

ALBERTA ENERGY REGULATOR (AER)

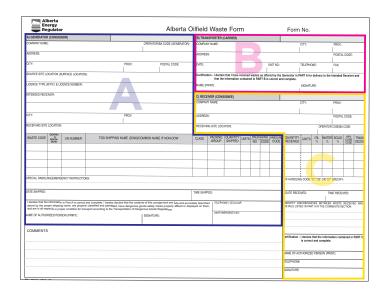
Directive 058 Reference

The waste manifesting and tracking requirements set out by Directive 058 will provide the information necessary to explore more effective means to reduce, reuse, recycle and recover resources from oilfield waste products. SECURE strives to work closely with its customers to identify these mutually beneficial opportunities. This document is designed to ease the AER's Directive 058 manifesting and tracking requirements. All parties are encouraged to read and develop a thorough understanding of the Directive 058 regulation.

The Alberta Oilfield Manifest

All parties must retain manifest copies and supporting data for a minimum of two years. Companies wishing to use the manifest for non-dangerous oilfield wastes must indicate on the manifest that the waste is non-dangerous. Copies of the manifest are not to be sent to the AFR.

See back of AFR Manifest for more instructions and detail.



Please fill out the form accordingly:

FOLLOW THE INSTRUCTIONS FOR EACH OF THE FORM'S COLOURED SECTIONS WHICH CORRESPOND TO SECTIONS A, B & C.

General

Generator and Transporter complete the Manifest form as specified.

Press firmly and print clearly all of the information required for the Manifest and distribute the copies as shown.

Some information listed may not be

Some information listed may not be applicable in all situations.

Blue Section

GENERATOR:

- · Completes Part A
- · Detaches and retains Blue copy
- Sends the rest of the copies with the Transporter

Pink Section

TRANSPORTER:

- Completes Part B
- Sends White, Yellow, and Pink copies to Receiver

Yellow Section

RECEIVER:

- Completes Part C
- Detaches and returns Pink copy to Transporter
- Detaches and returns White copy to Generator (within 30 days of receipt)
- Retains Yellow Copy

Part A

GENERATOR (CONSIGNOR)

The Generator completes Part A and has the Transporter complete Part B. It is the Generator's responsibility to properly characterize and classify the waste.

General:

- 1 Company Name
- 2 Business Address
- 3 Source Site Location LSD-SEC-TWP-RGE-WM
- 4 Operator Code (Generator)

Information for the following is available on pages 9-11:

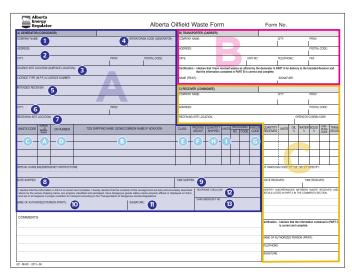
- 5 Intended Receiver
- 6 Receiver Address
- Receiving Site Location

Identify:

- 8 Date Shipped
- 9 Time Shipped

Certification:

- 10 Name of Authorized Person
- Signature
- 12 Telephone/Cellular
- 13 24hr Emergency Number



Description of Waste:

Choose the waste type that best describes the product you are shipping. If there is no match, call the intended SECURE plant for assistance.

- A Nor D Identify the waste as N (non-dangerous) or D (dangerous). Refer to pages 6-8
- B TDG Shipping Name/Common Name Refer to Transportation of Dangerous Goods Regulations Schedule 1
- Waste Code Refer to pages 6-8
- Transportation of Dangerous Goods Act/Product Identification Number (UN Number) Reference Transportation of Dangerous Goods Regulations Schedule 1
- E Class Reference Transportation of Dangerous Goods Regulations Schedule 1
- Packing Group I Very dangerous; II Dangerous; III Moderately Dangerous
- G Handling Code can be found on back of AER manifest
- (I) Quantity Shipped To the nearest 0.01 m³ or 0.01 tonne
- Units Indicate units of shipment and type (codes are located on back of manifest)

Part B

TRANSPORTER (CARRIER)

The Transporter completes Part B. Transporter carries the white, yellow and pink copies with shipment and gives them to the Receiver.

