RESPONSE TO COMMENTS ON THE GM POWERTRAIN
EAST PLANT AREA PROPOSED INTERIM MEASURE
GM POWERTRAIN - BEDFORD, INDIANA (IND 006 036 099)

I. INTRODUCTION

The United States Environmental Protection Agency (U.S. EPA) received public comments on the proposed Interim Measure work at the East Plant Area of the site GM Powertrain - Bedford Plant (site) in Bedford, Lawrence County, Indiana.

The public comment period commenced on May 31, 2005, with a public notice in the Bedford Times Mail and a direct mailing of U.S. EPA's Statement of Basis to all persons on the facility mailing list. GM held a public meeting on June 2, 2005 at the site, and on June 3, 2005 the Bedford Times Mail published a front page article regarding the proposed Interim Measure and U.S. EPA's public comment period. The public notice requested comments on the proposed Interim Measure work at the East Plant Area of the site. The 45-day comment period ended on July 14, 2005. Responses to comments received follow below.

II. COMMENTS AND RESPONSES

Comment 1:

As we understand it, GM is proposing to take the GM-generated PCB's and place them back on top of the hill from whence they came. ... These PCB wastes, both greater than 50 parts per million and less than 50 parts per million, will be placed not in regulated landfills, sited in appropriate geologic areas, but at the top of the watershed over karst topography...

While the PCB landfill that is being proposed will be subject to yearly inspections and a trust fund to operate the landfill forever, the same cannot be said for those areas where PCBs will be backfilled and graded on the plant site. The entire area of the GM plant is underlain by fractured bedrock. Over the last 30 years, PCBs have leached from the GM facility into this fractured bedrock and have contaminated seeps and springs throughout northern Lawrence County, as well as Bailey's Branch and Pleasant Run Creek. Placing these wastes on top of this fractured bedrock without any additional subgrade liners and leachate collection systems seems shortsighted, at best.

Although the PCB landfill area will have a cover system and a groundwater recovery system, no provision has been made for providing the same controls to the PCB's that will be backfilled and graded on the plant site. It would appear that a groundwater recovery system would be required around the entire GM facility in order to intercept the leachate from these PCB backfill areas. A two-foot cover of clay and topsoil should also be placed on any areas where PCB's are backfilled. Yearly inspections of these PCB backfilled areas should be made and a trust fund set up, with money set aside to operate the groundwater recovery systems and cover system in perpetuity. None of this has been proposed.

Response 1:

The U.S. EPA understands that the commenter is referring to soils and sediments being removed from the Bailey's Branch and Pleasant Run Creek systems. None of the 50 part per million (ppm) or greater material from the creek system removal action will be placed in the East Plant Area. That 50 ppm or greater material will continue to be disposed of off-site. Fifty ppm or greater material which is currently present in the soils of the East Plant Area will be excavated and entombed in an on-site engineered landfill vault. This vault will have an underdrain system to prevent groundwater contact with the bottom liner and

prevent subsidence. The vault will be double lined with leak-detection and leachate collection systems. The less than 50 ppm material from the creek system removal action would be used as backfill for the on-site excavations of fifty ppm or greater material. It would also be used as grading material for an engineered cover system which would be placed over almost the entire East Plant Area. This cover system will be an approximately 2.5 foot thick multi-layer system including a Geosynthetic Clay Layer (GCL). GCLs are factory manufactured hydraulic barriers, typically consisting of bentonite clay or other very low permeability material, sandwiched between geotextiles and/or geomembranes. The GCL is equivalent to nearly two feet of compacted clay liner in terms of protection against water infiltration (permeability). The multi-layer cover system components proposed for the East Plant Area exceed the two-feet of clay cover and topsoil recommended by the commenter.

