



City of Anderson Economic Development Department

120 East Eighth Street P.O. Box 2100 Anderson, Indiana 46018 Phone (765) 648-6159 Fax (765) 648-5911 www.cityofanderson.com

Kris Ockomon, Mayor

December 16, 2011

Donald A. Heller Corrective Action Project Manager U.S. EPA, Region 5 77 W, Jackson Boulevard (LU-9J) Chicago, IL 60604

> RE: "Final Corrective Measure" Recommendation From the Anderson Redevelopment Commission (ARC) IND 980 503 825

Dear Mr. Heller,

In accordance with Section VI (Work To Be Performed) of the Administrative Order on Consent (AOC) (Docket No. RCRA-05-2011-0011), ARC representatives are submitting a "final corrective measures" proposal recommendation for U.S. EPA's review.

Per the AOC, the ARC has one hundred eighty (180) days from the effective date of the AOC to propose final corrective measures necessary to protect human health and the environment from all current and future unacceptable risks due to releases of hazardous waste or hazardous constituents at from the former Plant 7, Area 7.

Please let me know if you have any questions or concerns related to the proposal recommendation.

Sincerely,

TauxMe Gary McKinney

Project Manager

# Final Corrective Measure Proposal

Submitted by Anderson Redevelopment Commission

Former General Motors Corporation Plant 7 – Area 7 Site 2900 S. Scatterfield Road Anderson, Indiana

### 1.0 Statement of Understanding

The Anderson Redevelopment Commission, City of Anderson, Indiana (ARC) is pleased to provide this Final Corrective Measure Proposal to the United States Environmental Protection Agency (U.S. EPA) in response to the requirements of Section VI. <u>Work To Be Performed</u> in the Administrative Order on Consent (Order) EPA ID No. IND 980 503 825.

On July 11, 2011, the ARC entered into an Order with the U.S.EPA for the area referred to as the former Plant 7 – Area 7. The purpose of the Order is to propose and implement a final corrective measure necessary to protect human health and the environment from current and future risk due to the release of hazardous waste or hazardous constituents at or from the former Plant 7 – Area 7 site.

ARC representatives began the process of determining how to propose and implement a final corrective measure by preparing a Request for Proposal (RFP) to be submitted to three (3) environmental companies that were familiar with and had a working knowledge of the Site, had a good reputation, technical competence, and a good working history with the City of Anderson and the ARC. The environmental companies receiving RFPs were Conestoga-Rovers & Associates, Hull & Associates and a local company, HydroTech Environmental Engineering & Consulting. ARC representatives requested that each company submit three (3) separate proposals based on the following:

- 1) The best final corrective measure;
- 2) Least costly final corrective measure; and
- 3) Fastest final corrective measure.

The next step in the process was review of the proposals. As part of the review process, ARC representatives met with each environmental company individually. Each company was asked a specific set of questions related to what the ARC representatives determined to be their proposed best final corrective measure. From the review of each proposal and the individual meetings ARC representatives were able to determine a final corrective measure.

Since the Order went into effect, the ARC has not implemented any corrective measures at the Site.

This Proposal is organized as follows:

- 1.0 Statement of Understanding
- 2.0 Description of All Evaluated Final Corrective Measures & Cost Estimates
- 3.0 Proposed Final Corrective Measure
- 4.0 Explanation of Why Proposed Final Corrective Measure
- 5.0 Construction & Implementation Timeline

## 2.0 Description of All Evaluated Final Corrective Measures & Cost Estimates

All reviewed proposals, nine (9) total, are attached for U.S. EPA's review (Appendix A).