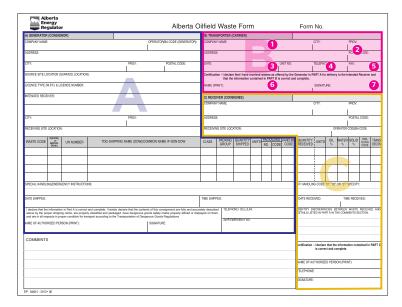
If a serious incident occurs during transport (e.g. spill), the Transporter must notify the Generator immediately.

Identify:

- 1 Company Name
- 2 Business Address
- 3 Date
- 4 Unit Number
- 5 Telephone and Fax Number

Certification:

- 6 Name
- 7 Signature



Part C

RECEIVER (CONSIGNEE)

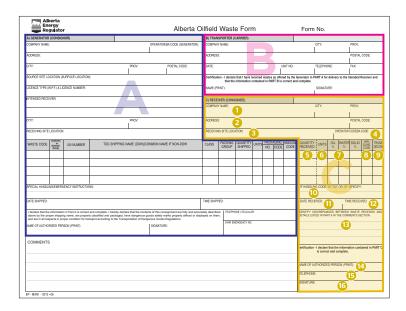
Receiver completes Part C, noting any discrepancies, then returns pink copy to transporter. The white copy is returned to Generator (to be sent no later than 30 days after waste shipment date); Receiver retains the yellow copy.

Identify:

- 1 Company Name
- 2 Business Address
- 3 Receiving Site Location (LSD-SEC-TWP-RGE-WM)
- 4 Operator Code

Specifications:

- 5 Quantity Received (To the nearest 0.01 m3 or 0.01 tonne)
- Indicate units of shipment and type (codes are located on back of manifest)
- Oil% Water% Solid% (Identify where applicable)
- Handling Code (Enter code 01 to 23 for method of handling – handling codes are listed on back of manifest)
- Trans Decom (Transporter decontaminated enter Yes or No)
- If Handling Code 02 or 21 Specify (Describe treatment/ disposal – e.g. location/method)
- 11 Date Received
- 12 Time Received
- 13 Identify Discrepancies



Certification:

- 14 Name of Authorized Person
- 📵 Telephone Number
- Signature

Waste Types and Classification

THIS LIST IDENTIFIES ONLY THE MOST COMMON WASTE TYPES. REFER TO AER DIRECTIVE 58 TABLE 7.4, OR CONTACT THE INTENDED SECURE FACILITY FOR ASSISTANCE REGARDING WASTES NOT LISTED.