The commenter proposes placement of a subgrade liner in the bottoms of excavations where greater than 50 ppm material has been removed prior to backfilling with less than 50 ppm material. The installation of subgrade liners would have limited beneficial impact in this type of limited areal application because, under any soil remediation scenario, some PCB contaminated soil will remain in contact with fractured bedrock at the East Plant Area. All of the PCB impacted soils at the East Plant Area cannot be excavated due to their proximity to underground utilities or because the integrity of on-site structures (e.g. stormwater pond) would be compromised. Thus, the interception of any remaining PCBs potentially migrating from remaining on-site soils and those trapped in bedrock fractures is required. A groundwater collection trench is the most practical way to address the commenter's concern regarding a groundwater recovery system. A groundwater collection trench would be installed into competent bedrock on the downgradient sides of the East Plant Area to intercept contaminated groundwater or soil particles flowing from the area including all backfilled and graded areas.

The U.S. EPA agrees with the commenter that yearly inspections of these PCB backfilled areas should be made and money set aside to operate the groundwater recovery systems and cover system in perpetuity. The U.S. EPA will be negotiating an order with GM to maintain all of the engineered systems/controls at the East Plant in perpetuity. In addition, if an approval is issued by the U.S. EPA Region 5 PCB Program for the on-site engineered landfill vault, GM will be required, under the conditions of the approval, to perform yearly inspections, provide closure and post-closure care and maintenance in perpetuity and maintain financial assurance for the closure and post-closure care. An Operation & Maintenance plan will be developed for all components.

The U.S. EPA disagrees with the commenter that none of the above information was proposed. This information was presented at GM held public meetings, contained in newspaper articles, and was part of a direct mailing of the Statement of Basis from the U.S. EPA to approximately 600 persons on the facility mailing list prior to the opening of the public comment period.

All of the proposed components of the East Plant Area Interim Measure will undergo regulatory agency review and approval.

Comment 2:

The sampling plan by GM cannot identify, with any surgical precision, all of the hotspots which may result from the backfilling and grading operation. Certain average concentrations can be obtained, but GM cannot guarantee that concentrations greater than 50 parts per million will not be placed as backfill.

Response 2:

It is unclear to which sampling plan the commenter is referring. The U.S. EPA assumes that the commenter is referring to the verification sampling to ensure that material brought to the East Plant Area is less than 50 ppm. The verification sampling of creek soils/sediments consists of multiple stages. Initial samples are taken while the soils are in place in the creek area to delineate areas above and below 50 ppm. Areas found to be between 1.8 ppm and 50 ppm are excavated and staged. Up to three composite soil samples are then taken for every 500 tons of material. The composites are made up of soil samples taken from every truckload of material. If any of the composite samples are found to be greater than 50 ppm, the entire 500 ton pile is disposed of off-site.

Comment 3:

Given the potential for groundwater contamination, erosion, and re-contamination of areas already remediated by GM, we strongly oppose any proposal to backfill PCB wastes of less than 50 parts per million anywhere on the GM plant site.

Response 3:

As noted in Response 1, all of issues of concern raised by the commenter regarding the backfilling of less than 50 parts per million soil materials are addressed by the proposed Interim Measures Alternative. The less than 50 ppm backfill or grading material would be placed under an engineered multi-layer cover system. This will prevent erosion of contaminated materials. The cover system combined with the perimeter groundwater collection trench will prevent re-contamination of areas already remediated by GM. The U.S. EPA will require long-term monitoring of the creek system to ensure the controls are functioning properly and the creeks remain protected.

Comment 4:

What, if any, is the expected monitoring of the site? When GM leaves Bedford, how long will the site be checked and who will be responsible? The city?

Response 4:

As noted in Response 1, the U.S. EPA will be negotiating an order with GM to maintain all of the engineered systems/controls at the East Plant in perpetuity. An Operation & Maintenance plan will be developed for all components. The U.S. EPA will require long-term monitoring of the creek system to ensure the controls are functioning properly and the creeks remain protected. In addition, if an approval is issued by the U.S. EPA Region 5 PCB Program for the on-site engineered landfill vault, GM will be required, under the conditions of the approval, to perform yearly inspections, provide closure and post-closure care and maintenance in perpetuity and maintain financial assurance for the closure and post-closure care.

Should GM sell the property, the new owner will be required to maintain the systems in operation. Under the PCB regulations, the Permittee must notify U.S. EPA at least thirty (30) days before transferring ownership of the property. The new owner must comply with the terms of the PCB approval and the requirement for perpetual care of the facility transfers with ownership of the property.