



May 19, 2009

Mr. Fred Waters  
LKQ Corporation  
1435 Triplett Boulevard  
Akron, OH 44306

Mr. Mark Moore  
City of Akron  
161 S. High Street  
Akron, OH 44308

Dear Mr. Waters and Mr. Moore,

Attached to this letter is a report summarizing the debris removal activities performed a few weeks ago on the storm drain pipe running under the LKQ parking lot north of Triplett Boulevard.

If you have any questions, please feel free to call me at 703-628-4559.

Sincerely,

A handwritten signature in black ink, appearing to read "Daghu", with a long horizontal flourish extending to the right.

David Gunnarson

Attachment: Storm Drain Debris Removal Report

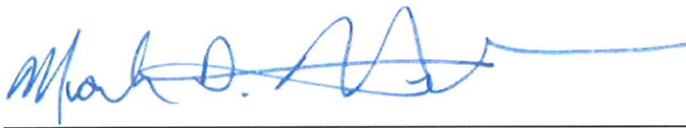
**Lockheed Martin Corporation**

**Stormwater Drain Pipe North  
Segment Debris Removal Report**

Akron, Ohio

May 15, 2008

ARCADIS



Mark Hurban  
Senior Project Manager

**Stormwater Drain Pipe  
North Segment Debris  
Removal Report**

Akron, Ohio

Prepared for:  
Lockheed Martin Corporation

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Our Ref.:  
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Date:  
May 15, 2009

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## 1. Introduction and Background

This project was undertaken to complete the removal of debris and sediment, which potentially contained residual PCBs, from the remaining 60-inch diameter pipe of the Airdock storm drain system. This last pipe to be cleared was the segment north of Triplett Boulevard to the open channel of Haley's Ditch, as shown in Figure 1. This work was completed between April 17 and April 19, 2009.

Since 2003, Lockheed Martin has undertaken a remediation program to address historical solid particle releases of non-liquid PCB contained in the siding material used on the exterior of the Akron Airdock. The strategy for the remediation program is to work from the source of the release outward by first removing or coating the siding material on the Airdock, removing the elevated PCB concentrations soil near the Airdock and removing debris from the pavement surface and the stormwater drainage system. The Airdock siding has been removed or encapsulated, on-site soil with elevated concentrations of PCB's has been excavated and properly disposed off-site, and residual PCBs from the pavement surfaces surrounding the Airdock were also collected and properly disposed off-site. Removal of debris from the storm drain system was performed for approximately 12 weeks between August and November 2008. These activities included debris removal from the storm drain system that surrounds the Airdock and extends off-site to the north side of Triplett Boulevard. Details describing the storm drain debris removal are presented in the Airdock Storm Drain Debris Removal Report, dated December 1, 2008. The only storm drain pipe remaining to be cleaned after this effort was the segment north of Triplett Boulevard to the open channel of Haley's Ditch. The successful completion of the work described in this report represents the completion of the storm drain debris removal activities for the Airdock remediation program.

## 2. Scope of Work

Remedial construction activities were completed between April 17 and April 19, 2009. The scope of work included the following tasks:

- Safety evaluation of the drain pipe;
- Sediment and debris removal;
- Storm drain video inspection; and
- Waste management.

These tasks are described on the following sections.

## 2.1 Safety Evaluation of Storm Drain Pipe

Concerns with the original materials of construction and the structural integrity of the storm drain pipe prompted an Arcadis structural engineer to perform a visual inspection of the interior of the drain pipe to evaluate its structural integrity. This inspection was performed on April 17, 2009, prior to debris removal activities. Based on the inspection, some bellies, general warping, and degradation of the pipe was observed, but no significant deformation and degradation were observed. Based on the inspection, the engineer determined that the work required to remove the debris from the drain pipe would not expose the workers to unnecessary risk nor would it put the pipe in danger of collapse.

## 2.2 Sediment and Debris Removal Process

Debris removal was performed on the 60-inch diameter steel drain pipe by working from the north end of the pipe at Haley's Ditch to the south end of the pipe where it terminates at the culvert box beneath Triplett Boulevard. The following describes the work performed.