## **Conestoga-Rovers & Associates**

- Best Final Corrective Measure Alternative #3 In-situ Chemical Oxidation Cost Estimate \$1,827,200
- Least Costly Final Corrective Measure Alternative #1 Physical Containment of the Source Area (Repair Existing Slurry Wall) Cost Estimate \$1,691,600
- Fastest Final Corrective Measure Alternative #2 Excavation With In-situ Chemical Oxidation Cost Estimate \$6,787,200
- Enhancement Option In-situ Enhanced Biodegradation (ISEB) Cost Estimate \$511,600

# Hull & Associates

- Best Final Corrective Measure Alternative #3 In-situ Thermal Treatment Cost Estimate \$4,609,000. Note: This estimate does not include investment necessary to provide the required electrical infrastructure to operate the system. The additional cost estimated by the City of Anderson Light & Power would be approximately \$40,000.
- Least Costly Final Corrective Measure Alternative #2 Repair Existing Slurry Wall Cost Estimate \$2,522,000
- Fastest Final Corrective Measure Alternative #1 Increased Long-term Pumping of the Existing Containment System (Slurry Wall) Cost Estimate \$39,000,000

# HydroTech

• Best Final Corrective Measure – Option 1 – Air Sparging (AS) and Soil Vapor Extraction (SVE) – Cost Estimate \$3,850,000

## HydroTech (continued)

- Least Costly Final Corrective Measure Option 2 Air Sparging (AS) and Soil Vapor Extraction (SVE) Reduced Mechanical System and Longer Period of System Operation and Groundwater Sampling Cost Estimate \$3,350,000
- Fastest Final Corrective Measure Option 3 Air Sparging (AS) and Soil Vapor Extraction (SVE) Reduced Mechanical System and the Use of In-situ Chemical Oxidation - Cost Estimate \$4,500,000

Note: The estimates above do not include investment necessary to provide the required electrical infrastructure to operate any of HydroTech's proposed systems. The additional cost estimated by the City of Anderson Light & Power would be approximately \$43,000.

## 3.0 Proposed Final Corrective Measure

ARC representatives are recommending the proposal from Conestoga-Rovers & Associates (Insitu Chemical Oxidation (ISCO) with the Enhancement Option In-situ Enhanced Biodegradation (ISEB) as the best final corrective measure proposal for the Plant 7 – Area 7 Site. Total estimated cost for both systems is \$2,338,800. Conestoga-Rovers & Associates has a 30% contingency included in its estimated costs for this project.

## 4.0 Explanation of Why Proposed Final Corrective Measure

The following are the factors that determined the ARC representative's proposal recommendation to the U.S.EPA. During the review process, it became very clear that in considering the technical proficiency of each environmental company "best final corrective measure" that any of the systems proposed would meet the requirements of the Order. This being the case, we realized that the determining factor would be based on three (3) factors, which company had the superior credentials, the most experience with and most knowledge of the Site. ARC representatives have determined that company to be Conestoga-Rovers & Associates. It goes without saying that Conestoga-Rovers & Associates credentials are impeccable and they are one of the most recognized names in the business. They are a multi-disciplined company with over 2,500 professional and support staff in over 80 countries around the world. Conestoga-Rovers & Associates Indianapolis office will be responsible for coordinating this project. Conestoga-Rovers & Associates has been the primary consultant completing investigation, design; corrective measures implementation activities and monitoring at the Site since 1998. They also have a vast Site-specific knowledge base of the Site that will be critical to this project. Conestoga-Rovers & Associates is a full service environmental firm that can complete all aspects of this project, including construction/remedy implementation services, and being the contractor and supervisor. They also have the financial and insurance capabilities to complete the entire project under one (1) contract with the ARC.

# 4.0 Explanation of Why Proposed Final Corrective Measure (continued)

Conestoga-Rovers & Associates has a health and safety program called SMART (Safety Means Awareness Responsibility and Teamwork). Conestoga-Rovers & Associates are also committed to corporate quality assurance/quality control and are registered under the International Organization for Standardization (ISO) 9001:2008 international standard for their quality management system in consulting Engineering and Design Services.

# 5.0 Construction & Implementation Timeline

See attached construction & implementation timeline graph (Appendix B).

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# 5.0 <u>Construction & Implementation Timeline</u>

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