

Frequently Asked Questions

How to Manage Impacted Hydrovac Material

June 2018

The purpose of this FAQ is to further clarify how impacted and nonimpacted hydrovac material should be managed when it is generated on an AER-regulated site.

Q1. How do I determine whether the hydrovac material is impacted or nonimpacted?

A1. If it is uncertain whether hydrovac material is impacted, it must first be properly contained and tested. Although field-testing methods may be acceptable, laboratory analysis should be conducted if the material might contain contaminants of concern that cannot be field tested, if historical evidence indicates that impacts are likely, or if the field testing is uncertain. Ultimately, it is the licensee's responsibility to ensure that appropriate steps have been taken to determine whether any material originating from an upstream petroleum site is impacted.

Q2. What are the regulatory requirements for managing impacted hydrovac material vs. nonimpacted hydrovac material?

A2. Impacted hydrovac material does not meet Alberta Tier 1 soil remediation guidelines and must be managed under the requirements of *Directive 058: Oilfield Waste Management Requirements for the Upstream Petroleum Industry* since it is an oilfield waste (tracking requirements will also have to be met). Send any questions about managing impacted material to Directive058@aer.ca.

Nonimpacted material must still be managed appropriately so that it does not cause an adverse effect.

Management options for nonimpacted material:

- Use nonimpacted material to backfill hydrovac holes.
- Spread the material on the site of origin to dry, then incorporate it as fill material (e.g., on a well-site pad or road grade).
- Move the material to private land, with permission from the landowner.
- Move the material to another *Public Lands Act* disposition or site, and notify the AER.

Requirements for nonimpacted material:

- Managing the material must not cause an adverse effect.
- Soil quality must be similar chemically and physically to the receiving site's soil quality.

- There must be no burying of topsoil or admixing of topsoil and subsoil.
- End-use-site reclamation objectives must not be compromised or limited (e.g., by introducing saline or alkaline subsoils that limit or change vegetation communities).
- Material managed on a *Public Lands Act* disposition must meet the conditions of a letter of authorization.
- Trucks used to transport nonimpacted material must be clean.

Send any questions about managing nonimpacted material to the appropriate email addresses:

- AERAuth.OilGas@aer.ca
- AERAuth.Pipelines@aer.ca
- AERAuth.InSitu@aer.ca
- AERAuth.Mining@aer.ca

Dangerous Oilfield Waste and Non-DOW Hydrovac Material Management

Q3. How should I store and manage impacted hydrovac material?

A3. Impacted hydrovac material must be stored on the site where the waste was generated or at a location that has an approval under *Directive 058* for the storage of impacted hydrovac material. Storage must meet the requirements of *Directive 055: Storage Requirements for the Upstream Petroleum*; therefore, it cannot be stored directly on the ground. Because management of the impacted material must comply with *Directive 058*, the material must be sent to an approved facility if it is dangerous oilfield waste (DOW) (see tables 4.1a and b of *Directive 058* for DOW properties). However, if the material is impacted non-DOW and meets the requirements in section 16 of *Directive 058*, it can be bioremediated and eventually used as fill material on the site of origin, or it can be sent to an approved facility.

Q4. Can I send the impacted material to landfill?

A4. The impacted material must pass the paint filter test before being disposed of at the appropriate landfill, as outlined in *Interim Directive (ID) 99-4: Deposition of Oilfield Waste Into Landfill*. Testing must be completed before any amendments (e.g., sawdust) are added.

Non-DOW Hydrovac Material Management

Q5. Is a notification or application required if bioremediation occurs on the site of origin?

A5. No, as long as all requirements in section 16 of *Directive 058* are met.

Q6. Can I bioremediate the impacted non-DOW material on another site?

A6. Storage of impacted material on another site for bioremediation is only permitted if the site is within the same production system, as defined in *Interim Directive 2000-4: An Update to the Requirements for the Appropriate Management of Oilfield Waste*. The site must also be active—it cannot be an abandoned or suspended well site.

Notification that impacted non-DOW material is being stored and bioremediated on another active site must be sent to Directive058@aer.ca. Section 4.2 of *Information Letter (IL) 98-2: Suspension, Abandonment, Decontamination, and Surface Land Reclamation of Upstream Oil and Gas Facilities* outlines the information that must be included in the notification (note that landowner consent is also required).

Q7. If I have collected non-DOW impacted material off lease but I wish to store the material on the site of origin, is notification or an application required?

A7. No, as long as the impact is directly related to the activities on the AER-licensed site, the impacted material can be temporarily stored in accordance with *Directive 055* or bioremediated as directed by *Directive 058* at the site of origin, provided all requirements are met.

Q8. Can I have a standalone location to manage impacted non-DOW hydrovac material from our different sites?

A8. The licensee would require an oilfield waste management facility approval for a standalone location. The AER's website outlines the application process for obtaining an oilfield waste management facility. Please contact Directive058@aer.ca if you have additional questions.

Q9. Can I have a central location on an active AER site to store and manage impacted non-DOW hydrovac material from our other sites?

A9. If the site is active, is in the same production system, and is under the same licensee, a component approval can be applied for. Please contact Directive058@aer.ca if you have additional questions.