- To divert stormwater during the debris removal process, a by-pass pumping system was installed in the culvert box where the drain pipe begins. A manhole, located at the median between the east and west bound lanes of Triplett Boulevard, provided access to the culvert box beneath Triplett Boulevard. The by-pass pump hoses ran through the drain pipe to approximately 50 feet downstream of the beginning of Haley's Ditch.
- To remove standing water in the storm drain, a second set of pumps was placed at the beginning of Haley's Ditch. The second set of pumps also prevented water from entering the storm drain pipe from the north. These pump hoses also discharged water approximately 50- feet downstream.
- To prevent any sediment from discharging from the drain pipe, sand bags were placed at the downstream end of the drain pipe during the debris removal operation into Haley's Ditch.
- To test the in-place sediment before removal, three samples were collected: at the south end, middle, and north end of the drain pipe. The samples were tested for total PCB's using USEPA Method SW846 8082. The results of the laboratory analyses are provided in the table below and are shown in Figure 1.

**Haley's Ditch Culvert Pipe Sediment Samples: Total PCB Analytical Results**

Sample ID:		LMC-SSD-001	LMC-MSD-002	LMC-NSD-003
Date Collected:	Units	04/18/09	04/18/09	04/18/09
Total PCBs	mg/kg	0.907	0.729	3.100

**Note:** mg/kg – milligrams per kilogram

- Debris removal began by removing large size material by hand. Removal began at the north end of the drain pipe and proceeded to the south end of the pipe. After the heavier material was removed (i.e., metal beam, motor vehicle wheel axle, cinder blocks, and small boulders), the pipe was rinsed using a hand-held high pressure water wand, beginning at the culvert box beneath Triplett Boulevard and working northward down the drain pipe. Water and sediment flushed through the pipe during this process were contained behind the sand bags at the north end of the drain pipe, where they were collected and handled as described in Sections 2.3.1 and 2.3.2.
- The steel storm drain pipe was degraded in three areas, such that openings were observed to the fill material surrounding the pipe. These locations are shown on Figure 1. Each of these openings was sealed with concrete.
- At the conclusion of the project, hand-held video recording equipment was used to document that the sediment was removed from the storm drain pipe. A copy of this video is included as Appendix B.

**2.3 Waste Management**

Water and collected debris were managed as described in the following sections.

**2.3.1 Water Management**

Approximately 300 gallons of water were generated during the pressure washing activity. This water was pumped directly into a weir tank located approximately 250 feet north of the drain pipe. The weir tank is located within the fenced in property owned by Lockheed Martin. The water will be filtered and discharged to the City of Akron POTW during the remediation project of Haley's Ditch, which is expected to begin in June 2009, in accordance with a discharge permit to be issued by the City of Akron.

### 2.3.2 Debris Management

Approximately two cubic yards of sediment and debris was removed from the drain pipe. This material was transported back to the Lockheed Martin facility, where it is being temporarily staged prior to transportation to an appropriate disposal facility. The containment area is lined, covered with plastic, and secured for proper disposal of the material by Lockheed Martin. Based on the analytical results from the sediment samples, it is planned that the material will be shipped off-site to American Landfill located in Wayne, Ohio for disposal as non-TSCA (containing PCBs less than 50 mg/kg).

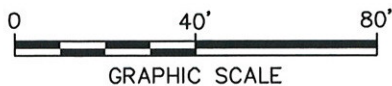


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 XREFS: IMAGES: PROJECTNAME: 38063X01 38063X02.JPG 38063X04



**LEGEND:**

- ▲ SEDIMENT SAMPLE LOCATION (APPROXIMATE ONLY)
- CONCRETE PATCH LOCATION (APPROXIMATE ONLY)



LOCKHEED MARTIN CORPORATION AKRON AIRDOCK FACILITY AKRON, OHIO	
<b>HALEY'S DITCH          STORM DRAIN PIPE          LOCATION MAP</b>	
<b>ARCADIS</b>	FIGURE <b>1</b>