

Health Consultation

FORMER PETER COOPER AND HYNITE PROPERTIES
CITY OF OAK CREEK, MILWAUKEE COUNTY, WISCONSIN

FEBRUARY 4, 2008

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Public Health Service
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia 30333

Health Consultation: A Note of Explanation

An ATSDR health consultation is a verbal or written response from ATSDR to a specific request for information about health risks related to a specific site, a chemical release, or the presence of hazardous material. In order to prevent or mitigate exposures, a consultation may lead to specific actions, such as restricting use of or replacing water supplies; intensifying environmental sampling; restricting site access; or removing the contaminated material.

In addition, consultations may recommend additional public health actions, such as conducting health surveillance activities to evaluate exposure or trends in adverse health outcomes; conducting biological indicators of exposure studies to assess exposure; and providing health education for health care providers and community members. This concludes the health consultation process for this site, unless additional information is obtained by ATSDR which, in the Agency's opinion, indicates a need to revise or append the conclusions previously issued.

You May Contact ATSDR Toll Free at
1-800-CDC-INFO

or

Visit our Home Page at: <http://www.atsdr.cdc.gov>

HEALTH CONSULTATION

FORMER PETER COOPER AND HYNITE PROPERTIES
CITY OF OAK CREEK, MILWAUKEE COUNTY, WISCONSIN

Prepared By:

Wisconsin Department of Health and Family Services
Under a Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry

Summary and Statement of Issues

The Wisconsin Department of Health and Family Services (DHFS) evaluated whether public health concerns exist at the Hynite and Peter Cooper properties in the City of Oak Creek, Milwaukee County. There are many physical hazards at these former industrial properties and these pose a *public health hazard* to people who visit the properties. There is no available data about whether environmental contamination is on the Hynite and Peter Cooper properties, but limited field screening and the history of past industrial activities suggest substantial environmental contamination may be present. This is an *indeterminate public health hazard*. The property owners need to take actions that will restrict the public from going onto these properties and entering buildings. Prior to redevelopment, there should be an environmental investigation to determine whether contamination exists and, if present, its degree and extent. DHFS will assist the City of Oak Creek in evaluating the human health implications of any new environmental data that is collected from these two properties.

Background

DHFS prepared this health consultation to address the public health implications of conditions that exist at several former industrial properties located on Lake Michigan, near the intersection of South Fifth Avenue and East Depot Road, in the City of Oak Creek, Milwaukee County. There are several former industrial, contiguous properties in this area, which are often referred to as Peter Cooper, Hynite, Allis-Chalmers/DuPont, and Wabash Alloys. The specific properties this health consultation addresses are: 1) the 8-acre Hynite or Fifth Property LLC (4301 East Depot Road, Parcel 866-9989-001); and 2) the 80-acre former Peter Cooper or Oak Creek Storage and Handling Property (9006 South Fifth Avenue, Parcel 866-9992-002). The combined Lake Michigan shoreline frontage for these two properties is estimated to be one-half mile (Figure 1).

This area of Oak Creek is historically referred to as Carrollville, though many current Oak Creek residents may not be familiar with the name (Cech 2005). In 1899, the Milwaukee tanning industry established the U.S. Glue Company factory in Carrollville to make glue from remnants and scraps of animal hides, both tanned and untanned. During the 1930s, the U.S. Glue Company sold the factory to the Peter Cooper Corporation, who then sold the factory in 1976 to the French pharmaceutical company Rousselot. Manufacturing of glue continued at the factory until it closed in 1985. In November 1987, a fire broke out in the main buildings of the vacant Peter Cooper facility. This was one of the largest fires in the history of Oak Creek, and the wooden structure was consumed by the blaze and fire fighters focused on saving adjacent buildings (Oak Creek FD, 2007). Cech (2005) states, “three of the four stories of the main building had been destroyed, the entire west wall had collapsed, and the remaining ground floor was gutted.” The Hynite Company reportedly opened in Carrollville during the 1920s to manufacture nitrogenous fertilizers leather meal from waste leather. It is not clear to DHFS when such manufacturing halted at the Hynite property.

