



Investigation Derived Waste

What is Investigation Derived Waste?

Investigation Derived Waste (IDW) is waste generated from environmental site investigation activities required for determining the presence, extent, and/or nature of known or suspected contamination at a site. IDW may consist of, but is not limited to: drilling mud, drill cuttings, purge water from test borings or monitoring well development, excess sampling media, personal protective equipment, and water from decontaminating tooling and sampling equipment.

What is the concern with IDW?

Assessments or investigations are performed due to a suspected or known release of a regulated compound. IDW may contain hazardous substances as defined by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Some CERCLA hazardous substances are hazardous wastes under Subtitle C of the Resource Conservation and Recovery Act, while other substances are regulated by other federal laws (e.g., Safe Drinking Water Act, Clean Air Act, Toxic Substances Control Act, Clean Water Act).

If IDW contains regulated quantities of hazardous substances, it may pose a threat to human health or the environment and need to be properly managed.

Why manage IDW?

- To leave a site in no worse condition than existed before the investigation
- To remove or containerize wastes that may pose a threat to human health or the environment
- To comply with federal and state regulations
- To minimize the quantity of wastes generated

When should IDW be containerized and characterized?

Often IDW should be properly containerized, labeled, and sampled to characterize the waste to determine the appropriate storage, transport, and disposal options. However, there are site-specific situations where the use of existing information (e.g., manifests, safety data sheets, previous test results, knowledge of process, professional judgement) can be used to determine how IDW should be managed. For more information, see DEQ's Hazardous Waste Determinations fact sheet.

Characterization of IDW

To ensure characterization sampling data is of adequate quality for regulatory agencies or potential disposal facilities to make decisions, waste characterization samples must be collected with approved methods and analytical techniques. These methods and techniques are typically defined in a DEQ-approved quality assurance project plan.

The number and type of waste characterization samples needed depends on the amount of material, the type of potential or expected contaminants, and the available disposal options.

In general:

- An appropriate number of samples and approved analytical methods should be used to characterize the IDW
- The number of samples and sampling methodology selected should provide statistically-defensible results
- Disposal facilities may require specific analyses or testing before accepting the waste—which should be considered when selecting the appropriate analyses and number of samples

How do the characterization results affect disposal?

Depending on the analytical results, IDW may be classified as hazardous waste, contaminated waste, or noncontaminated waste.

Determination depends on the contaminant type, contaminant concentrations, and waste characteristics. To make this determination, the analytical results from the IDW characterization sampling should be compared to the appropriate regulatory standards:

- Hazardous waste determination for listed or characteristic waste (CFR 40.261 Subparts C and D)
- EPA Regional Screening Levels for Residential Soil and Water (metals and non-petroleum compounds)
- DEQ Residential Use Screening Levels (petroleum compounds)
- Published or site specific background concentrations (metals)

Analytical Result	Classification	Disposal Restrictions
Less than regulatory standard	Noncontaminated	No environmental restrictions
Greater than regulatory standard but not classified as a hazardous waste	Contaminated	Solid waste— IDAPA 58.01.06
Classified as a hazardous waste	Hazardous	Hazardous waste— IDAPA 58.01.05

Disposal

If IDW is classified as contaminated but not hazardous waste, it needs to be disposed of as a solid waste. Hazardous waste may require disposal at a Subtitle C Hazardous Waste Treatment, Storage, and Disposal Facility. If the IDW is classified as noncontaminated there are no state environmental restrictions on disposal. Local ordinances and permits for fill and site disturbance may apply.

For more information

For specific regulatory questions, contact the nearest DEQ regional office:

- Boise: (208) 373-0550
- Coeur d'Alene: (208) 769-1422
- Idaho Falls: (208) 528-2650
- State Office: (208) 373-0502
- Lewiston: (208) 799-4370
- Pocatello: (208) 236-6160
- Twin Falls: (208) 736-2190