

## **APPENDIX A**

June 1, 2005

Jyl Lapachin  
Division of Emergency and Remedial Response  
Ohio Environmental Protection Agency – SWDO  
401 East Fifth Street  
Dayton, Ohio 45402

**RE: Peters Cartridge site, Kings Mills, Warren County**

Ms. Lapachin:

On Thursday April 21, 2005, ODH HAS staff, Bob Frey, Greg Stein, and Peter Ferron, visited the Peters Cartridge site, a former ammunition plant, along the Little Miami River (LMR), just east of Kings Mills, in Warren County, Ohio. The facility was recently proposed for the Superfund status in April, 2003. HAS is in the process of completing a Public Health Assessment (PHA) for ASTDR and U.S. EPA.

During our walkover of the site the following was noted;

1. In some sections of the plant, buildings have been maintained and several small businesses are operating from these buildings. However, other portions of the facility have been vandalized and are in a dilapidated condition.
2. The plant is not effectively fenced and other than “No Trespassing” signs, it is readily accessible to people using the adjacent Little Miami Bikeway.
3. Observations by HAS staff led to identification of several physical hazards at the site, including:
  - Potential exposure to falling glass from broken windows and loose bricks,
  - broken doorways allowing access into buildings,
  - hanging sheet metal coverings over the lower windows almost detached from the building,
  - miscellaneous debris from the plant operations in the more dilapidated areas of the complex, and
  - an open “well” of unknown depth adjacent to an out building between the Bikeway and the Little Miami River (LMR). (see attached map for location)

A nearby parking lot, the Bikeway, and the lack of fencing provide easy access to the buildings and the open "well" at Peter's Cartridge. It is also obvious that the site has been a target of vandalism and has had a number of unauthorized visitors. The physical hazards, easy access, and obvious visitation by local youth add to the concern of potential exposure to hazardous wastes, a growing physical safety concern.

HAS will be adding these concerns to the draft PHA document with the following recommendations:

- Restrict access to all parts of the site; the buildings and the northwest side of the Bikeway where the open "well" was observed.
- Post signs warning of the presence of hazardous materials on the site.
- Monthly inspections of the site should be made to ensure site security.

If you have any questions, please give me a call at (614) 466-1069.

Sincerely,

Bob Frey, Ph.D.  
Chief, Health Assessment Section

## **APPENDIX B**



**Bureau of  
Environmental Health  
Health Assessment Section**

"To protect and improve the health of all Ohioans"

**Peters Cartridge Factory (PCF)  
Warren County Commissioners Meeting  
December 5, 2005**

**ODH Involvement:**

The Peters Cartridge Factory (PCF) site is a former ammunition manufacturing facility located in Kings Mills, Warren County, Ohio. In 2003, PCF was proposed for inclusion on the National Priorities List (NPL) of federal Superfund hazardous waste sites. PCF was proposed because there was a confirmed release of lead and mercury to on-site soils and nearby surface waters and there were additional concerns about groundwater contamination and the potential to impact nearby municipal drinking water supplies.

For every site proposed for inclusion on the NPL, the Agency for Toxic Substances and Disease Registry (ATSDR) is required by congressional mandate to complete a Public Health Assessment (PHA). The purpose of a PHA is to evaluate the threat to public health posed by each NPL site. Since 1990, the Health Assessment Section (HAS) of the Ohio Department of Health has been a cooperative agreement partner with the ATSDR and serves as ATSDR's representative in Ohio. As a part of that cooperative agreement, HAS agreed to take the lead in completing the PHA for the PCF site.

**What is a Public Health Assessment (PHA)?**

The purpose of the PHA is to review and evaluate the data and information available on the hazardous substances found in the environment and to determine if there is a completed exposure pathway that poses a public health threat. HAS staff evaluate information available about toxic material at the site, determine whether people might be exposed to it, and report what harm exposure might cause.

Note that a PHA *does not* look at medical records and patient charts. A PHA *does not* count community disease or illness. In other words, a PHA is *not* the same thing as a medical exam or a community health study. Based upon the scientific data and findings, PHA's may lead to recommendations for specific public health actions. Possible public health actions include: restricting the use of or replacing water supplies; requesting additional sampling or specific sampling methods; restricting site access; removing contaminated materials; or carrying out a community health study.

**Peters Cartridge Factory (PCF) Background:**

The PCF site is a former ammunition manufacturing facility located on the floodplain of the Little Miami River at 1414 Grandin Road in Kings Mills, Warren County, Ohio. The site is divided into two distinct parcels (Parcel A & Parcel B). When operational, Parcel A was the main munitions manufacturing area within the site. Parcel A is currently a 14 acre commercially managed property that contains six structures that are subleased to smaller tenants. Parcel B consists of 56 acres of hilly, wooded terrain located south/southwest of the developed portion and was used as munitions bunkers and ammunition testing.

The site is bordered to the north by the Little Miami River and the Little Miami Scenic Trail, a paved hiking and bicycle trail built over the former Little Miami Railroad. The site is bordered to the east by Grandin Road and to the south by the Kings Mills Military Reservation (KMMR). The KMMR is located approximately 120 feet above the site on top of a bluff overlooking the Little Miami River. The remaining area surrounding the site is semi-rural with the nearest residence being about 0.25 mile from the site.

