Where did the spills occur?

In 2016, 222 spills were reported to the 24-Hour Spill Report Line in the NWT. Just over half (54%) of the reported spills occurred in the North Slave Region. The remaining spills occurred in the other regions: Sahtu (17%), Inuvik (15%), Dehcho (7%) and South Slave (7%).

The number of spills by the mining industry has decreased since 2015 to 28%. Spills originating from government agencies (25%) and transportation companies (6%) have shown an overall increase from 2015. Spills from unknown parties (15%), others (14%), private individuals (7%) and petroleum companies (5%) have remained relatively unchanged. Figure 1 below shows the number of reported spills by region between 2012 and 2016.

Residential oil tank spills

Since the release of the Homeowners Guide to Oil Tanks in 2010, there continues to be an overall decreasing trend in the number of spills reported in the NWT from residential-sized steel oil tanks (1,135 litres) caused by corrosion (see Figure 2).

The Guide is intended to:
- Act as a pollution prevention measure;
- Alert home, building and property owners to the potential environmental and financial liability of an oil spill; and
- Provide some simple, practical steps that help to minimize the chances of an oil spill.

The Department of Environment and Natural Resources (ENR) maintains a database of hazardous material spills reported in the Northwest Territories (NWT) since 1971. This report briefly summarizes the data collected for spills reported in 2016.

- 222 spills were reported in 2016; 57 fewer than in 2015.
- 64% of the reported spills were small, below 100 litres or kg.
- 54% of the spills reported were in the North Slave Region.
- Reported mining spills decreased by 14% from 2015. The completion of construction activities at a new diamond mine and the suspension of activities at another diamond mine are likely related to this decrease.
- Spills from government operations increased by 8%. This can be attributed to an increase in infrastructure upgrades and site remediation activities being managed by federal, territorial and municipal governments.

Figure 1 – Number of Reported Spills by Region

Figure 2 – Number of Spills by Residential Oil Tanks
Spills in the Northwest Territories 2016

What was spilled?
Fuel oil, which includes diesel and heating fuel, accounted for 37% of the spills reported in 2016, which is an increase of 2% from 2015. Additionally, there was a corresponding increase in volume (62,599 litres) of fuel oil spilled in 2016.

There was a 1% decrease in reported drill mud spills in 2016 from the previous year. However, there was a 78,215-litre increase in the volume of drill mud spilled compared to the previous year. This is attributed to a single drilling activity.

Wastewater, including sewage, produced water (salty wastewater brought to the surface during oil and gas extraction), mine tailings, fine processed kimberlite from diamond mines and fresh water were responsible for 18% of reported spills. Compared to 2015, there were four additional wastewater spills in 2016 and the volume reported increased by 2,067,847 litres. This volume increase was caused by a one-time spill event that did not leave the containment structures at the site.

Figure 3 below shows the number of spills reported by product categories.

How much was spilled?
Table 1 below shows the products spilled by category in 2016 compared to the previous five-year average. Five of the nine product volumes spilled were below the five-year average.

Table 1 – Volume Spilled (Litres)

<table>
<thead>
<tr>
<th>Product</th>
<th>2016</th>
<th>5-year Average (2011 – 2015)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wastewater</td>
<td>3,103,472</td>
<td>1,555,616</td>
</tr>
<tr>
<td>Fuel Oil</td>
<td>107,823</td>
<td>45,209</td>
</tr>
<tr>
<td>Drill Mud</td>
<td>90,000</td>
<td>18,134</td>
</tr>
<tr>
<td>Other</td>
<td>10,729</td>
<td>153,626</td>
</tr>
<tr>
<td>Lube Oil</td>
<td>6,787</td>
<td>5,153</td>
</tr>
<tr>
<td>Chemicals</td>
<td>4,205</td>
<td>11,781</td>
</tr>
<tr>
<td>Gasoline</td>
<td>161</td>
<td>6,806</td>
</tr>
<tr>
<td>Crude Oil</td>
<td>155</td>
<td>5,199</td>
</tr>
<tr>
<td>Unknown</td>
<td>21</td>
<td>214</td>
</tr>
</tbody>
</table>

1 “Crude Oil” is separated from “Others” to show volume.

Figure 4 below shows the number of spills by volume over the last five years. 64% of all spills in 2016 were less than 100 litres.

For more information on spills, contact:
Environment 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

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

“Preventing a spill is more desirable than even the best clean up!”