While the adjacent Wabash Alloys and Allis-Chalmers/DuPont properties and buildings are well fenced and locked, the Peter Cooper and Hynite properties are poorly fenced and the doors and

windows of buildings are open, and the public can easily walk or drive onto these two properties and enter buildings.

Demographics

The 2000 U.S. Census reported that the City of Oak Creek had a population of 28,456, which is comprised of 93.3% white, 2.2% African American, 3.8% Asian or Pacific Islander, and 2.4% all other races. Children under 5 years of age were 6.7% of the population, and under 19 years of age were 27.6% of the population. The per capita income was \$23,586. The average family size was 3.10 and median family income was \$63,381.

Site Visits

DHFS staff first conducted a drive-by visit of these properties in October 2006. The 80-acre former Peter Cooper property was fenced along South Fifth Avenue, and from there staff could see three large industrial buildings, and a smaller single-story office building that was apparently in use. The two large industrial buildings on the northwestern portion of the property were estimated by staff to be 175,000 and 50,000 sq ft (square feet) in area. Approximately one-half of the 175,000 sq ft building had a second story, and most of the door ways and ground floor windows were open or broken out. Aerial photographs show the roofs of both buildings to be in poor condition, with visible holes and plant growth. Near the south boundary of the Peter Cooper property is a newer, single story warehouse-like building that is estimated to be 150,000 sq ft and apparently in good condition. DHFS was informed this was structure was currently being used to stockpile sludge received from the Milwaukee Metropolitan Sewage District South Shore Treatment Plant, which is immediately north of the Peter Cooper property. DHFS assumes this newer structure was built on top of where the main glue factory building that burnt down in 1987. Aerial photos show a number of concrete foundation footprints of prior buildings on the north side of this 150,000 sq ft building.

Tucked behind the southeast corner of the former Peter Cooper property is the 8-acre former Hynite property. Viewed from the end of East Depot Road, staff saw two buildings, a smaller, brick office with a vehicle scale on the south side, and larger multi-storied brick building estimated to be about 22,500 sq ft, with a newer 13,500 sq ft structure attached to the east side. Aerial photos of the Hynite property also show that on the northeast side of these buildings are several concrete foundation footprints of one or more prior buildings.

During the October 2006 visit, from South Fifth Avenue, staff saw several large holes in the fence and well worn footpaths leading onto the Peter Cooper property. At that time they also observed several adolescent children walking eastwards on East Depot Road to where it ends at the gated entrance to the Hynite property. These children walked around the locked gate, onto the Hynite property, and went into one of the abandoned buildings through one of many open doorways or windows. Staff also talked with a resident who lives near the intersection of South Fifth Avenue and East Depot Road, and she reported regularly seeing people walking and driving down East Depot Road and going onto these properties, particularly during the summer.

On the morning of November 2, 2006, staff from DHFS and the City of Oak Creek Health Department visited the Hynite property. While the East Depot Road entrance to the Hynite property was a locked gate, it was simple to walk or drive a vehicle around the fence across a flat, grassy area. Staff saw worn foot paths and other signs that people were regularly going onto the Hynite property, as well as the adjoining Peter Cooper property, and observed numerous physical hazards around and inside of buildings. There was a substantial amount of graffiti on the internal and exterior walls of all levels of the Hynite building, and the glass of most windows and skylights were broken out. Inside of the building it appeared all industrial machinery had been removed. Despite this, staff saw a make-shift skateboard ramp, a swing made from old fire hose and hanging above a floor covered with broken glass, rusty stairways of questionable stability leading to the upper floors, and there were many other apparent physical hazards. DHFS staff used an x-ray fluorescence (XRF) meter to screen for heavy metals in the dust and dirt on the floors inside and outside of the Hynite building. The XRF meter indicated there were unsafe levels of lead and cadmium in the dust and dirt. While staff did not visit the adjacent Peter Cooper property, there was no fencing between the two properties and it was easily accessible from all portions of the Hynite property. From this distance staff could see the poor condition of the larger and more expansive buildings on the Peter Cooper property, and it is very likely there are physical hazards similar to what was observed in the Hynite building.

