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August 18, 2010

TEC Report 50668-33

Ms. Terry Desautels
Wayne County Land Bank
500 Griswold Street, Suite 3025
Detroit, Michigan 48226

RE: Hazardous Material Survey
Vacant Medical Office Building
11049 Beech Daly Road
Taylor, Michigan

Dear Ms. Desautels:

Testing Engineers & Consultants, Inc. (TEC) has completed the Hazardous Materials Survey of 11049 Beech Daly Road (Site) located in Taylor, Wayne County, Michigan. The scope of work for the Hazardous Materials Survey by TEC included mobilization to the Site, a walk through and visual survey of hazardous and potentially hazardous materials, and the preparation of this report detailing identified materials. The survey was intended to quantify readily observable hazardous materials and provide information for future renovation, material removal, or demolition activities. The survey does not include the sampling or analysis of materials. A description of the tasks completed during the survey is presented below.

Mobilization

Mobilization included all activities necessary to begin work at the site, including such activities as the identification of existing structures at the Site and the preparation of site-specific survey templates. It also included internal job initiation tasks, assembling survey materials and tools, and arranging for delivery of equipment and personal protective equipment as necessary.

Field Activities

TEC conducted the Hazardous Materials Survey within the Site building on August 17, 2010. During the survey, TEC exercised care to not cause hazardous materials to become airborne, spill to the ground or water, dispose into drains, or to pose an exposure risk to people or the environment. No handling or removal of hazardous materials was conducted during the survey.

The Site building consisted of a single-story structure constructed of brick and steel on a concrete slab. Areas of the Site not covered by the building consisted of an asphalt parking lot. The interior of the building was observed to be in fair condition with some localized damage to the ceiling. No inaccessible areas were encountered during the survey.

Hazardous materials identified during the survey included multiple exit signs, emergency lights, and fluorescent light bulbs/ballasts located throughout the Site building. Two mercury-containing thermostats were identified in the hallways and three mercury-containing blood pressure gauges were identified in a plastic wastebasket in an eastern office. Several containers of assorted cleaners, disinfectants, and paint were identified in various offices, closets, and lab room. Two containers of photo development fluid were identified in the x-ray room. Several small blood collection tubes were identified in the lab room.

Materials identified as having the potential to contain hazardous materials included electrical panels, electrical switches, circuit breaker panels, smoke detectors, electronic equipment, and an x-ray machine.

Recommendations

Guidance presented by the Michigan Department of Natural Resources and Environment states that all facilities, including manufacturing industries, businesses, agencies, health care providers, and other waste generators, are required to determine if they generate hazardous waste. If Michigan facilities determine they have hazardous waste, they may choose to handle the following as universal waste:

- Antifreeze, meaning a mixture containing ethylene glycol or propylene glycol used as a heat transfer or dehydration fluid,
- Batteries, including spent dry cell and lead-acid batteries,
- Consumer electronics which are devices run by electricity containing circuit boards commonly found in offices and homes such as computers, fax machines, telephones, televisions, and printers (note: cathode ray tubes (CRTs) may alternatively be managed as electric lamps),
- Electric lamps, including fluorescent, high intensity discharge, sodium vapor, mercury vapor, neon, and incandescent lamps, and CRTs from computers and televisions (note: CRTs may alternatively be managed as consumer electronics),
- Devices containing elemental mercury, including thermostats, switches, thermometers, manometers, barometers, gas flow regulators, hydrometers, etc.,
- Pesticides.

Due to the identification of hazardous materials, TEC recommends the removal and proper disposal of hazardous materials in advance of demolition or renovation activities at the Site. TEC also recommends that equipment with the potential to contain hazardous materials be evaluated for the presence of hazardous materials in advance of disturbance, removal, or disposal.

Hazardous materials may be recycled through a local recycling coordinator, or may be disposed by an appropriately licensed waste disposal company. The types and quantities of waste generated from the Site should be tracked and the waste generator status of the facility should be determined.

Limitations and Exceptions

Information collected and presented in this Hazardous Materials Survey Report is based on current regulations and accepted practices in assessing potentially hazardous materials. Changes in the present guidelines may be retroactive and may require further expenditures for additional investigation and/or remediation.

The hazardous materials survey was limited to those materials readily observable or identified to TEC by on-site personnel. Site conditions such as the absence of lighting and the deterioration of building structures had the potential to conceal hazardous materials during the survey. TEC's scope of work did not include the confirmation of the presence of hazardous materials in suspect equipment via dismantling and or sampling of such equipment.

