

# Letter Health Consultation

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MOLE LAKE SCHOOL

CRANDON, WISCONSIN

**Prepared by  
Wisconsin Department of Health Services**

NOVEMBER 27, 2012

Prepared under a Cooperative Agreement with the  
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Agency for Toxic Substances and Disease Registry  
Division of Community Health Investigations  
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.

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Under a cooperative agreement with the  
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Jacob Hassan, U.S. EPA Region 5 (SE-5J)

**From:** Robert Thiboldeaux, Toxicologist, Wisconsin Division of Public Health

**Date:** July 12, 2012

**Subject: Public Health Consultation for the former Mole Lake School**

The U.S. Environmental Protection Agency (EPA) has conducted an environmental assessment of an older damaged building located in Mole Lake, Wisconsin, within the Mole Lake Indian Reservation. The Mole Lake Reservation is more formally known as the Sokaogon Chippewa Community, Mole Lake Band, of the Lake Superior Chippewa Indians. On November 14, 2011, the Sokaogon Chippewa Community requested assistance from the EPA. On November 29, 2011, the EPA requested technical assistance in their investigation from the Wisconsin Department of Health Services (DHS), under DHS's cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR). DHS agreed to provide a Health Consultation reviewing health hazards present on the property, based upon EPA's field investigation. This letter serves as that written Health Consultation.

**Site description.** The property is located at 10960 County Rd M, Crandon, WI 54520. Crandon, Wisconsin, is an unincorporated community located in the Township of Nashville in Forest County, Wisconsin (figure 1). The community has 1,166 residents.<sup>1</sup>

According to the initial site visit and the site assessment conducted by the EPA<sup>2</sup>, the property contains damaged, burned, and heavily deteriorated buildings that were used until approximately 1987 as the Mole Lake School. The buildings were used as the Tribal Office until about 2005, and since then have been vacant. In 2010, the building was gutted by fire.

#### **Environmental contaminants in building debris.**

**Asbestos.** The initial site visit and final assessment by EPA and EPA START contractor Oneida Total Integrated Enterprises (OTIE) reported visible evidence of broken and weathered asbestos floor tiles inside the burned out structure (figure 2). The presence of

<sup>1</sup> (U.S. Census, 2009) (<http://www.city-data.com/city/Nashville-Wisconsin.html> )

<sup>2</sup> EPA/OTIE. 2012. Site Assessment Report Mole Lake School Site Assessment, February 10, 2012. Crandon, Forest County, Wisconsin. Technical Direction Document No. TO-01-11-11-0030. Prepared by Oneida Total Integrated Enterprises, Contract No. EP-S5-10-10

asbestos in the floor tiles is based upon an earlier report that excluded the presence of asbestos in ceiling tile, wallboard, felt, and floor runners.<sup>3</sup> The floor tiles represent asbestos-containing material (ACM) that was formerly non-friable, but should now be considered friable due to their broken and deteriorated state. The EPA/OTIE site assessment confirmed that the tiles and floor mastic contain 5-10% chrysotile, where concentrations greater than 1% meet the definition of ACM.<sup>4</sup> The 1% asbestos criterion is a regulatory definition that corresponds to the detection limit of the analytical method. It is used to make decisions regarding the disposition of asbestos-containing waste materials. The presence of broken and weathered ACM in building debris at the former school represents a potential for asbestos exposure to trespassers or workers handling the ACM. The ACM building debris should be removed to avoid this exposure potential.

The removal of friable ACM will require proper mitigation procedures to avoid environmental dispersion and direct exposure to workers during demolition. State asbestos experts have advised that the removal of ACM be consistent with National Emission Standards for Hazardous Air Pollutants (NESHAP),<sup>5</sup> and where applicable with the WDNR Asbestos Program for Demolition and Renovation Projects. In particular, workers should ensure that any materials co-mingled with the tile or mastic are disposed of as friable waste. Any concrete foundation material that will be crushed for recycling must have ACM mastic removed. Region 5 USEPA must be notified of the demolition 10 working days before it is started. All removal work on the friable materials should be done adequately wet with no visible emissions.