There were many homes close to these properties, with many homes recently built. During the visits staff noted that across South Fifth Avenue and less than 500 yards from these properties are over 50 older Carrollville homes and a recent residential development that can accommodate dozens of new homes. There were five homes on the corner of South Fifth Avenue and East Depot Road that abut up against the southeastern corner of the former Peter Cooper property. There were also four single family dwellings on South Fifth Avenue that abut up against the northeastern corner of the Peter Cooper property.

The City of Oak Creek has initiated redevelopment plans for these properties and this was scheduled to begin in mid-2007. These plans included the demolition of buildings, investigating and cleaning up chemical contamination, and resulting actions would abate physical hazards and investigated for environmental contamination. Unfortunately, these plans were not implemented.

On November 27, 2007, DHFS staff again visited Oak Creek. From South Fifth Avenue staff saw no evidence of investigative, remediation, or redevelopment activities on these properties. Staff also observed clear indications of more frequent visitation by the public than what was seen during the 2006 visits. Two new holes cut into the fence on South Fifth Avenue, with well worn footpaths on either side of the holes. At the end of East Depot Road, where in 2006 there was only crushed grass from vehicles driving around the gate, there were now barren soil ruts from more regular vehicle traffic. There was new graffiti on the outside walls of the 2nd and 3rd floors of both the Hynite and Peter Cooper buildings, which was not in photos taken in 2006.

Once DHFS staff returned to their offices, they came across a number of recent photographic and written accounts on internet websites from people who visit the Hynite and Peter Cooper properties. These entries describe going onto the property and inside buildings for general curiosity, exploring, photography, thrill seeking, alleged paranormal encounters, and vandalism.

Not only do these accounts independently demonstrate that people are visiting the properties, this online information promotes interest among others and likely results in increased visitation.

Discussion

Based on these brief site visits to the Hynite property and observations of the Peter Cooper property, it is evident that many physical hazards are present and these pose a *public health hazard* to people who visit the properties. It is clear that people, including children, are regularly trespassing onto these properties.

Available information suggests there may be chemical contamination on the Hynite and Peter Cooper properties, but it is not possible to determine whether this is a health concern. This is an *indeterminate public health hazard* and underscores the need to restrict access to the public and investigate these properties for possible chemical contamination prior to any redevelopment. The very limited use of the XRF on the Hynite property indicates there is heavy metal contamination in soils at several locations, but this data is not sufficient to draw a firm health conclusion. When in operation, any waste leather received at the Hynite and Peter Cooper properties that previously underwent the chrome tanning process (USEPA 1997) could have contained elevated levels of chromium, as much 2.5% or 25,000 parts-per-million (USDA 1997). Such wastes disposed or residuals left behind on the properties could also contain elevated levels of chromium.

Minutes of the June 3, 2003, City of Oak Creek Community Development Authority states that while the CDA did not possess environmental data on the Peter Cooper property, members “believe [the property] is contaminated.” Staff with the Department of Natural Resources (DNR) informed DHFS they have observed contractors on these properties conducting environmental investigations. Such actions by property owners indicate there is sufficient reason to expend funds and evaluate for environmental contamination. Unfortunately, DNR has not received this data or subsequent investigative reports. Significant environmental contamination has been found at former glue factories in other states, several which were also owned and operated by the Peter Cooper company, such as the former Peter Cooper properties in Cattaraugus County, New York (ATSDR 2000).

