigation Activities for 2004 (cont'd)

- Interim Measures.
 - Northern and Western Tributaries IMs
 - Northern Tributary IM:
 - Small isolated areas on a parcel where sample results showed
 PCBs slightly above cleanup criteria.
 - Western Tributary IM:
 - Small isolated areas on 3 parcels where sample results showed
 PCBs slightly above cleanup criteria.
 - Cleanup at each parcel will typically involve 1-2 truckloads of soil/sediment or less to be removed. Planned to be completed in August/September 2004. Verification sampling will be completed to confirm cleanup goals are met. All disturbed areas will be restored.
 - East Plant Area IM



RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Ecological Risk Assessment

- The preliminary framework has been submitted to the U.S. EPA for review
- This document looks at three representative species data end points
 - Piscivore
 - Insectivore
 - Carnivore



STATUS OF CERCLA REMOVAL ACTION

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

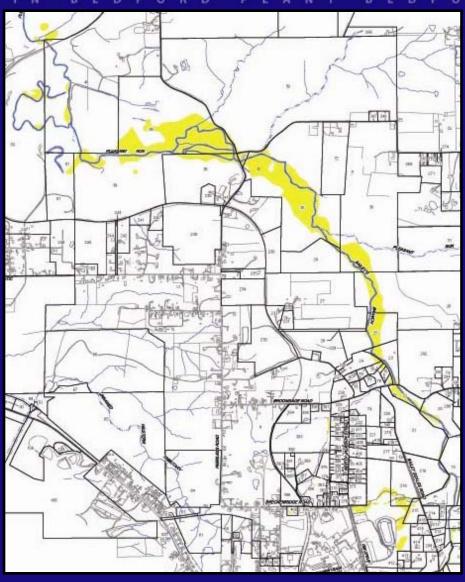
Elements of Removal Work

- Control of impacted seeps and springs along creeks;
- Removal of floodplain soil and sediment in the creek;
 - Site setup;
 - Removal of sediment 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.



RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO











RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

G M POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION



Trucks and haul roads







RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN



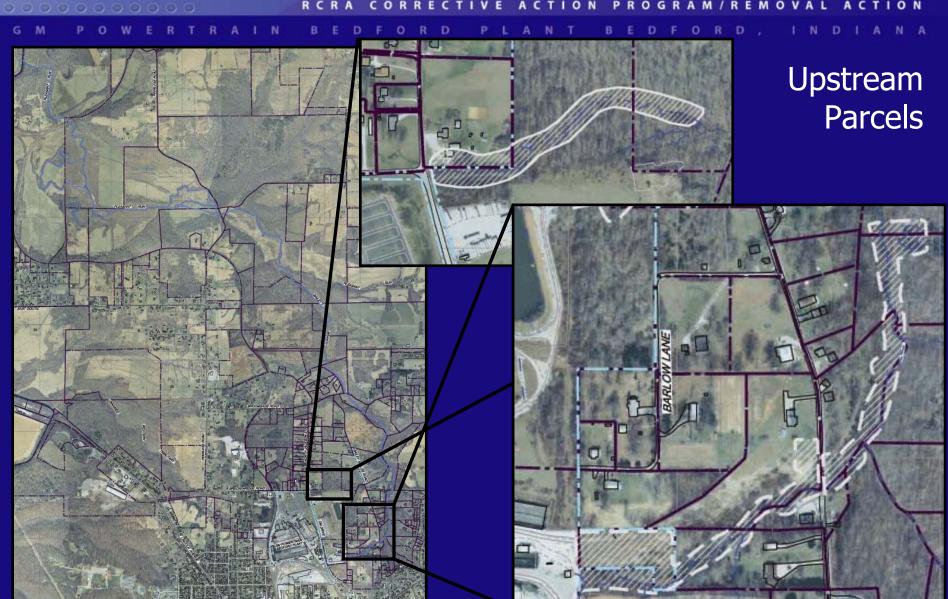
Staging Pad













STATUS OF CERCLA REMOVAL ACTION

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

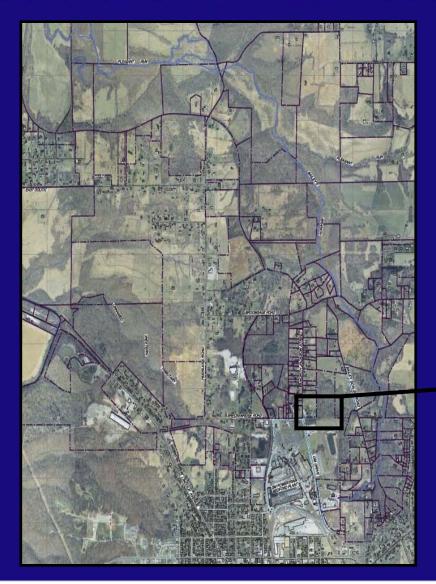
- Upstream Parcels Removal Action Work Plan
 - Excavation is ongoing along the unnamed tributary north of the storm water lagoon and east from the historic outfall.
- Addendum No. 4 outlines updated verification sampling procedures for excavation sidewall sampling; samples will be collected at 5-foot intervals at approximately 25-foot spacing along the creek bed.
- Parcels 3 6, east of Bailey Scales Road, have been fully excavated and backfilling with clean fill is ongoing.
- Silt fences for new fill are up, seeding is complete, and erosion controls are being installed.
- Parcel 401 excavation and backfilling has been completed.



STATUS OF CERCLA REMOVAL ACTION

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /



Parcel 401





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN,



Parcel 401 Progression of cleanup

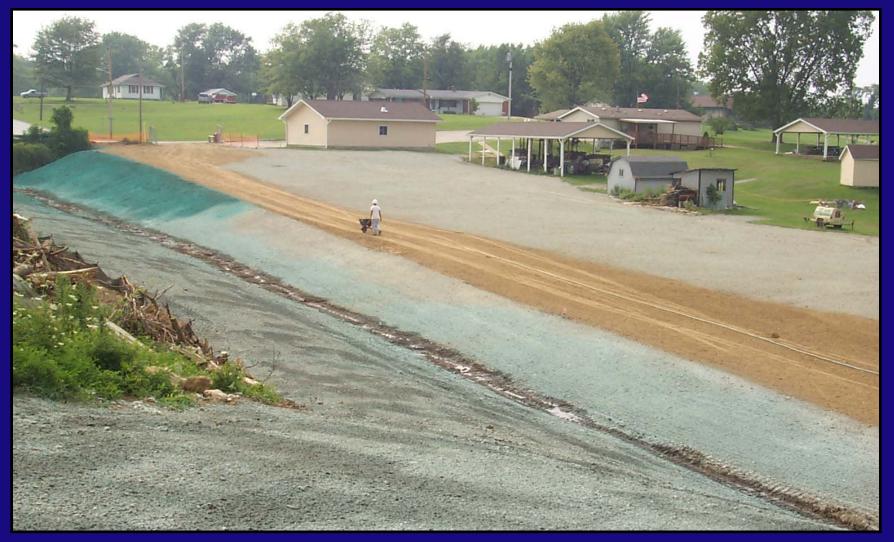




RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

5 M POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /

Parcel 401





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION







RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN

Parcels 3 – 12 East of Outfall 002





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA



Restoration of culvert under Bailey Scales Road



RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO



View looking west of Bailey Scales Road – post excavation but prior to restoration

View looking east of Bailey Scales Road – during excavation activities





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN



East of Bailey Scales Road





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN



East of Bailey Scales Road





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN

Placement of backfill

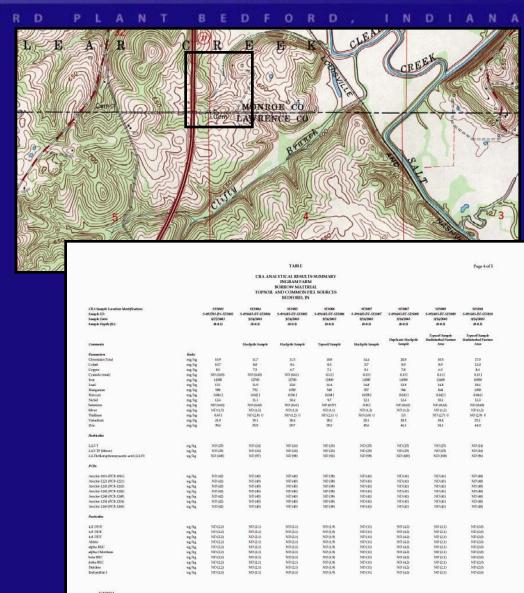




RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Backfill Sources

- Potential backfill sources are evaluated prior to accepting any fill material.
- Backfill soils are tested on a routine basis prior to acceptance.



