## United States Environmental Protection Agency Region V POLLUTION REPORT

Date: Friday, September 10, 2004

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Subject: POLREP #2

Queen City Barrel Fire

1937 South Street, Cincinnati, OH

Latitude: 39.1075000 Longitude: -84.5510000

POLREP No.: 2 Site #: R5ZZ

Reporting Period: D.O. #:

Start Date:8/19/2004Response Authority:CERCLAMob Date:8/19/2004Response Type:EmergencyDemob Date:NPL Status:Non NPLCompletion Date:Incident Category:Removal Action

CERCLIS ID #: Contract #

**RCRIS ID #:** 

#### **Site Description**

The Queen City Barrel Emergency Response Site consists of a 400,000-square-foot warehouse building at 809 Evans Street in Cincinnati, Hamilton County, Ohio, commonly referred to as the "Lawson Building." E. Paul Corporation owns the Lawson Building. The Site is bordered to the north by Boston Street, to the east by Evans Street, to the south by Whateley Street, and the west by Woodrow Street. Queen City Barrel Company (QCB) owns a container reconditioning facility that adjoins the Lawson Building to the north and west. Since at least 1998, QCB has leased the Lawson Building and used it for drum and container storage, fiber drum reconditioning, and equipment and maintenance storage. Since at least 1998, a portion of the Lawson Building has also been leased to a wooden pallet reconditioner, C&H Pallet Company.

On August 19, 2004 at approximately 6:30 p.m., a fire ignited in the Lawson Building. At the time of the fire, the warehouse contained thousands of fiber, plastic, and metal drums and other containers. The fire engulfed the building and blanketed the heavily industrial area west of Interstate 75 in heavy smoke. Explosions were heard every few minutes from inside the building, which began to collapse at 9:20 p.m. on August 19, 2004. More than 20 Cincinnati-area fire departments responded to the fire. By August 20, 2004, 10 fire companies remained on-site to contain the fire.

On August 19-20, 2004, at the request of the Cincinnati Health Department, the U.S. EPA performed downwind air monitoring east of the fire. U.S. EPA air monitoring teams were part of the Cincinnati Chemical Air Monitoring (CAM) team deployed to the fire to determine the extent of airborne contaminants released during the fire. Based on the CAM Team monitoring, the Cincinnati Health Department recommended "shelter in place" for downwind residents on August 19, 2004. CAM Team air samples were laboratory analyzed and detected the following chemicals in the downwind plume: acetone, 2-butanone (methyl ethyl ketone), benzene, toluene, and xylene.

On August 20, 2004, at the request of the Bureau of Alcohol, Tobacco & Firearms (ATF) and the Cincinnati Fire Department (CFD), the U.S. EPA conducted air sampling on Whateley Street immediately adjacent to the Lawson Building where the fire was smoldering. Two summa canister samples were collected and sent to a local laboratory for analysis. The following chemicals were detected in the Whateley Street smoke plume: acetone, 2-butanone (methyl ethyl ketone), tetrahydrofuran, heptane, benzene, toluene, ethylbenzene, styrene, and xylene. During the August 20, 2004, U.S. EPA sampling investigation, the U.S. EPA's On Scene Coordinator (OSC) Steven Renninger observed numerous drums (>1,000) in areas inside and outside of the Lawson Building. Drums were noted to be burned, partially burned, and in varying stages of deterioration due to the fire, which was still smoldering. OSC Renninger observed drums within the fire area, as well as in other parts of the building that were immediately adjacent to the fire areas. Drums were stacked three high in several areas of the building's upper level, as observed from Evans and Whateley Streets.

On August 20, 2004, the Cincinnati Metropolitan Sewer District (MSD) collected three samples from water run-off down gradient of the fire including curb, puddled water and combined sewer locations. The water samples were laboratory analyzed and detected the following chemicals: 2-propanone, 2-butanone, benzene, tricholoroethene, and toluene.

On August 20, 2004, the City of Cincinnati, Department of Buildings and Inspections (B&I) issued a notice of violation and order pursuant to the Cincinnati Building Code. The City ordered demolition of the Lawson Building located at 809 Evans Street, and declared it to be a public nuisance.

On August 24, 2004, the U.S. EPA sampled two drums located adjacent to the fire area. The drums were located in Whateley Street as a result of the fire at 809 Evans Street. One of the drums was in deteriorated condition (bulging) at the time of sampling. Laboratory results indicated that the sample denoted as QCB1 was corrosive with a pH=2.2.