DHFS has requested the City of Oak Creek order the owners of these properties to properly fence the full property perimeter so that it will restrict the curious public from going onto these properties and entering the buildings (DHFS 2007). As authorized by State of Wisconsin Statutes (254.59), local public health officers can order property owners to abate human health hazards on their property. Should the property owner fail to follow these orders, health agencies also have the authority to undertake abatement of the hazard and attach the costs to the property taxes for that land, which, according to public tax records for the Hynite and Peter Cooper properties, appears to be regularly paid and not in arrears. This order should also include the placement of no trespassing and hazard warning signs at regularly spaced intervals around the entire perimeter. Actions could consider closing and securing door and window openings of all buildings. DHFS staff are offering technical assistance to the Oak Creek health officer with drafting these abatement orders, as well as follow-up site inspections and guidance.

DHFS regularly provides public health technical assistance on brownfield properties and have referred Oak Creek officials to the Wisconsin Department of Natural Resources, Bureau for Remediation and Redevelopment. The DNR is extremely knowledgeable about state and federal funds to assist local government with the redevelopment of properties such as Hynite and Peter Cooper.

Child Health Considerations

In communities faced with air, water, or food contamination, the many physical differences between children and adults demand special emphasis. Children could be at greater risk than are adults from certain kinds of exposure to hazardous substances. Children play outdoors and sometimes engage in hand-to-mouth behaviors that increase their exposure potential. Children are shorter than are adults; this means they breathe dust, soil, and vapors close to the ground. A child's lower body weight and higher intake rate results in a greater dose of hazardous substance per unit of body weight. If toxic exposure levels are high enough during critical growth stages, the developing body systems of children can sustain permanent damage. Finally, children are dependent on adults for access to housing, for access to medical care, and for risk identification. Thus adults need as much information as possible to make informed decisions regarding their children's health.

Observations made at the Hynite and Peter Cooper properties show that adolescent children from adjacent neighborhoods are visiting the site, but the lack of environmental data for these properties does not allow an evaluation of the specific environmental health risks they may face. Immediately west of the Hynite and Peter Cooper properties are many older homes, with homes being built in a newer residential development. The census blocks immediately across Fifth Avenue have a similar or slightly higher percent of children under 5 years (6 to 9%) and under 18 years of age (13 to 37%) than what the 2000 Census reported for the City of Oak Creek. But this census data does not include the homes recently constructed in the new residential development. Additionally, the census blocks west of those on Fifth Avenue have an even higher percent of children under 5 years (6 to 19%) and under 18 years of age (20 to 52%) than for greater Oak Creek.

This dense population of children who live nearby certainly increases the odds that children are regularly visiting the properties. It is less likely that children under 6 years of age are visiting the properties alone, but they may be accompanying their older siblings. A higher degree of curiosity and poorer judgment among younger children places them at greater risk of being seriously injured or killed by the many physical hazards at these properties. For people who live across South Fifth Avenue from these properties, the nearest public access to a beach on Lake Michigan is approximately 2 miles away at Bender Park. Children from these neighborhoods may be more likely to access the Lake Michigan via these properties than going to Bender Park.

Conclusions

There are many physical hazards present on the Hynite and Peter Cooper properties in Oak Creek and these pose a *public health hazard* to all people who trespass on the properties.

There is no data available to assess and determine whether chemical contamination is present in buildings, soils or groundwater at the Hynite and Peter Cooper properties, but limited screening data and the history of past industrial activities suggest that environmental contamination may be present. This is an *indeterminate public health hazard*.

Recommendations

The City of Oak Creek should order property owners to take actions, such as fencing and posting warning signs around the full property perimeter, which will restrict the public from going onto these properties and entering buildings. If the property owners fail to comply with the abatement order, the City of Oak Creek should consider undertaking these abatement actions.

Prior to the redevelopment of the Hynite and Peter Cooper properties, there should be an appropriate environmental investigation of the Hynite and Peter Cooper properties to determine whether contamination exists and, if it is present, its full degree and extent, and impact it could have on the community nearby.

Public Health Action Plan

DHFS staff have visited the Hynite and Peter Cooper properties, identified public health hazards, and made recommendations to the Oak Creek Health Department regarding actions needed to protect public health from conditions at these properties.

