



Guidelines for **Waste Handling** from Temporary Work Camps

These guidelines for waste handling procedures in work camps apply to camps in excess of 300 person-days in one year. Guidelines for waste treatment in work camps for less than 300 person-days are described in "Rules for field work and reporting regarding mineral resources (excluding hydrocarbons) in Greenland", BMP November 2000 (Rules for fieldwork.pdf). Person-days are defined as the sum of days each person has spent in the camp within one year to be counted from the establishment of the camp in a calendar year.

These guidelines are a supplement to the Rules for field work. The guidelines are issued with the legal base in the regulation on protection of the environment in the Mineral Resources Act, especially section 84. The guidelines apply for activities which are carried out under a prospecting licence and an exploration licence.

The guidelines are drawn up following the principles of the use of the Best Available Technology (BAT) and Best Environmental Practice (BEP) for waste handling in work camps.





1 General Requirements for Temporary Work Camps

- 1.1 The establishment and operation of a temporary work camp shall minimize surface disturbance and environmental impacts.
- 1.2 A temporary work camp shall at all times be kept in neat and sanitary conditions.
- 1.3 All products used in household, kitchen, sanitary facilities, laundry etc. shall be environmentally friendly and carry an Eco label (EU-Eco label or equivalent) to the extent that the products are available in Greenland.
- 1.4 When a camp is being decommissioned, the area shall be reclaimed according to the given activity permits and the approval by Mineral Resources Authority.
- 1.5 A plan for the handling of both wastewater, liquid and solid waste shall be submitted to EAMRA. EAMRA may require that the plan includes an evaluation of impacts on the environment, cf. Mineral Resources Act section 73, subsection 2, if e.g. the number of person days or the sensitivity of the environment justifies this.





2 Wastewater

- 2.1 Wastewater arising from food preparation, laundry, bath and latrines (sewage) shall comply with the requirements specified in 2.2 to 2.7 below.
- 2.2 Any liquids containing harmful substances like for instance heavy metals, chemicals, flammable, explosive or radioactive substances must be collected and shall not be discharged to wastewater, but shall be handled as hazardous waste, i.e. kept in lidded and leak proof containers under roof with a drip tray or liner beneath and delivered to an approved waste handling facility for final disposal/treatment.
- 2.3 Wastewater may be discharged to the sea provided that this takes place subsea and at sites with sufficient sea water circulation that will ensure adequate dispersion of the wastewater. Marine discharge must be approved by EAMRA for the specific work camp.
- 2.4 Discharge of wastewater to freshwater must be approved by EAMRA for the specific work camp. When discharged to freshwater the discharge of liquid waste effluents shall comply with the following criteria depending on person-days and the sensitivity of the recipient:

BOD=Biological Oxygen Demand, COD= Chemical Oxygen Demand, N=Nitrogen, P=Phosphorous.

Person-days	Criteria (an assessment of the sensitivity of the recipient determines the requirements)
300-999	No requirements <i>or</i> BOD (15 mg/l), COD (75 mg/l).
1000-9999	BOD (15 mg/l), COD (75 mg/l) <i>or</i> BOD (15 mg/l), COD (75 mg/l), Total-N (8 mg/l) and Total-P (1.5 mg/l).
10000-100 000	BOD (15 mg/l), COD (75 mg/l), Total-N (8 mg/l) and Total-P (1.5 mg/l) <i>or</i> requirements to cleaning and discharge are set by EAMRA depending on location for the discharge to water.
>100 000	Requirements to discharge are set by EAMRA depending on location for the discharge to water.

- 2.5 EAMRA may require that the quality of discharge water is monitored if e.g. the number of person-days or the sensitivity of the environment justifies this.
- 2.6 Equipment, including wastewater treatment plants shall meet EU/US standard and be CE marked (or equivalent).
- 2.7 Sludge generated from domestic liquid waste systems may be kept in lidded and leak proof containers and delivered to an approved waste handling facility for final disposal/treatment or may be discharged in the sea, provided that this takes place subsea and at sites with sufficient sea water circulation that will ensure adequate dispersion of discharged material. Sea disposal shall be approved by EAMRA. Other disposal such as burial or seeping through the soil shall be approved by EAMRA.



3 Solid waste and oil products

- 3.1 All solid waste and oil products shall be handled according to requirements specified in 3.2 to 3.11 below.
- 3.2 Waste shall not be buried, spread in the terrain or disposed to streams, lakes or the sea.
- 3.3 Food wastes, clean wood and paper products and oil may be burned on site if approved by EAMRA. All burning shall be done in a controlled manner and be supervised.
- 3.4 Food waste should be kept in lidded and fly/animal proof (e.g. bear and fox proof garbage can) containers until burned or removed to an approved waste disposal site.
- 3.5 Oil or material containing oil may be burned according to 3.6 -3.9 or kept in lidded and leak proof containers under roof and delivered to an approved waste handling facility for final disposal/treatment.
- 3.6 All combustible waste shall be incinerated at incineration plants. Incinerators shall meet all requirements to be approved in accordance with the relevant Greenland and EU regulation in force at the time concerned. Incineration plants shall meet EU/US standard and be certified. The incineration plants must be approved by the EAMRA for the specific work camp.
- 3.7 Incinerators shall be operated, maintained and adjusted so that the combustion is optimal at all times.
- 3.8 To ensure an efficient combustion, the flue gases shall achieve the highest temperature possible and live up to the specifications for the incinerator. The temperature shall be controlled.
- 3.9 As an alternative to burning on site, food wastes, clean wood and paper products may be stored and transported out of the area to a permanent incinerator plant. This procedure shall be approved by EAMRA. For storage and transport, such waste shall be kept fly/animal proof in lidded and leak proof containers or be baled and wrapped in UV-stabilized PE.
- 3.10 Environmentally harmful substances containing heavy metals, toxic materials or other harmful substances shall not be burned in the work camp area, but shall be delivered to an approved waste handling facility for final disposal/treatment. Ash and combustion residues shall be handled as harmful substances. For storage and transport, such waste shall be kept in lidded, leak proof containers.
- 3.11 Non-combustible objects, including discarded equipment and empty fuel containers shall be delivered to an approved waste handling facility for final disposal/treatment.