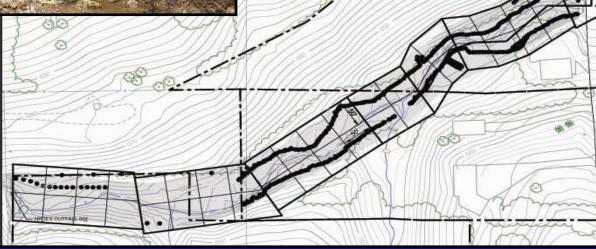


STATUS OF CERCLA REMOVAL ACTION REMOVAL ACTIVITIES – SITE WORK

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION



Verification samples taken on sidewalls





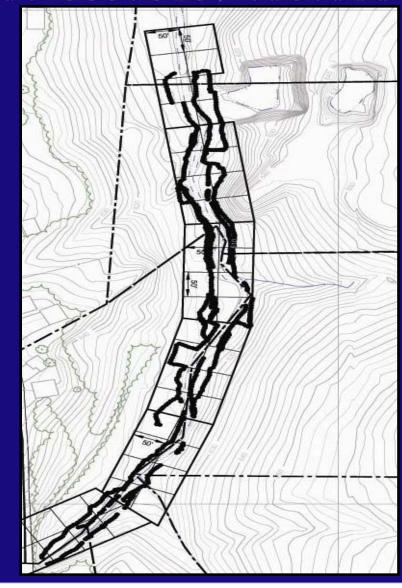
STATUS OF CERCLA REMOVAL ACTION REMOVAL ACTIVITIES – SITE WORK

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD. INDIAN



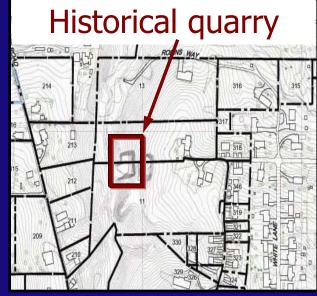
Verification samples taken on sidewalls





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

- Parcels 11/12 Lower Quarry
 - One historical quarry along Bailey's Branch Creek needs to be excavated because of historical overflow from the creek.
 - A temporary berm may be constructed between the lower quarry and the creek channel if the quarry cleanup takes longer than cleanup in the adjacent creek.
 - The quarry will be dewatered and accumulated sediment and soil will be removed to Removal Action criteria, characterized, and disposed.
 - An Addendum to the Upstream Parcel Work Plan is being drafted and will be submitted to the U.S. EPA for approval.







RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /

- Parcel 22 Removal Action Work Plan
 - Cleanup has not reached this parcel.







RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN A

- Downstream Parcels
 Removal Action Work Plan
 - Removal activities are anticipated to begin later this year downstream of Broomsage Road.
 - Bid documents have been received from potential contractors.
 - There is one remaining access agreement that has not been signed for a parcel at the far end of the cleanup.





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /

Swallet



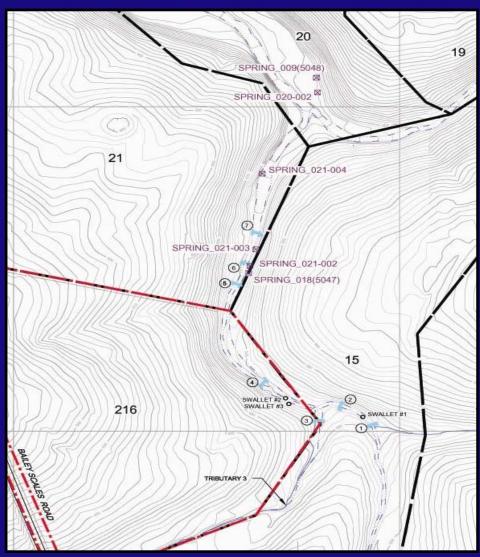


RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Mini-Dye Tracer Study

along Creek Swallets

- Three swallets were identified within the stream channel downstream of the current cleanup activities.
- Work plan was prepared which proposed a dye tracer test and stream flow study in the vicinity of the swallets and springs (where it is believed the stream resurfaces).
 - Two tests have been completed using red dye.
 - Seven wiers were installed to evaluate flow during the study.





