



Case Study

Case Study: Oldcastle infrastructure Inc. | Napoleon, Ohio

Average Loss Amount: \$1,011,421.87

Type of Loss: Industrial mercury abatement

OVERVIEW

In March of 2018, Cousino Restoration responded to an emergency call for a mercury spill/contamination at Oldcastle Infrastructure, Inc.'s plastic extrusion manufacturing facility at 1675 Industrial Drive in Napoleon, Ohio.

Cousino Restoration responded the next morning after the emergency call. This large manufacturing facility industrial site produces parts and accessories for telecommunications, energy, transportation, building structures, and water industries. An expensive and important extruding machine caught fire, burning the internal switches which contained mercury and causing a near plant-wide mercury fume release and contamination.

PROJECT MANAGEMENT

As General Contractor for this emergency remediation project, Cousino Restoration Project Management worked closely with the client, its insurance carrier, and environmental hygienist (for testing and analysis) to develop and implement a safe, proper, and expedient, site remediation plan prior to any remediation activities commencing.

- The scope of the contamination was substantial, but by using aggressive and creative containment measures the client was able to maintain production, which was critical for operations to continue.
- Safety being a foremost concern, Cousino Restoration was able to conduct environmental remediation efforts and remediate all traces of the mercury contamination with a large OSHA trained workforce working 6 days a week, 10 hours a day in a high hazard environment while experiencing zero lost time/recordable injury incidents during the duration of this 3-month long project. The client was extremely happy with the project and results.
- Daily Project Reports were prepared and submitted to the client to track onsite resources (labor, equipment, and materials), planned vs. actual work progress, actual vs. projected costs, accumulated costs and overall project schedule performance.

PROJECT PLANNING

- **PROJECT PLANNING** – Required working with factory management, an insurance carrier, and our abatement subcontractor, to plan, design, and implement, a commercial mercury abatement sampling protocol which included a detailed description of the sampling process, description of the sampling equipment and methods, locations of each sample
- **EPA COORDINATION** – the project design and abatement team worked closely with the EPA to ensure all applicable regulations were followed.
- **HEALTH & SAFETY** - Developed a site Health and Safety Plan, (HASP) and Activity Hazard Analysis (AHA), physical hazards, and safety monitoring activities.
- **THE USE OF LEVEL C PERSONAL PROTECTIVE EQUIPMENT** using Full Face Air Purifying Respirators to reduce any risk of exposure risks inside the containment “HOT Zone”.

SAMPLING & ANALYSIS

- **SAMPLING** – Cousino Restoration Project Response Manager worked with abatement subcontractor and environmental engineer to determine the extent of mercury contamination using Portable Mercury Vapor Analyzers.

Restoration Starts Here.

PROJECT MANAGEMENT OPERATIONS

This project required Trained, Qualified Emergency Response Managers and 40 Hour OSHA trained personnel familiar with hazardous materials abatement and fire/smoke odor response and remediation, specialized decontamination equipment was utilized for recovery of mercury as well as the use of fire and smoke odor cleansers, encapsulation application equipment, and HEPA air scrubbing/HEPA structural vacuum equipment.

- **CONTAINMENT** – Designed and erected containment around the manufacturing equipment that caught fire and the surrounding area of confirmed mercury contamination, allowing the factory to maintain nearly all its production operations while the contained remediation work was performed.
- **PROJECT PERFORMANCE (MERCURY ABATEMENT)** – Coordinated abatement subcontractor and project owner managers to permit daily abatement without disrupting owner's production operations followed by appropriate fire restoration cleaning and restoration of XXX equipment and facilities.

The State of OH EPA coordinated the Transportation & Disposal of the recovered Mercury and mercury - contaminated materials disposed of according to EPA standards

UNIQUE CHALLENGES

Many complexities and unique challenges were presented in repairing this building. Some of them include:

- The client needed to maintain production throughout the project, requiring substantial and creative containment measures, and limiting the daily hours we could work on the project.
- Maintain negative pressure inside the 80,000 cubic foot containment/work zone while production was ongoing elsewhere and the overall remained in use.
- Insurance carrier funded the project and aggressively worked to limit scope and price, but we were able to overcome this challenge with superb project documentation and scientific support.

ACCOMPLISHMENTS

- Completed \$1.0+ million industrial emergency mercury release project within 3 months without disrupting client's production.
- Balanced insurance carrier's low-claims-cost goals with need for safe and proper work measures to stay within client's budget.
- No safety or health incidents.

PROJECT HIGHLIGHTS

- Assembled and guided multidisciplinary stakeholders, consultants, and contractors to successful project conclusion.
- Although it originally appeared the machine would have to be scrapped due to contamination, we were able to save most it

