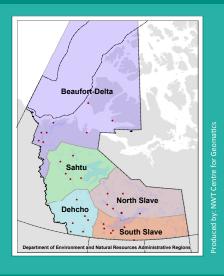
2021 Northwest Territories Spills Report





The Department of Environment and Natural Resources (ENR) has maintained a database of all hazardous material spills reported in the Northwest Territories (NWT) since 1971. This report briefly summarizes the data collected for spills reported in 2021.

- 233 spills were reported in 2021, an increase of 21 spills or 9.9% compared to 2020.
- 64% of the reported spills were less than 100 litres or 100 kilograms.
- 41% of the spills reported occurred in the North Slave region.
- Spills at mining operations accounted for 24% of reported spills in 2021.
- Spills at all government operations combined (municipal, territorial, and federal) accounted for 45% of reported spills.
- 31% of spills reported in 2021 involved fuel oil.
- The number of spills from home oil tanks is down by 73% since 2010, when ENR released the Homeowners' Guide to Oil Tanks.

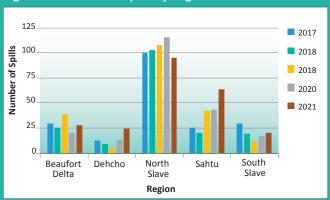
Location of Spills

In 2021, 233 spills were reported to the 24-Hour Spill Report Line in the NWT. Of those, 41% occurred in the North Slave region. Figure 1 shows the number of reported spills by region from 2017 to 2021.

The following is the percentages of reported spills by sector for 2021:

- Mining operations 24%
- Government operations (municipal, territorial, and federal) 45%
- Transportation companies 5%
- Private individuals 13%
- Petroleum operations 3%
- Other 4%
- Construction sites 4%
- Unknown parties 2%

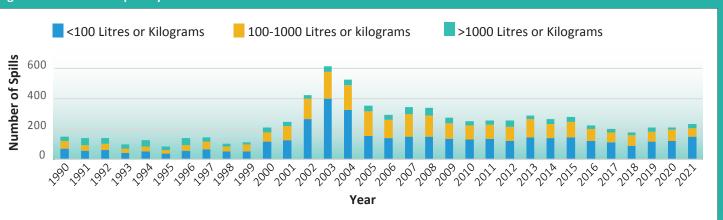
Figure 1 - Number of Spills by Region



Number of Spills Between 1990-2021

Figure 2 below shows the number of spills by volume since 1990. Of the spills reported in 2021, 64% were less than 100 litres.

Figure 2 - Number of Spills by Year



2021 Northwest Territories Spills Report



What and How Much Was Spilled?

Wastewater, which includes sewage, mine tailings and other types of contaminated water, accounted for 37% of reported spills. In 2021, there were 86 wastewater spills for a total volume of 918,315 litres. In 2020 there were 48 wastewater spills for a total volume of 2,232,733 litres.

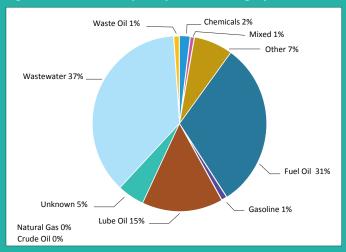
'Other' spilled hazardous materials can include bentonite, Halon-1211, emulsion explosives – or in this case, 90,000 kilograms of kimberlite spilled in the North Slave region. In 2020, only 5,016 litres of hazardous material categorized as other were spilled.

At the end of May of 2021, unprecedented flooding occurred in the Dehcho region. Jean Marie River and Fort Simpson combined, reported 14 spill reports of primarily heating oil, sewage, and mixed hydrocarbons. The impacted sites were assessed and remediated by October of 2021.

In 2021, there was a single event at a production facility resulting in an estimated 57,600,000 litres of natural gas escaping into the environment. 2020 in comparison, only had 8,028 litres of natural gas reported to be released into the environment

Figure 3 shows the number of spills reported in 2021 in each product category and Table 1 summarizes the total volume of product spilled in each category.

Figure 3 – Number of Spills by Product Category



For more information on spills contact:

Environmental Protection and Waste Management Division Department of Environment and Natural Resources Government of the Northwest Territories

P.O. Box 1320

Yellowknife, NT X1A 2L9

Telephone: (867) 767-9236 Ext. 53176

Table 1 – Volume (litres) of Product Spilled by Category

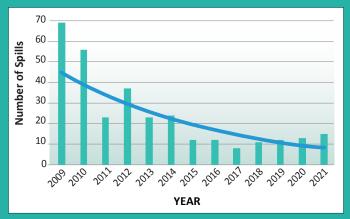
	2021	2020
Wastewater	918,315	2,232,733
Fuel Oil	9,432	9,292
Natural Gas	57,600,000	8,028
Lube Oil	14,567	7,365
Chemicals	5,303	5,464
Other	102,647	5,016
Gasoline	15	201
Mixed Load	0	157
Waste Oil	100	30
Unknown	1571	0
Crude Oil	1500	0
Total	58,653,450	2,268,287

Residential Oil Tank Spills

Since the release of the <u>Homeowners' Guide to Oil Tanks</u> and the requirement for new oil tanks to be double walled in 2010, the number of spills reported from residential oil tanks (defined as tanks under 1,136 litres) has followed a continuous downward trend.

The <u>Homeowners' Guide to Oil Tanks</u> was developed to inform individual homeowners and commercial building and property owners of the potential environmental and financial liabilities associated with an oil spill. It also provides some simple, practical steps that can minimize the chances of an oil spill.

Figure 4 - Number of Spills from Residential Oil Tanks



To report a spill, call the 24-Hour Spill Report Line (867) 920-8130