



Statewide Hazmat Response Work Group



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

Extremely Hazardous Substance (EHS) Release Summary for Calendar Year 2017 (September 17, 2018)

The State of Alaska received reports of 72 extremely hazardous substance (EHS) releases during Calendar Year (CY) 2017.

EHS Releases by Substance and Quantity:

The following table is a breakdown of the EHS released over CY 2017.

CY2017 EHS Releases by Substance and Quantity			
Extremely Hazardous Substance (EHS)	Number of Releases	Quantity (lbs)	% of releases (by weight)
Ammonia (Anhydrous)	67	3015.62	87.672
Hydrogen Peroxide	1	352.00	10.234
Chlorine	2	72.00	2.093
Hydrazine (Anhydrous)	1	0.03	0.001
Total	71	3439.65	100.000

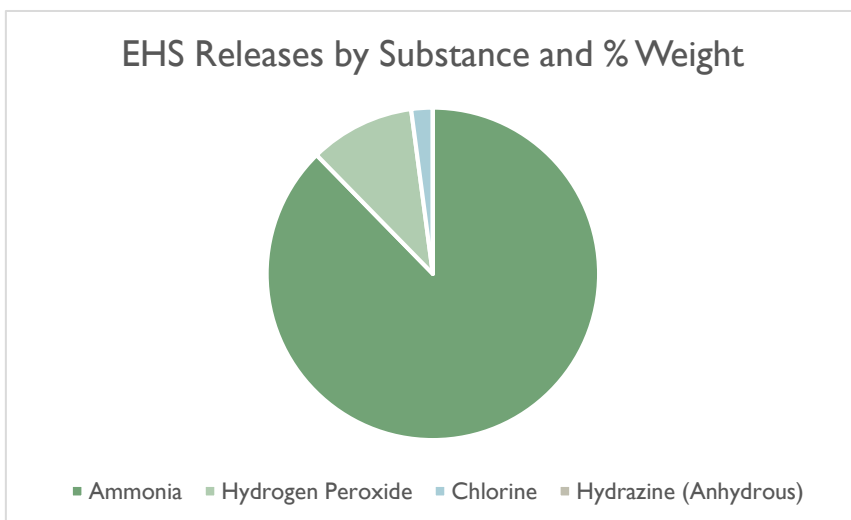
To ensure consistency, the total volume released was converted to pounds, using a general factor of 1 gallon = 8 pounds.

By comparison, in CY2016 there were 89 EHS releases. Hydrochloric Acid accounted for 47% of the total quantity of releases, followed by Sulfur (Dioxide) (28%), Ammonia (Anhydrous) (24%). There was one reportable release each of Nitric Acid (>40% Solution), Chlorine, Sulfuric Acid, Hydrazine (Anhydrous). No other releases of EHS Chemicals were reported during the 2016 calendar year.

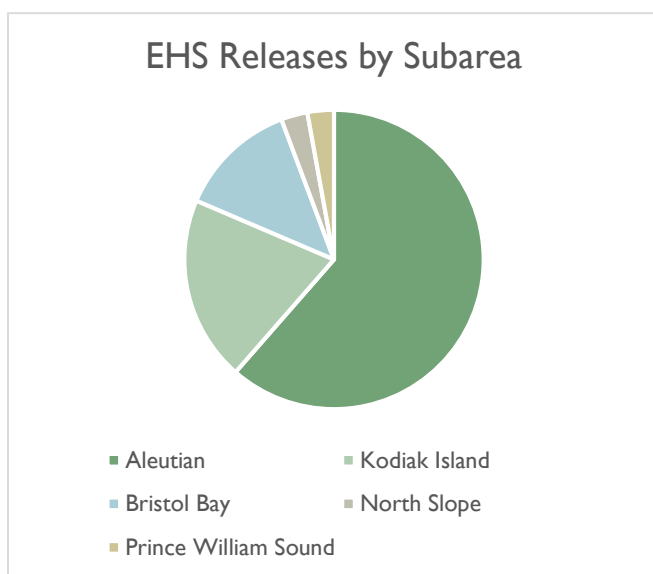
Significant EHS Releases:

Significant EHS releases for CY 2017 were as follows:

- 2400 pounds of ammonia (anhydrous)
June 9, 2017 – Bering Sea)
- 208 pounds of ammonia (anhydrous)
(May 26, 2017 – Naknek)
- 352 pounds of hydrogen peroxide
(October 30, 2017 – Valdez)



EHS Releases by Location:



EHS Releases by Subarea	Number of Releases
Aleutian	43
Kodiak Island	14
Bristol Bay	9
North Slope	2
Prince William Sound	2
Interior Alaska	1
Total	71

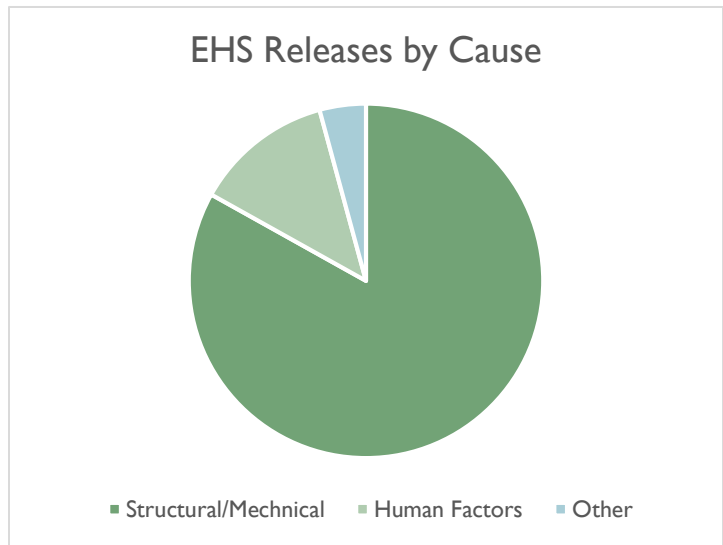
During CY 2017, the Aleutians (61%) and Kodiak (20.5%) accounted for nearly 4/5 of the total number of releases throughout the State. Bristol Bay (12.5%), Prince William Sound (2.8%), North Slope (2.8%), all had multiple releases. Interior Alaska reported one release. The Northwest Arctic, Western Alaska,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

In comparison, during CY 2016 the Aleutians (79%) accounted for nearly 4/5 of the total number of releases throughout the State. Bristol Bay (4.5%), Kodiak (4.5%), Cook Inlet (3.3%), Interior Alaska (3.3%), North Slope (3.3%), and Southeast Alaska (2.1%) all had multiple releases. The Northwest Arctic, Western Alaska, and the Prince William Sound subareas did not report any EHS releases for CY 2016.

EHS Releases by Cause:

Analysis of the State's SPILLS database, which tracks these releases shows "Structural/Mechanical" (83%), "Human Factors" (13%), and "Other" (4%) were the primary causes for the EHS releases in the State Alaska for CY 2017. Examples of "Structural/Mechanical" causes include equipment failure, valve failure, and seal failure.

EHS Releases by Subarea	Number of Releases
Structural/Mechanical	59
Human Factors	9
Other	3
Total	71



By comparison in CY 2016, "Structural/Mechanical" (71%), "Human Factors" (23%), and "Other" (5%) were the primary causes for the EHS releases.