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN



Swallet dye tracer study







STORMWATER MANAGEMENT

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA







STORMWATER MANAGEMENT

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

G M POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA





STORMWATER MANAGEMENT

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIANA





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /



Parcel 216



RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN



Parcel 216 – Grading for the modular tank





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /

Typical Modular Tank Structure









RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Project Status

- Site Source Control (SSC) Work Plan
 - The SSC Work Plan was approved November 11, 2003.
 - Currently installing seep controls near Outfall 002 and at AOI 4.
 Additional seep/spring controls will be added as identified during removal action.
 - Addendum No. 1 to the SSC Work Plan was approved by the U.S. EPA on April 21, 2004.
 - Installed cast-in place concrete foundation and containment walls in Trench 1 & 2;
 - Installed the 6-inch HDPE underdrain system;
 - Filter fabric has been placed over the gravel and geogrid has been placed along the sidewalls;
 - Placement of ≥1 foot of compacted clay over filter fabric; and
 - Began construction of the containment inlet structure.



STATUS OF CERCLA REMOVAL ACTION REMOVAL ACTIVITIES





STATUS OF CERCLA REMOVAL ACTION SITE SOURCE CONTROL





- Site Source Control North of AOI 4
 - Installation of the primary in-ground components of the forcemain and electrical conduit.



STATUS OF CERCLA REMOVAL ACTION SITE SOURCE CONTROL

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN



 Site Source Control east of the historical outfall







RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTIO

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN,



Road Repair





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /



Foam





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN

Indiana Bat Evaluation

- Indiana Bat is an endangered species.
- The final Biological Assessment was submitted to USFWS on June 18, 2004.





RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Archeological Assessment

- Archeological Assessment was previously performed for areas in proximity to the GM Bedford Powertrain Plant as part of the RCRA Permit.
- An Archaeological Contingency Plan has been developed in the event that artifacts are uncovered during the removal work.



RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

Activities for 2004

- Continue progression of cleanup downstream along Bailey's Branch to Pleasant Run Creek.
 - Tree removal has been completed downstream to near the Peerless Road Bridge.
 - Cleanup activities are currently focused east of Bailey Scales Road moving north along the creek bed.
 - Restoration activities will be implemented on Parcels as cleanup is completed.



PROPERTY ISSUES

- The plan for properties purchased by GM.
 - Properties are being listed through local real estate brokers.
 - Properties will not be sold if they do not meet cleanup standard.
 - Properties that meet the cleanup standard will be listed through local real estate brokers.
 - Properties with structures that are is disrepair may be refurbished prior to being listed through local real estate brokers.
 - Properties with structure that are unsalvageable will be demolished.
 - Donation of some of these properties are being considered.



PROPERTY ISSUES

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

GM POWERTRAIN BEDFORD PLANT BEDFORD, INDIAN /



Demolition





PROPERTY ISSUES

- North Jackson Street Open House.
 - The Open House was held on June 10, 2004.
 - There is a concentrated effort enhancing these properties through refurbishment.
 - There is an emphasis on local contractors and labor for this revitalization effort.
- Donated 2 duplexes to Charity Chapel.
- Working with Habitat for Humanity



COMMUNITY RELATIONS ACTIVITIES

- Meetings with select residents to discuss access issues.
- Community meetings are held on a quarterly basis
 - The last meetings were on April 28 and 29, 2004.
 - Presentations have been and will continue to be posted to the website.
 - The current meetings are scheduled for:
 - August 4, 2004, project update meeting with residents in proximity to creek;
 - August 5, 2004, project update meeting with the general public; and
 - The next community are proposed for November 2004. The style of presentation will change from former presentation to an informal topicspecific information booths staffed by project-team members.
- The next project update meeting with the Community Liaison Panel is scheduled for August 6, 2004.
- The next Fact Sheet issued August/September 2004 timeframe.



COMMUNITY RELATIONS ACTIVITIES

- Project website at: www.BedfordPowertrainCorrectiveAction.com
- Quarterly Community Relations Meetings now available on the website
- 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 (eight issued to date)



QUESTIONS AND ANSWERS

RCRA CORRECTIVE ACTION PROGRAM/REMOVAL ACTION

G M P O W E R T R A I N B E D F O R D P L A N T B E D F O R D I N D I A N A

Q & A SESSION