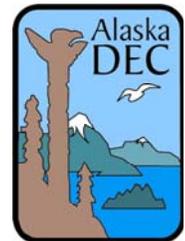




Statewide Hazmat Response Work Group



<http://dec.alaska.gov/spar/perp/hazmat.htm>

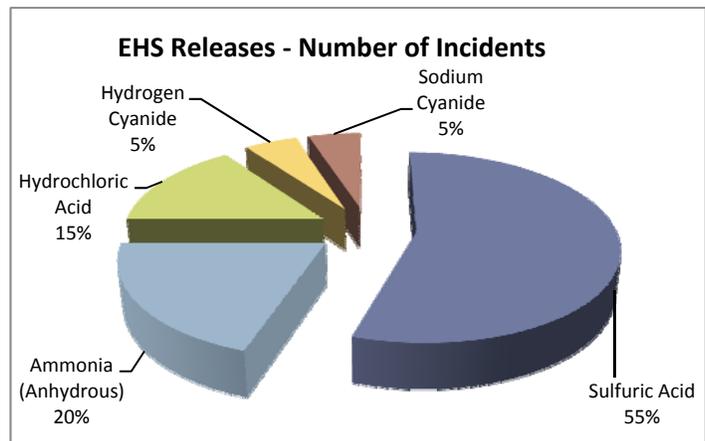
Extremely Hazardous Substance (EHS) Release Summary for Calendar Year 2010

The State of Alaska experienced a total of 20 extremely hazardous substance (EHS) releases during Calendar Year 2010.

EHS Releases by Substance and Quantity: The following is a breakdown of the EHS released over the past calendar year. To ensure consistency, the total volume released was converted to pounds, using a general factor of 1 gallon = 8 pounds. Sulfuric acid accounted for 55% of the total number of releases, followed by anhydrous ammonia (20%). Hydrochloric acid releases comprised 15% of the total number of releases, while hydrogen cyanide (5%) and sodium cyanide (5%) releases constituted the remainder of the total. No other releases of EHS chemicals were reported during the calendar year.

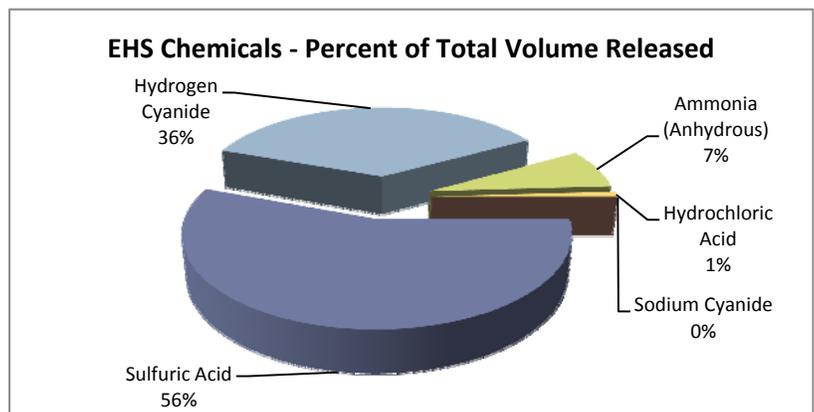
By comparison, in CY2009 sulfur dioxide accounted for 35% of the total number of releases, followed by sulfuric acid (27%). Releases from sulfur dioxide also contributed to nearly 100% of the total volume released for CY2009.

Substance	Number of Releases	Quantity (lbs)
Sulfuric Acid	11	2,424
Ammonia (Anhydrous)	4	313
Hydrochloric Acid	3	40
Hydrogen Cyanide	1	1,584
Sodium Cyanide	1	1
Total	20	4,362



Significant EHS Releases: The significant EHS releases for Calendar Year 2010 were as follows:

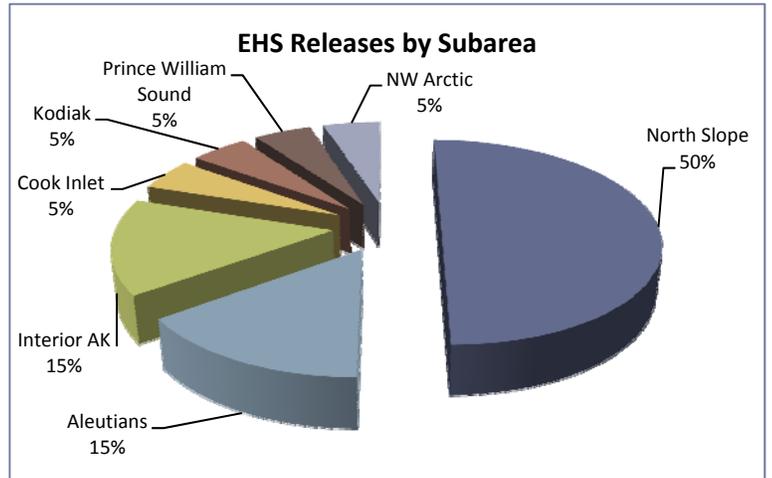
- 2,400 pounds of sulfuric acid (May 13, 2010 – North Pole)
- 1,584 pounds of hydrogen cyanide (August 11, 2010 – Interior Alaska)
- 190 pounds of anhydrous ammonia (July 13, 2010 – Aleutians)
- 50 pounds of anhydrous ammonia (July 28, 2010 – Kodiak)



EHS Releases by Location: In terms of EHS releases by subarea, the North Slope accounted for 50% of the total number of releases throughout the State, while the Aleutians (15%) and Interior Alaska (15%) jointly comprised nearly a third of the releases. The Cook Inlet, Kodiak, Prince William Sound, and Northwest Arctic subareas experienced one EHS release, while the Southeast Alaska, Bristol Bay, and Western Alaska subareas did not report any EHS releases for Calendar Year 2010.

In Calendar Year 2009, the Cook Inlet (46%) and North Slope (27%) subareas accounted for 73% of the total releases, followed by the Interior Alaska (12%) and Southeast (11%) subareas.

EHS Releases by Subarea	Number
North Slope	10
Aleutians	3
Interior Alaska	3
Cook Inlet	1
Kodiak	1
Prince William Sound	1
NW Arctic	1
Southeast Alaska	0
Bristol Bay	0
Western AK	0
Total	20



EHS Releases by Cause: “Structural/Mechanical” (50%) and “Human Factors” causes (30%) were the leading causes for 80% of the EHS releases in the State of Alaska for CY 2010. “Structural/Mechanical” causes included equipment failure, valve failure, and seal failure. “Human Factors” causes included cargo not secured and human error.

By comparison in Calendar Year 2009, “Structural/Mechanical” causes resulted in 50% of the releases, followed by “Other” causes at 35%, and “Human Factors” causes (15%).

EHS Releases by Cause	Number
Structural/Mechanical	10
Human Factors	6
Unknown	2
Other	2
Total	20

