



5.8 INVESTIGATION DERIVED WASTE

In the process of collecting environmental samples, potentially contaminated investigation-derived waste (IDW) is generated. This includes soil, groundwater, disposable sampling equipment, used personal protective equipment, decontamination fluids and any other waste material that may become potentially impacted during the course of the investigation. IDW is typically identified by the three following items: (1) type of IDW (such as soil cuttings, groundwater, decontamination fluids, etc.); (2) characteristics (Hazardous Waste or Non-hazardous Waste); and (3) quantity of waste. It is the responsibility of the party conducting the sampling to properly dispose of all waste generated according to local, state, and federal regulations.

During the site investigation, minimize the amount of IDW generated to the extent practicable, and properly manage on-site. IDW must be properly characterized through analytical testing to determine appropriate disposal. Analytical testing typically entails Toxicity Characteristics Leaching Procedure (TCLP) testing if the waste is suspected of being hazardous waste. If the IDW is non-hazardous soil or water, in most cases it should be left on-site after first determining if there are restrictions that may prevent this, such as Toxic Substances Control Act (TSCA) or Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) wastes. If there are no restrictions, the following are options for onsite handling non-hazardous IDW:

For soil cuttings:

- Spread around the well
- Put back into the boring
- Put into a pit within an area of concern
- Dispose of at an on-site disposal unit (any disposal unit exceeding one cubic yard should be discussed with the HDOH SHWB to evaluate if a permit is required)
- Transport to a HDOH-permitted off-site treatment/disposal facility.

For decontamination fluids:

- Pour onto ground (from containers) to allow infiltration or evaporation. Be careful not to pour on a known



contaminated area to avoid leaching of additional contaminants into the environment.

- Transport to a HDOH-permitted off-site treatment/disposal facility.

For decontaminated Personal Protective Equipment (PPE):

- Double bag and deposit in the site dumpster, or a municipal landfill

If analytical testing determines the IDW is hazardous soil or water, it must be either (1) managed off-site at a licensed facility approved for the waste or (2) stored securely on-site until the remedial action commences. HDOH encourages on-site treatment of IDW determined as hazardous. Treatment should be completed to appropriate levels to eliminate significant hazards to human health or the environment. Hazardous waste left on-site should be managed within the same property as the delineated area of contamination and must be handled in a fashion that does not pose an immediate threat to human health or the environment. In these situations, the HEER Office and/or other pertinent HDOH Division such as the Solid and Hazardous Waste Branch (SHWB) should be contacted for concurrence with manner of treatment or handling of IDW determined to be hazardous.

Before deciding to leave hazardous waste on site, the proximity of residents and workers in the surrounding area must be considered. Planning to leave hazardous waste on site involves the following:

1. Delineating the area of concern
2. Determining pit locations close to borings within the area of concern for waste burial
3. Covering IDW in the pits with surficial soil
4. Properly managing and testing wastes designated to be left on site.

Another alternative for leaving hazardous soil on site is disposal in a temporary disposal unit located on the same property as the area of concern under investigation.

IDW should be disposed off site if the following is true:

1. Hazardous liquid
2. Hazardous soil that poses a risk if left at the site



3. Hazardous PPE
4. If leaving on site would increase risks at the site.

IDW designated for off site disposal must be tested and properly managed before pick-up and disposal. RCRA regulations must be followed. This usually entails TCLP testing if the waste is suspected of being hazardous waste.