



# Statewide Hazmat Response Work Group

<https://dec.alaska.gov/spar/ppr/prevention-preparedness/hazmat/>



## Extremely Hazardous Substance (EHS) Release Summary for Calendar Year 2018 (May 31, 2019)

The State of Alaska received reports of 41 extremely hazardous substance (EHS) releases during Calendar Year (CY) 2018.

### EHS Releases by Substance and Quantity:

The following table is a breakdown of the EHS released over CY 2018.

CY2018 EHS Releases by Substance and Quantity			
Extremely Hazardous Substance (EHS)	Number of Releases	Quantity (lbs.)	% of releases (by weight)
Ammonia (Anhydrous)	32	149.91	70.25
Hydrogen Peroxide	1	.08	.04
Sulfuric Acid	6	13.52	6.33
Methyl Alcohol (Methanol)	1	48.84	22.89
Hydrazine (Anhydrous)	1	1.05	.49
<b>Total</b>	<b>41</b>	<b>213.4</b>	<b>100.000</b>

To ensure consistency, the total volume released was converted to pounds, using a the chemical's density at standard temperature and pressure

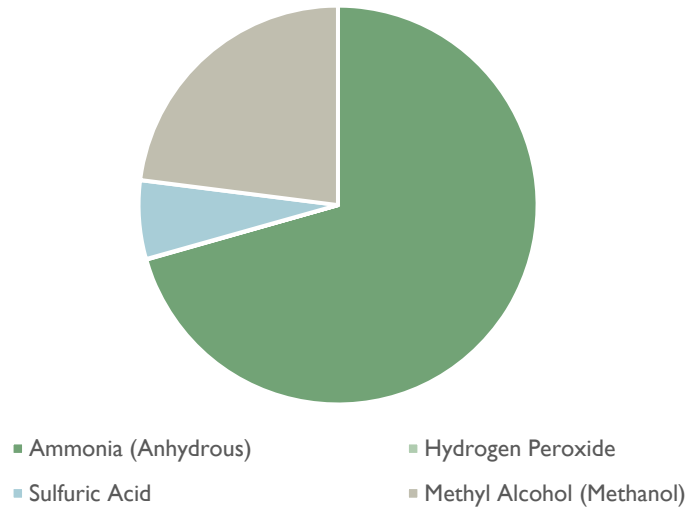
By comparison, in CY2017 there were 71 EHS releases. Ammonia (Anhydrous) accounted for 87.67% of the total quantity of releases, followed by Hydrogen Peroxide (10.23%), Chlorine (2.09%) and, Hydrazine (Anhydrous) (.001%). No other releases of EHS Chemicals were reported during the 2016 calendar year.

### Significant EHS Releases:

Significant EHS releases for CY 2018 were as follows:

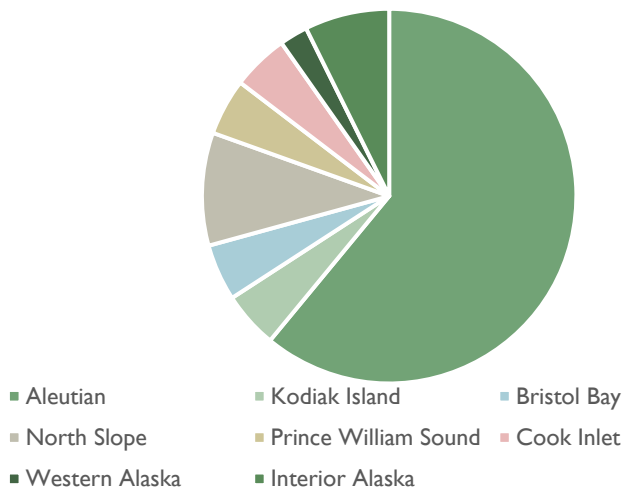
- 100 pounds of ammonia (anhydrous) September 4, 2018 – Dutch Harbor)
- 46 pounds of lead, 18.5 of sulfuric acid, & 48.84 pounds of methanol from repeater station (August 10, 2018 – Bristol Bay)

EHS Releases by Substance and % Weight



### EHS Releases by Location:

EHS Releases by Region



EHS Releases by Region	Number of Releases
Aleutian	25
Kodiak Island	2
Bristol Bay	2
North Slope	4
Prince William Sound	2
Cook Inlet	2
Western Alaska	1
Interior Alaska	3
<b>Total</b>	<b>41</b>

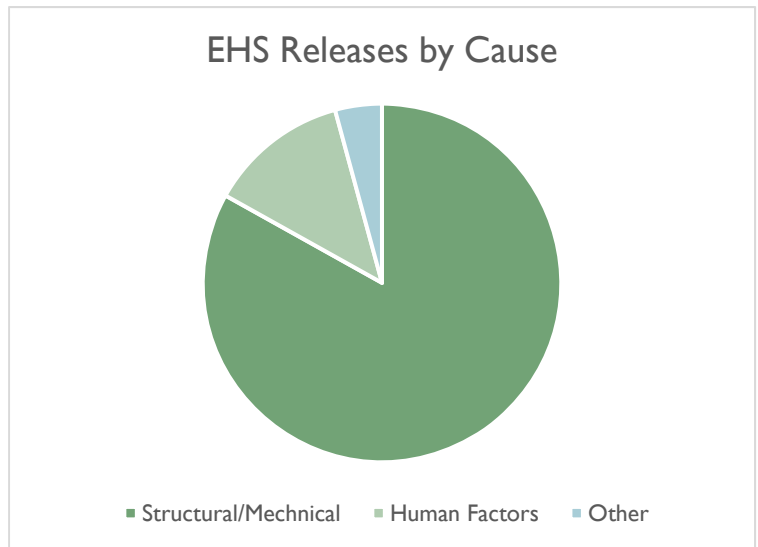
During CY 2018, the Aleutians (60%) accounted for over half of the total number of releases throughout the State. North Slope (9.75%), Interior Alaska (7.3%) Kodiak Island (4.8%), Bristol Bay (4.8%), Prince William Sound (4.8%), Cook Inlet (4.8%), all had multiple releases. Western Alaska reported one release.

In comparison, during CY 2017, the Aleutians (61%) and Kodiak (20.5%) accounted for nearly 4/5 of the total number of releases throughout the State. Bristol Bay (12.5%), Prince William Sound (2.8%), North Slope (2.8%), all had multiple releases. Interior Alaska reported one release. The Northwest Arctic, Western Alaska, Cook Inlet, and Southeast Alaska subareas did not report any EHS releases for CY 2017.

### EHS Releases by Cause:

Analysis of the State's SPILLS database, which tracks these releases shows "Structural/Mechanical" (90%), "Human Factors" (5%), and "Other" (5%) were the primary causes for the EHS releases in the State Alaska for CY 2018. Examples of "Structural/Mechanical" causes include equipment failure, valve failure, and seal failure.

EHS Releases by Subarea	Number of Releases
Structural/Mechanical	37
Human Factors	2
Other	2
<b>Total</b>	<b>71</b>



By comparison in CY 2017, "Structural/Mechanical" (83%), "Human Factors" (13%), and "Other" (4%) were the primary causes for the EHS releases