DHFS staff have and will continue to provide technical assistance to the Oak Creek Health Department in drafting abatement orders to be issued to the property owners, as well as providing follow-up site inspections and guidance.

DHFS will evaluate the human health implications of new environmental data collected from the Hynite or Peter Cooper properties.

DHFS will provide public health technical assistance on brownfield properties to City of Oak Creek officials, in coordination with the Wisconsin Department of Natural Resources, Bureau for Remediation and Redevelopment.

References

Agency for Toxic Substances and Disease Registry. 2000. Public Health Assessment for Peter Cooper, Gowanda, Cattaraugus County, New York. Atlanta, GA: U.S. Department of Health and Human Services. Available at: http://www.atsdr.cdc.gov/HAC/pha/petercooper/pet_toc.html

Cech, Jim. 2005. Oak Creek: 50 Years of Progress. Chicago, IL: Arcadia Publishing. p 55-59.

Oak Creek Community Development Authority. June 4, 2003. CDA Minutes. Oak Creek, WI: City of Oak Creek. Available at:

http://www.oakcreekwi.org/Official%20City%20Documents/Minutes/2003/06-03/060403_CDA_minutes.htm

Oak Creek Fire Department. 2007. Live Fire Training. Oak Creek, WI: City of Oak Creek. Available at: http://www.oakcreekwi.org/city%20departments/fire_dept/livefiretraining.htm

State of Wisconsin Statutes. 2007. Chapter 254 – Environmental Health. Available at: <http://www.legis.state.wi.us/rsb/Statutes.html>.

U.S. Census Bureau. 2000. Profile of General Demographic Characteristics for the City of Oak Creek, Wisconsin. Washington DC: Department of Commerce. Available at: <http://factfinder.census.gov>.

Wisconsin Department of Health and Family Services. December 27, 2007. Correspondence to P DeGraves, Administrator, City of Oak Creek. Madison, WI: DHFS.

U.S. Department of Agriculture. 2000. Leather Meal. NOSB TAP Materials Database Compiled by OMRI. Washington DC: USDA. Available at: <http://www.ams.usda.gov/nop/NationalList/TAPReviews/LeatherMeal.pdf>

U.S. Environmental Protection Agency (USEPA), Emission Factors and Policy Applications Center. 1997. Chapter 9.15 Leather Tanning. Compilation of Air Pollutant Emission Factors Volume I: Stationary Point and Area Sources. Washington DC: USEPA. Available at: <http://www.epa.gov/ttn/chief/ap42/index.html>

