

	<b>CONOCOPHILLIPS ALASKA</b> <b>Health Safety and Environmental</b>		<b>Field: North Slope</b>
	<b>Solid Waste Cells Standard Operating Procedure</b>		<b>Last Reviewed:</b> <b>10/23/25</b>
<b>Retention Code</b> <b>CG01</b>	<b>Owner/Author:</b> <b>Operations Environmental</b> <b>Coordinator</b>	<b>SOP Number:</b> <b>W-002</b>	<b>Review Frequency:</b> <b>3 years</b>

Purpose

To establish a procedure for the handling, storage and disposal of Exploration and Production (E&P) RCRA exempt and non-exempt non-hazardous solid waste materials placed in permitted Class I and Class II Waste Cells in accordance with Company policy and current state and federal permits and regulations.

Scope

**Class I Solids Storage Cells:**

In scope	Out of scope
<ul style="list-style-type: none"> <li>Exempt and non-exempt, non-hazardous solids</li> <li>Vessel and tank bottoms</li> <li>Residues from spills of exempt or non-hazardous fluids</li> <li>Contaminated snow (exempt/non-hazardous) on space available basis</li> <li>Frac sand and other well work solids</li> </ul>	<ul style="list-style-type: none"> <li>No spill residues from hazardous waste such as unused methanol or xylene</li> <li>No chemicals, used solvents or degreasers</li> <li>No liquids</li> </ul>



**NOTE:** If analytical is required for disposal, (i.e. sending to DS 4 G&I) then do not put E&P Exempt material in the Class I Cell.

**Class II Solids Storage Cells:**

In scope	Out of scope
<ul style="list-style-type: none"> <li>E&amp;P Exempt solids</li> <li>Exempt Vessel &amp; tank bottoms</li> <li>Residues from spills of exempt (Class II eligible) fluids</li> <li>Contaminated snow (exempt)</li> <li>Frac Sand and other well work solid returns</li> </ul>	<ul style="list-style-type: none"> <li>No spill residues from hazardous waste such as unused methanol or xylene</li> <li>No chemicals, used solvents or degreasers</li> <li>No liquids</li> <li>Class II-eligible material only</li> </ul>

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Authorized user

Authorized users of this procedure include all personnel who may generate or handle Class I (Non-exempt, Non-hazardous Solids) or Class II (E&P Exempt Solids)

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Prerequisites

Personnel generating, transporting, or receiving Class I or Class II waste that will be placed in the solid waste storage cells must have completed:

- Waste Determination and Manifest Training (Redbook) training, CPA-REQ-052-MiX (Certified North Slope Waste Generator/Transporter/Receiver)
  - Site-specific HSE training
  - NSTC Unescorted Training
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References

Permanent and Temporary Solid Waste Cells:

- Permitted by Alaska Department of Environmental Conservation (ADEC) Solid Waste Group (<https://dec.alaska.gov/eh/solid-waste>)
  - Solid waste cells must meet requirements of 18 AAC 60.430(b)
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Procedure/  
Responsibilities

Waste Generators:

- Must notify the Receivers at each waste cell to coordinate hauling and unloading of waste.
- All waste going to the waste cells at Alpine and Kuparuk must be manifested using a North Slope Manifest.

Waste Receivers:

- **At WNS/Alpine-** Alaska Clean Seas (ACS), 670-4586: ACS must ensure material meets Class I or Class II Cell acceptance criteria. ACS will maintain a log for all material placed in the Class I cell. ACS signs the NS manifest as the Receiver and provides the manifest to the Field Environmental Coordinator (FEC).
- **At Kuparuk-** Roads and Pads (R&P) via Dispatch 659-7949: They will ensure material meets Class I or Class II Cell acceptance criteria, sign the manifest as the Receiver and provide the manifest to the Field Environmental Coordinator (FEC).

**Permanent Solid Waste Cells:**

Both Alpine and Kuparuk have both Class I and Class II permitted permanent cells for waste storage.

**Temporary Solid Waste Cells:**

Both Alpine and Kuparuk periodically permit temporary solid waste cells. These cells are generally permitted for one year. At Kuparuk, they sometimes use lined ice cells for the containment following the requirements of 18 AAC 60.430(b). Ice cells must be removed by April 1<sup>st</sup> unless ADEC grants a waiver.



**NOTE:** The FEC in each field provides support for all waste classification and acceptability issues.

Temporary Cells Permitting Requirements

- Permanent and temporary cells are permitted through the ADEC Solid Waste Program. (See steps below)
- Regulations require that a storage plan that meets the requirements of 18AAC 60.430(b) be submitted and approved before temporary storage of drilling waste begins.