Waste Name	Waste Description	Typical Sources	Oilfield Class	N	D	Waste Code
Acid Solutions (unneutralized)	Corrosive Liquid	Unused acid solutions from well workovers or completions (i.e. did not go down hole), pickling solutions from compressor start-up	DOW		D	ACID
Boiler Blowdown Water (unless containing CR, V, or other additives)	Normally not a DOW	Blow down solutions from steam boilers and associated lines	Testing required (pH)	N	D	BLBDWT
Brackish Water	Saline Water/Brackish Water TDS > 4000ppm	Groundwater from a saline aquifer	N-DOW	N		BRKWTR
Caustic Solutions (unneutralized, spent)	Corrosive Liquid	Well servicing, drilling/completion operations	DOW		D	CAUS
Cement	Cement (Returns Dry)	Cementing of well casings, drilled out cement, uncured (green) cement	N-DOW	N		CEMENT
Contaminated Debris and Soil (chemical / solvent)	Depending on chemical / solvent released	Spill clean-up material that is contaminated with chemicals or solvents	Testing required (flashpoint, pH, Leachate)	N	D	SOILCH
Contaminated Debris and Soil (crude oil / condensate)	Solids / debris impacted with crude oil / condensate	Spill clean-up material that is contaminated with crude oil / condensate	Normally N-DOW (depending on flash point and BTEX)	N	D	SOILCH
Contaminated Debris and Soil (produced water / saltwater)	Non-regulated Solid (soil-produced water)	Spill clean-up material that is contaminated with produced water or salt water	N-DOW	N		SOILPW
Contaminated Debris and Soil (refined fuels / oils)	Solids/debris impacted with refined fuels/oils	Spill clean-up material that is contaminated with diesel, gasoline, lube oil, etc	Testing required (flash point, leachate)	N	D	SOILRO
Contaminated Water	Waters Contaminated (leachate, collected surface waters)	Fresh water from inside secondary containment, surface water, etc. that has a hydrocarbon sheen or chloride content that does not meet surface release criteria	Testing requried (pH, hydrocarbon sheen)	N	D	CWATER
Corrosion Inhibitor	Corrosion Inhibitor /Oxygen Scavenger Solutions	Liquids from the annulus on wells, pipeline abandonment fluids	Normally a DOW		D	CORINH
Crude Oil/Condensate Emulsions (residuals after treatment)	Petroleum Crude Oil	Emulsion rag layer, untreatable emulsions	Normally N-DOW (depending on flash point, BTEX)	N	D	COEMUL
Dimethyl Diisulphide	Dimethyl Disulphide Solutions	Hydrogen sulphide sweetening operations or sulphur scavenging operations	DOW		D	DMDS
Drilling Sump Materials (gel chem)	Drilling Waste Gel Chemical	Drilling sump liquids and solids where the drilling mud is gel chem based	N-DOW	N		DRWSGC

Waste Name	Waste Description	Typical Sources	Oilfield Class	N	D	Waste Code
Drilling Sump Materials (advanced gel chem)	Drilling Waste Advanced Gel Chemical	Drilling sump liquids and solids where the drilling mud is Potassium Chloride based	N-DOW	N		DRWSAC
Drilling Sump Materials (hydrocarbon)	Drilling Waste Hydrocarbons	Drilling sump liquids and solids where the drilling mud is invert (diesel) based	Normally N-DOW (depending on flash point, BTEX)	N	D	DRWSHC
Frac Fluid (Water Based)	Frac Fluid (Water Based)	Well frac operations	N-DOW	N		FRFLDW
Frac Fluid (Hydrocarbon Based)	Frac Fluid (Hydrocarbon Based)	Well frac operations	Testing required	N	D	FRFLDH
Frac Sand - Non-Radioactive	Non-radioactive frac sand	Well servicing, drilling/completion operations, formation fracturing	Normally N-DOW (depending on flash point, leachate)	N	D	FRCSND
Glycol Solutions (containing lead or other heavy metals)	Glycol solutions impacted with heavy metals	Engine and compressor coolant. Dehydration for natural gas processing. Heat trace and heat medium (liner heater, utility boilers)	DOW		D	GLYCHM
Glycol Solutions (no heavy metals)	Glycol Solutions (No Heavy Metals)	Waste glycol from heaters or boilers	Testing required, normally N-DOW (may be DOW depending on flash point)	N	D	GLYC
High Solids Produced Water	High Solids Produced Water	Liquids pulled from swabbing of a well (gas)	Testing required	N	D	HSPWTR
Hydrovac Material (chemicals/solvents impacted)	Hydrovac material impacted with chemical/solvents	Spill clean-up material	DOW		D	HYDVCH
Hydrovac Material (crude oil/condensate impacted)	Hydrovac material impacted with crude oil/condensate	Spill clean-up material	DOW		D	HYDVCO
Hydrovac Material (mercury/heavy metals impacted)	Hydrovac material impacted with mercury/heavy metals	Spill clean-up material	Testing Required	N	D	HYDVHM
Hydrovac Material (produced/salt water impacted)	Hydrovac material impacted with produced/salt water	Spill clean-up material	N-DOW	N		HYDVPW
Hydrovac Material (refined fuels/oils impacted)	Hydrovac material impacted with refined fuels/oils	Spill clean-up material	Testing Required	N	D	HYDVRO
Hydrotest Fluids - Methanol	Methanol	Pipeline hydrotesting, pressure vessel hydrotesting	DOW		D	METHNL
Lubricating Oil (hydrocarbon and synthetic)	Lube oil	Compressor oil from compressor turn arounds	Normally N-DOW (depending on heavy metal content)	N	D	LUBOIL
Pigging Waste (liquid and wax)	Pigging wax	Pipeline pigging, pipeline abandonments	Testing required (flash point)	N	D	PIGWST

