



## **Safe Work Procedures**

### **Abandoned Waste Collection**

#### ***Purpose***

To provide staff members who collect abandoned garbage with guidelines for the identification of waste items which could be potentially hazardous; and to provide safe work procedures for the appropriate handling and disposal of suspected hazardous waste materials to prevent worker injury or exposure.

#### ***Scope***

These procedures shall be employed by all staff members involved in the collection of abandoned waste materials. Historically, abandoned waste has been found in various locations throughout the City of Burnaby, including:

- vacant lots (public or private)
- park lands
- right-of-ways
- surrounding the outside of public facilities
- golf courses
- parking lots

#### ***Risks and Hazards***

Staff may experience a risk of injury resulting from the inappropriate handling of potentially hazardous materials in abandoned waste. The hazards greatly increase when precautionary measures are not observed. Possible risks of injury or exposure include:

**Dangerous Reactions** – Incompatible substances may be inadvertently mixed during handling and disposal, possibly causing a violent reaction.

**Inhalation of Vapours** – The accidental release of certain chemicals during handling can generate vapors which may be harmful if inhaled.

**Inhalation of Particles** – Disturbing substances such as moulds and asbestos can generate dust particles which may be harmful if inhaled.

**Punctures** – Accidental contact with sharps may result in puncture of the skin and possible exposure to hazardous substances.

**Rupture of Pressurized Vessels** – Damaged and corroded pressurized vessels (e.g. old propane tanks, paint cans, etc) can rupture during handling and disposal.

**Splash Contact** – Splash contact of hazardous materials on exposed skin or mucous membranes can occur during handling.

**Waste Material Container/Bag Failure** – The waste material container or bagging can fail during handling due to its condition or it's overloading. This may cause the waste to spill out onto the worker and surrounding area.

## ***Manual Collection Procedures***

*NOTE: Whenever practicable, abandoned waste should be collected and loaded for transport using mechanical equipment such as backhoes and loaders. When this is not feasible, the following manual collection procedures should be followed.*

**Warning: Before handling any abandoned waste for which a worker has reason to suspect may contain hazardous materials, contact your supervisor for additional instructions.** Site specific procedures may be required for the work, depending on the hazardous materials identified.

Manual Collection Procedures:

- 1) Perform an initial cursory survey of the area to identify potentially dangerous conditions such as the presence of homeless individuals, unstable structures, discarded hypodermic needles, chemical containers, rodent infestation, etc.
- 2) Collect any discarded needles in the vicinity of the work using the procedures detailed in Appendix B of the City Exposure Control Plan for Blood-borne Pathogens.
- 3) Approach closer to the abandoned waste and attempt to visually identify the material items before handling them. **Never open waste containers or bags to inspect their contents; this increases the risk of exposure or injury.**

- 4) Perform a test lift to determine if the objects can be safely lifted manually and that the waste container / bag will not fail during handling. **Do not place your hands underneath the waste material; this increases the risk of puncture injury.**
- 5) Collect any loose materials using hand tools such as shovels, garbage pickers, pitchforks, rakes, etc. **Direct hand contact with the waste material should be avoided whenever possible.**
- 6) Suspected hazardous waste materials should be left on-site until the appropriate precautionary measures, collection, and disposal procedures have been determined.
- 7) Transport and dispose of the collected abandoned waste in a suitable location which limits the need for additional manual handling. When disposing into the hopper of a garbage truck, ensure that you stand clear as the waste items are pressed into the body.

### ***Personal Protective Equipment (PPEs)***

All workers performing abandoned waste collection must wear the following PPEs:

- Steel toed boots with steel shanks meeting CSA standards
- Hand Protection (rubber gloves for biohazards, leather gloves for abrasion hazards)
- City issued coveralls/overalls (reflective)
- Eye Protection (goggles for splash hazards, safety glasses for impact protection)

## *Appendix 1*

### *Hazardous Materials Commonly Found in Abandoned Waste*

**Figure 1 - Discarded Components from Methamphetamine Production**



**Figure 2 - Asbestos Containing Insulation (Vermiculite)**



**Figure 3 - Close-up of Vermiculite**



**Figure 4 - Marijuana Plant**



**Figure 5 - Hypodermic Needles**



**Figure 6 - Commonly Discarded Household Chemicals (fuels, paints, bleaches, lubricants, solvents, pesticides)**



**Figure 7 - Propane Tank Used for Methamphetamine Production (greening of valve caused by anhydrous ammonia)**