Temporary Solid Waste Cells Stipulations and Construction Requirements

Step	Action
1.	Prior to constructing a temporary cell, CPAI FEC will notify ADEC of a new temporary cell being built that follows the existing operations plan and notify ADEC when a cell is removed.
2.	The waste cell must be constructed according to an ADEC approved design specification ( <b>An existing design specification previously approved by ADEC is noted below</b> ). If a new design is required, submit the new design to ADEC for approval prior to constructing.
3.	Limit the waste stored within the temporary storage cells to drilling waste associated with the exploration, development, and production of crude oil or natural gas generated and stored with the KRU, CRU, GMTU, and BTU.
4.	Always maintain a minimum of two feet of liquid freeboard within temporary storage cells. Solids in these areas may be piled above the height of the perimeter as long as they are contained within the lined area.
5.	Remove all pumpable liquids from temporary storage cells to prevent overtopping of fluids and dispose of the free liquids. Typically disposed of via Class I or Class II well or HC recycle.
6.	Prevent, contain, or control leaks from the storage cells and any associated features used to transfer solid waste. Report any leaks to ADEC Solid Waste Program as well as ADEC SPAR if necessary.
7.	Storage and treatment of certain non-RCRA exempt wastes (such as used oil filters, shop rags and absorbents), prohibited chemical waste, radioactive material other than NORM, solvents, corrosives, lead-acid batteries, polychlorinated biphenyl fluids, explosives, and hazardous waste as defined and regulated under 40 CFR 261
8.	Temporary storage cells must be removed within one year of their construction. An extension can be requested if the cell hasn't been used and the liner is inspected and in good condition.

Permanent Solid Waste Cells

**At WNS - Alpine:**

- There are two permanent waste cells at Alpine, one cell designate for Class II wastes and one cell for Class I wastes.

**At Kugaruk:**

- There are two permanent waste cells at Kugaruk, one cell designated for Class II wastes and the other cell designated for Class I wastes.

**Alpine & Kugaruk Permanent Cells Cleanout** – Roads and Pads (R&P) will clean out the cells when they get full. The material will be manifested to a Class I or Class II Grind and Inject Facility (Typically Prudhoe's DS4 G&I is used)

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## Approved Temporary Waste Cell Design Specifications

### ADEC Approved Design Specification

#### Typical Design Specification (Previously approved by ADEC)

1. Check with the FEC to verify approval has been granted to begin construction. Obtain a drawing if available and verify approved design specifications.
2. Finished size of the cell may vary but typical cell sizes are between 40'x 40' and 60'x 60'.
3. Layout the plywood sub-base, the sub-base should be larger than the intended cell to ensure that the walls sit on the plywood for stability.
4. Lay felt mat on top of plywood.
5. Lay first layer of 30-mil liner material.
6. Use 10"x 10" or 12"x 12" timbers for dike (cell) walls and set on top of liner, pull the first layer up over the walls and secure.
7. Lay second layer of the 30-mil liner material inside walls and pull excess over the walls.
8. Dike (cell) walls should be approximately 4' high.
9. Secure dike walls together with all thread rods and bolts. Alternatively, metal straps may be attached to the outside walls for easy disassembly.
10. Wrap liner ends around exterior of dike walls and over the top timber.
11. Secure liner on top timber with 3"x12" or 2"x8" top plate.
12. Cut/trim excess liner overlap to facilitate viewing dike wall for inspections.
13. Build gravel or ice berm outside dike walls for exterior protection.
14. Ensure the cell is equipped with a **sign(s)** that includes: **Facility name, emergency phone numbers, type of waste in cell, and specifies that MSW or Hazardous Waste is prohibited.**
15. Take pictures of the completed cell and notify FEC the first day the cell is used, so agency notification can be made. Take a picture of the cell while in use.
16. Notify FEC when the cell is removed, so photographs can be taken and agencies notified.

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## Permanent and Temporary Waste Storage Cell Maintenance

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### Cell Maintenance

1. Maintain a minimum of 2 feet of freeboard for free liquids in the stockpiled storage area to prevent overtopping of fluids (Drilling Support/R&P).
2. Remove all pumpable liquids from the waste cells as soon as possible (Drilling Support/Roads and Pad). PM's in SAP were put in place in 2016 to ensure this is performed at least once in the spring and once in the fall (assigned to R&P).
3. Conduct visual monitoring at least once per month. PM's in SAP were put in place to ensure this is performed (assigned to R&Ps).
4. At the request of ADEC or permit stipulations, sample and analyze any surface water and/or soil to determine if waste escapement or contamination has occurred (FEC).



**NOTE:** Contact Environmental at 659-7242 (Kuparuk) or 670-4200 (Alpine) or 670-4943 (CPO/Expl.) with questions.