Hazardous materials covered by the Scope of Work for this project included following:

Mercury Containing Equipment - Historically, mercury has been used in pressure or temperature measurement gauges such as thermostats, thermometers, manometers, and barometers. Liquid mercury can have the appearance of a silvery pool of any dimension or tiny shiny beads scattered on a horizontal surface.

Polychlorinated Biphenyl (PCB) Containing Equipment - PCBs are regulated because of their potential to cause illness and their persistence in the environment. Their manufacture in the United States was discontinued in 1977. PCBs were used in electrical oil filled equipment such as transformers, capacitors, switches, and fluorescent light ballasts. Any of the above materials are suspected of containing PCB if they were installed before 1978. Fluorescent light ballasts were assumed to contain PCBs unless labeled Non-PCB.

Fluorescent Light Tubes - Fluorescent light tubes are considered hazardous waste because of their heavy metal content. TEC surveyed and quantified fluorescent light tubes during the hazardous materials survey.

Oil and Refrigerant Containing Equipment (Ozone-Depleting Compounds) - Equipment such as compressors and generators have the potential to contain oils. Refrigeration devices and air conditioning units contain refrigerants that are mainly composed of fluorinated and chlorinated compounds. Refrigerants are required to be recycled or disposed properly.

Miscellaneous Hazardous Materials - Miscellaneous hazardous materials include containerized paints, cleaners, solvents, laboratory equipment, sump pits, wastewater collection systems (e.g., grease traps),

and other hazardous materials not readily categorized by the above scope of work. Materials identified as unique to the processes conducted at the site were evaluated under the miscellaneous category.

Hazardous materials not covered by the Scope of Work included the following:

Bio-hazardous Materials – Managed biohazard materials are typically marked and labeled with a biohazard symbol.

Radioactive Materials – Known and/or identified radioactive materials and radiation producing equipment areas are typically marked and labeled with a radioactive symbol known as a tri-foil. In addition, unregulated items such as tritium illuminated "EXIT" signs and smoke detectors that may contain radioactive materials require evaluation on a case-by-case basis.

We are pleased to provide this service and hope that we can be of service in the future. Should you have any questions or require further information, please do not hesitate to call us at (248) 588-6200.

Respectfully submitted,
TESTING ENGINEERS & CONSULTANTS, INC.

Kenneth M. Majetic
Senior Environmental Scientist

Donald C. Kaylor, PG (IN, TN)
Manager, Environmental Assessment

Attachment

Summary of Identified Hazardous Materials

MATERIAL	QUANTITY	COMMENTS
MERCURY		
Smoke Detectors	6	
Emergency Lighting	6	Contain rechargeable lead-acid batteries.
Exit Signs	15	
Fluorescent Light - Bulbs	322	4-foot bulbs throughout building. Approximately 55 tubes (intact) on floor in various rooms.
Thermostats / Thermometers	3	Thermostats. One unit in hallway missing ampoule.
High Intensity Discharge Lighting	0	
Elevator Controls	0	
Manometers, Thermometers, Gauges	3	Blood pressure gauges in plastic waste basket in east office.
Float or Level Controls	0	
Space Heater Controls	0	
Pressure Controls	0	
CHLOROFLUOROCARBONS		
Fire Extinguishers	0	
Fire Extinguisher Systems	0	
Air Conditioners	4	Four roof top units containing R-22.
Walk-In Coolers	0	
Water Fountains	0	
Dehumidifiers	0	
Refrigerators/Freezers	4	In various rooms.
Heat Pumps	0	
Vending Machines	0	
POLYCHLORINATED BIPHENYLS		
Transformers	0	
Light Ballasts	134	Two ballasts per light fixture. Ballast's in three fixtures inspected were labeled as "No PCBs"
Light Capacitors (HIDs)	0	
Heat Transfer Equipment	0	
Appliances/ Electronics	12	Computer drives, CRT screens, printers, photo copiers in closet and various rooms.
OTHER		
Hazardous Waste	0	
Other Equipment	1	Raytheon X-Ray machine in x-ray room.
Other Material	Less than 20 gallons	Several containers of miscellaneous household cleaners and disinfectants in various cabinets. Two containers of photo development fluid in x-ray room. Several small blood collection tubes containing unknown substance in lab room. One small compressed gas cylinder containing a mixture of ethanol and nitrogen.