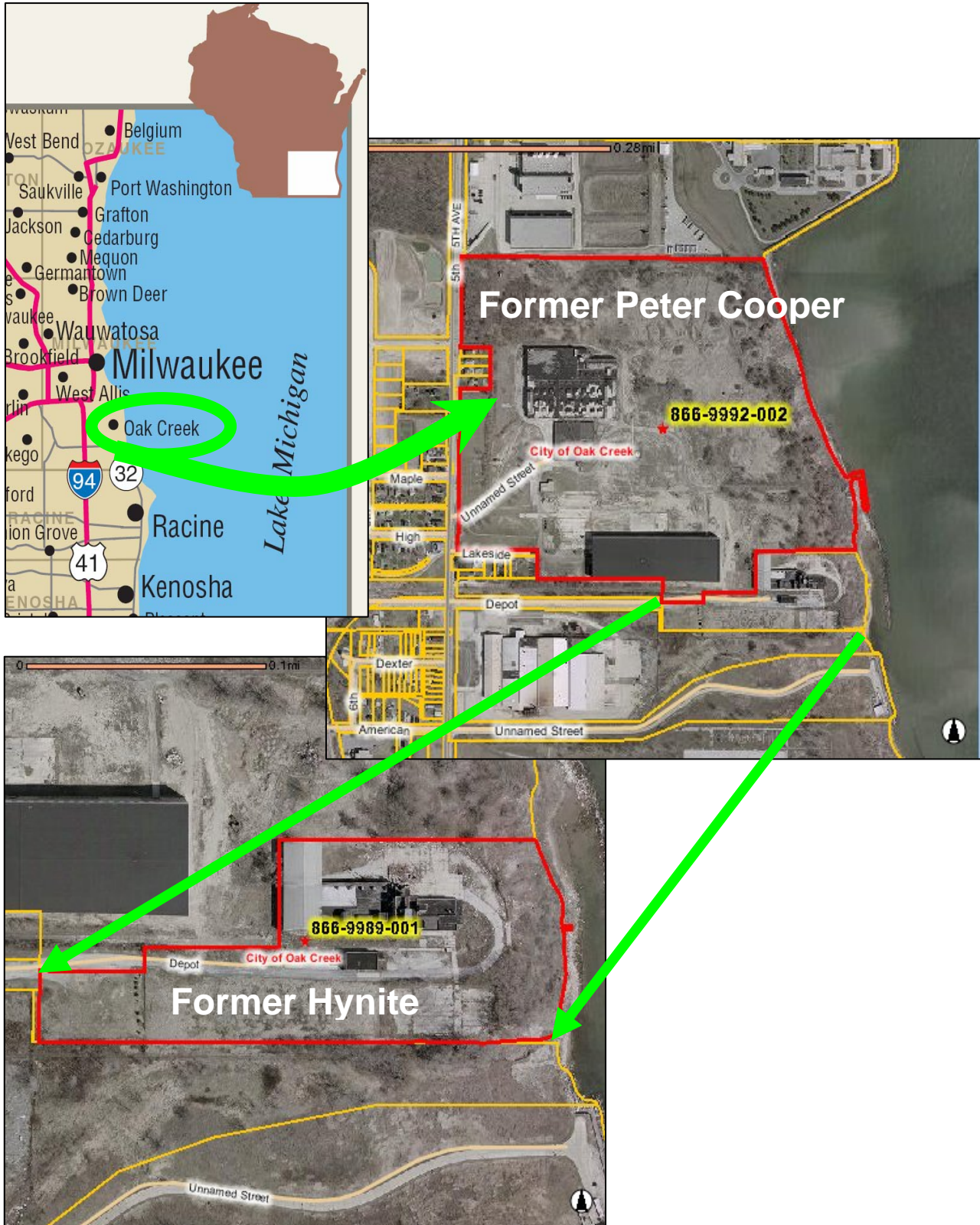
Report Preparers

Henry Nehls-Lowe
Epidemiologist
Bureau of Environmental and Occupational Health
Division of Public Health
Wisconsin Department of Health & Family Services

ATSDR Regional Representative
Mark Johnson
Division of Regional Operations, Region V
ATSDR

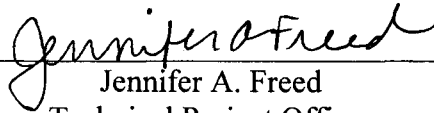
ATSDR Technical Project Officer
Jennifer Freed
Cooperative Agreement and Program Evaluation Branch
Division of Health Assessment and Consultation
ATSDR

Figure 1: Former Peter Cooper and Hynite Properties, City of Oak Creek, Wisconsin.



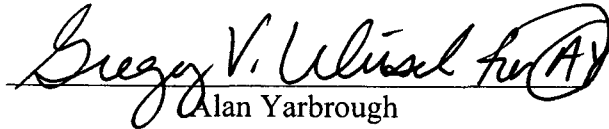
Certification

This Health Consultation was prepared by the Wisconsin Department of Health and Family Services under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with the approved methodology and procedures existing at the time the Health Consultation was begun. Editorial review was provided by the cooperative agreement partner.



Jennifer A. Freed
Technical Project Officer
Division of Health Assessment and Consultation (DHAC)
ATSDR

The Division of Health Assessment and Consultation, ATSDR, has reviewed this Health Consultation and concurs with the findings.



Alan Yarbrough
Team Leader
CAPEB, DHAC, ATSDR