PCF manufactured ammunition from 1887 to 1944. The primary product for the factory was fixed, loaded shotgun shells and semi-smokeless ammunition. The site was originally founded as a companion facility to the King Powder Company which was located directly across the river from the PCF facility. In 1934, the facility was purchased by Remington, who continued to manufacture ammunition until the facility was closed as part of a consolidation effort in 1944. In 1944, the PCF facility was purchased by Columbia Records who used the facility to mix plastics and press records. In 1950, the site was purchased by Seagram's Distillery and the buildings were used as warehouses. From 1970 until 1979 the facility was vacated and frequently vandalized. In 1979, the property was purchased by Landmark Renaissance Associates (Landmark). Landmark refurbished some of the on-site buildings and nominated the structures for the National Register of Historic Places in 1984. In the 1990s, Parcel A was renamed the Kings Mills Commerce Park, and several small businesses leased space from the company. From 1987 until 1993, Lenscrafters, a manufacturer of eyeglass frames and lenses, occupied parts of the site.

Ohio EPA discovered the PCF site in 1991 while attempting to locate existing monitoring wells to be used a background sampling locations for a nearby hazardous waste site (PRC, 1996). Ohio EPA approached the property owner to inquire about the existence of any on-site monitoring wells. The company provided OEPA with a copy of a site assessment report, completed in 1987, during which three groundwater monitoring wells were installed. The report revealed the presence of lead contamination in the on-site soils at levels up to 33,500 milligrams per kilogram (mg/kg) and in the on-site groundwater up to 3,840 micrograms per liter (ug/l). After discovering the lead contamination, Landmark was advised by their consultant to pave over the contaminated soils. The bare soil in the former production area was paved in 1993.

## **What were the 2005 Peters Cartridge Factory (PCF) PHA conclusions?**

1. The ODH-produced 2005 PHA conclusion stated the Parcel A of the PCF site currently poses an *ATSDR Public Health Hazard Category 3: Indeterminate Public Health Hazard* to the workers, residents and visitors who may visit the site. Elevated levels of lead and copper have been detected in on-site surface soils and sediments and in the Little Miami River. In 1993, measures were taken to cover the on-site soil contamination and most of the site was paved. However, recent site investigations discovered portions of the paving eroded and the contaminated soils are visible at the surface. The level of exposure that is currently occurring with workers and visitors at the site is unknown.
2. Parcel B of the PCF also poses an *ATSDR Public Health Hazard Category 3: Indeterminate Public Health Hazard* because, to date, no extensive environmental investigations have taken place. The area is heavily wooded and it is unlikely that residents and visitors are being exposed to site-related contamination but the extent of contamination is unknown and should be investigated.
3. Lead, mercury, and Freon-113 have been detected at elevated levels in the on-site groundwater. Based on limited groundwater monitoring data, it appears the contamination is limited to the areas of the site where specific processes occurred. Lead was detected in a downstream municipal drinking water supply at 5.0 ppb, which is below the U.S. EPA action level for lead in public water supplies of 15 ppb. It is unknown if PCF is the source of this lead in the public water supply. Note: there are no residential wells in the immediate vicinity of the site.
4. Copper, lead, and mercury were detected at elevated levels in both on-site soils and off-site sediments. Their presence in both on and off site soils suggest that site contaminants are migrating into the Little Miami River via surface water run-off from this site.
5. Mercury was detected in fish in the Little Miami River. However, the mercury could not be attributed to contamination from PCF because mercury was detected in both upstream and downstream fish. Ohio currently has a fish consumption advisory that advises residents to restrict their consumption of Ohio fish in order to reduce their risk of mercury exposure.
6. Unfenced portions of the site may pose a physical hazard to trespassers and people wandering off the nearby bike trail.

## **What were the 2005 PHA recommendations?**

1. The Potential Responsible Parties (PRP's) and agencies should fully characterize Parcel A to determine the extent of the soil and groundwater contamination. Investigations should also take place in adjacent areas including the Little Miami Scenic Trail and the Little Miami River to determine the extent of off-site contaminant migration.
2. The PRP's and agencies should investigate Parcel B to determine if any environmental contamination exists in the area and define the extent of any contamination that is discovered.
3. Repair fencing and restrict access to the site, especially the buildings and the open trench that are adjacent to the heavily used Little Miami River Bikeway.
4. Post signs warning of the presence of hazardous material on the site.
5. Periodic inspection of the site is advised to ensure that the site is secure.

## **Next Steps**

- An ODH-HAS "brown cover" draft PHA was produced and released September 30, 2005. This brown cover draft document is open to public review and comment and ODH will incorporate the any public comments in the brown cover phase and a final "blue cover" PHA will be released as a document in 2006.
- HAS will review any additional environmental data collected to determine if the site poses a health hazard to workers, and visitors who visit the PCF site and residents in the surrounding area.

## **For More Information:**

For information about the site contamination and cleanup activities, contact the U.S. EPA Region 5 Office.



U.S. EPA Region 5  
77 West Jackson Boulevard  
Chicago, IL 60604-3507  
Project Coordinator: Pamela Molitor  
(312) 886-3543 or 800-621-8431, ext. 63543  
[molitor.pamela@epamail.epa.gov](mailto:molitor.pamela@epamail.epa.gov)

For information about the public health threat posed by the site and the results of the public health assessment, contact the Ohio Department of Health.



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