#### **Current Activities**

The QCB company has contracted with local demolition and environmental remediation firms to address the removal of the existing drums and the demolition of the drum storage warehouse located at 809 Evans Street. U.S. EPA has conducted daily meetings with local and state personnel to address the remaining drums within the drum storage warehouse.

## Week of August 23rd

Analytical results from the two summa canister air samples collected by Tetra Tech START from the smoke plume showed various concentrations of volatile organic compounds, such as benzene at 1.1 parts per million (ppm); toluene at 0.67 ppm; styrene at 0.121 ppm; and propene at 3.6 ppm. No entries were made into the drum storage warehouse by the fire investigators.

On August 25, 2004, U.S. EPA issued a General Notice of Potential Liability to the owner of QCB.

U.S. EPA conducted meetings with local fire department personnel, local health department, Tetra Tech START, QCB, and Civil and Environmental Consultants (CEC). CEC is the environmental firm hired by QCB to manage the removal of the drums from the warehouse and the demolition activities.

There will be two phases of the operation. Phase I will consist of identifying the priority demolition areas of the warehouse (Areas B-2, B-3 and B-4), identifying and building a drum storage area, removing drums lying in the middle of Whateley and Boston Streets, generating a health and safety plan, identifying key personnel, and establishing an air monitoring plan and establishing a schedule. Phase II will consist of removing the drums from the warehouse (Area B-1) and staging them for either recycling or proper characterization and disposal.

## Week of August 30th

QCB identified a local demolition contractor to begin the initial steps to assess the building condition prior to demolition and drum removal activities, under the supervision of the Cincinnati Office of Building and Inspection. Initial demolition activities were conducted on Whateley and Boston Streets to ensure safe conditions. The southern wall of Area B-4 was removed to access the stockpiles of drums located in the warehouse.

Clean Harbors (CH) personnel, subcontractor to CEC, mobilized to the site to begin drum management activities. CH personnel will stage drums removed from the debris for processing. Processing activities include assessing whether the drum removed from the debris contains any liquid or is completely empty. If the drum is empty, CH personnel load the empty drums into a rolloff box in preparation for disposal. QCB personnel are working with American Compressed Steel (ACS) to deliver empty rolloff

boxes. ACS is a local scrap company located near the site that will scrap the drums for steel.

A site Incident Management Team (IMT) has been established with EPA, CFD, MSD, QCB, and QCB contractors. Daily IMT meetings are conducted at 3:00 pm with updates on site security, building demolition, air monitoring, drum staging, safety, and fire investigation information.

#### Week of September 7th

Demolition and drum removal activities continued, under the supervision of the Cincinnati Office of Building and Inspection. Demolition activities focused on removing debris in Area B-4 in preparation to drop the elevator shaft located in Areas B-3 and B-4. CH personnel mobilized personnel and equipment to expedite the drum removal and drum evaluation process. Daily air monitoring being conducted at 9 stations around the old drum storage warehouse. Total particulate levels and organic concentration levels are being monitored three times per day.

CH personnel mobilized a vacuum truck and a frac tank to remove oily liquid pooled within the southern portion of Area B-4. Approximately 100 drums containing lubricating oil is located in the basement of Area B-4. A few of the drums were damaged during the fire which caused the drums to leak. CH personnel will overpack the drums containing oil as they are removed from the debris in the basement.

As of September 9, approximately 650 empty drums had been removed from old drum storage warehouse. Approximately 32 drums containing liquid contents were staged on plastic sheeting located on Evans Street.

CEC personnel submitted a request to the county commissioners office to build a drum staging pad east of the old drum storage warehouse. A decision by the county commissioners office to approve the request is expected in about a week.

A site IMT has been established with EPA, CFD, MSD, QCB, and QCB contractors. Daily IMT meetings are conducted at 3:00 pm with updates on site security, building demolition, air monitoring, drum staging, safety, and fire investigation information.

### **Planned Removal Actions**

Continue drum removal and demolition activities in Areas B-2 and B-4.

Obtain approval from county commissioners office to build drum staging pad east of the warehouse on Evans Street.

# **Key Issues**

A site IMT has been established with EPA, CFD, MSD, QCB, and QCB contractors. Daily IMT meetings are conducted at 3:00 pm with updates on site security, building demolition, air monitoring, drum staging, safety, and fire investigation information.

QCB employees operating on-site wastewater treatment system to manage stormwater accumulating on the property.

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