Waste Name	Waste Description	Typical Sources	Oilfield Class	N	D	Waste Code
Sand - Produced	Sand produced from heavy oil operations	Heavy oil operations, production ecology pits	Normally - N-DOW (depending on flash point and leachate)	N	D	SAND
Sludge - Emulsion	Sludge Emulsion	Any process involving emulsions	Testing required	N	D	SLGEML
Sludge - Flare Pit	Flare pit sludges	Flare pit remediation	Testing required (flash point, leachate)	N	D	SLGPIT
Sludge - Gas Sweetening Systems	Gas Sweetening Sludges	Sour gas plant sweetening contact tower bottoms	DOW		D	SLGSWT
Sludge - Glycol/Gas Drying	Glycol Sludges, Gas Drying Sludges	Gas dehydration contact towers	DOW		D	SLGGLY
Sludge - Hydrocarbon	Hydrocarbon Sludges	Storage tank or process vessel bottoms, solids pad sump cleanout, floor sumps that contain a hydrocarbon fraction other than emulsions	Testing required (flash point, leachate)	N	D	SLGHYD
Sludge - Process	Facility process sludges	Storage tank or process vessel bottoms, solids pad sump cleanout, floor sumps that DO NOT contain a hydrocarbon fraction	Testing required (leachate)	N	D	SLGPRO
Soil - Contaminated (Chemical/ Solvent)	Contaminated Debris and Soil (Chemical/Solvent)	Spill clean-up material that is contaminated with chemicals or solvents	Testing required (flash point, leachate)	N	D	SOILCH
Soil - Contaminated (Crude Oil/ Condensate	Contaminated Debris and Soil (Crude Oil and Condensate)	Spill clean-up material that is contaminated with crude oi/ condensate other than emulsions	Normally N-DOW (depending on flash point and BTEX content)	N	D	SOILCO
Soil - Contaminated (Emulsions)	Contaminated Debris and Soil (Emulsion)	Spill clean-up materials that is contaminated with emulsions	Testing Required	N	D	SOILEM
Soil - Contaminated (Produced Water)	Contaminated Debris and Soil (Produced / Salt Water)	Spill clean-up material that is contaminated with produced or salt water	N-DOW	N		SOILPW
Soil - Contaminated (Refined Oils)	Contaminated Debris and Soil (Refined Fuels / Oils)	Spill clean-up material that is contaminated with diesel, gasoline, lube oil, etc.	Testing required (flash point, leachate)	N	D	SOILRO
Sweetening Agents - Liquids (spent)	Liquid sweetening agents to remove H2S	Amine solutions from gas sweetening processes	Testing required (flash point, leachate)	N	D	SWTLIQ
Wash Fluids - Water	Wash Fluids - Water	Any fluid associated with washing operations (truck flushing, storage tank washings, pressure vessels, etc.)	Normally N-DOW (flash point, pH)	N	D	WSHWTR
Water - Produced (including brine solution)	Non-regulated liquid (produced water)	Water portion of crude oil emulsions (oilfield production), water from inlet separators, filter vessels at gas wells and gas plants, water return from cavern washing operations	Normally N-DOW	N	D	WATER
Well Workover Fluids	Fluids associated with well workovers	Any fluid that has been down hole and returned to surface including acids, caustics, diesel, chemicals, hydrocarbons, water, etc.	Dependent on Workover Fluid type (testing required)	N	D	WWOFLD