*Lead paint.* Heavily weathered paint is evident on the concrete block wall and the former wood gymnasium (figure 3). Paint chips were present in the paved and unpaved parts of the site. During the initial site visit by EPA, a portable X-ray fluorometer (XRF) was used to confirm that the paint contains lead. The XRF produced a reading  $\geq 1,000$  milligrams lead per kilogram of soil (ppm, or parts per million) at locations where chips were present, with a maximum reading of 11,112 ppm. Lead in soils (using XRF) on the property having no visible paint chips ranged from 9-216 ppm. In the follow-up assessment by the EPA contractor (EPA/OTIE), paint chips were collected for lab analysis; these confirmed flaking lead paint throughout/from the building debris. Analysis of soil containing paint chips from around the perimeter of the building revealed lead concentrations ranging from 9 to 35,577 ppm. Significantly, several of the elevated readings were at soil locations 20 feet in each direction from the building footprint, including a reading of 915 ppm around the children's play area.

## **Conclusions.**

**The site is accessible to the public.** The region is largely rural. Based upon a review of aerial photographs, approximately 55 private residences lie within 2,500 feet of the

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<sup>3</sup> Coleman Engineering Co., 2006. Asbestos Containing Material Inspection Report Former BIA Indian School Mole Lake, Wisconsin.

<sup>4</sup> The Wisconsin Administrative Code, ch. NR 447.02

<sup>5</sup> Demolition Practices Under the Asbestos NESHAP.  
<http://www.epa.gov/region4/air/asbestos/demolish.htm>

property, and there are at least 25 neighboring residences within 1,000 feet of the site. The nearest residences are across the street. The adjacent lot is a recreational ball field and playground (figure 4). Playground facilities remain on the site property. The grounds are freely accessible and are attractive to trespass by children, youth, and adults. The property has no fence and is freely accessible to trespass. There is evidence of trespassing such as graffiti and beer bottles.

**The property is a health hazard to the public.** Due to the lead and asbestos used in the building construction, its heavily damaged condition, and its accessibility, the former *Mole Lake School* represents a *public health hazard, even for of relatively short exposures occurring over periods of less than one year.* The deteriorated building has numerous physical hazards. The building contains lead-based paint at concentrations known to be harmful to children. As discussed above, it is more difficult to define a health hazard for asbestos in outdoor situations; nonetheless an exposure potential exists that should be corrected.

### **Recommendations**

- Pending removal of the gutted building, Tribal officials should restrict access to the damaged building site to avoid exposure to unauthorized people visiting the site.
- Lead-contaminated soil should be removed and disposed of, followed by the installation of clean soil and covering vegetation sufficient to interrupt exposure to any residual lead in soil.
- Any asbestos-containing materials (ACM) in the building debris of the former school should be removed to limit its dispersion on-site and potentially off-site. ACM in the building debris should be safely collected and disposed of using workers trained and equipped in proper ACM-removal techniques, and in accordance with applicable removal and disposal rules.
- Removal of building demolition piles should include the removal of surface soil underlying and surrounding those piles to the extent needed to remove visible ACM building debris and prevent possible asbestos dispersion. These soils will require either further analysis to quantitatively verify asbestos content or preventive removal.

### **Public Health Action Plan**

DHS endorses the removal of physical and chemical hazards, consistent with the above recommendations, at the site of the former *Mole Lake School*. It is our understanding that these actions are planned as a joint effort of the community and the U.S. EPA.

**Figure 1. Area neighboring former school, Mole Lake, Wisconsin.**



Former Mole Lake School

**Figure 2. Interior (A) and exterior (B) of fire-gutted Former Mole Lake School showing asbestos tile and physical hazards.**



**Figure 3. Deteriorating lead-based paint on lower exterior wall of former school building, Mole Lake, Wisconsin.**



**Figure 4. Playground area adjacent to former school building, Mole Lake, Wisconsin**



## **Report Preparation**

This Health Consultation for the former Mole Lake School Site was prepared by the Wisconsin Department of Health Services under a cooperative agreement with the federal Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with the approved agency methods, policies, procedures existing at the date of publication. Editorial review was completed by the cooperative agreement partner. ATSDR has reviewed this document and concurs with its findings based on the information presented.

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