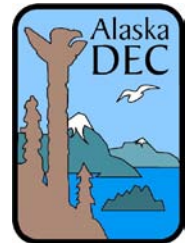




Statewide Hazmat Response Work Group



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

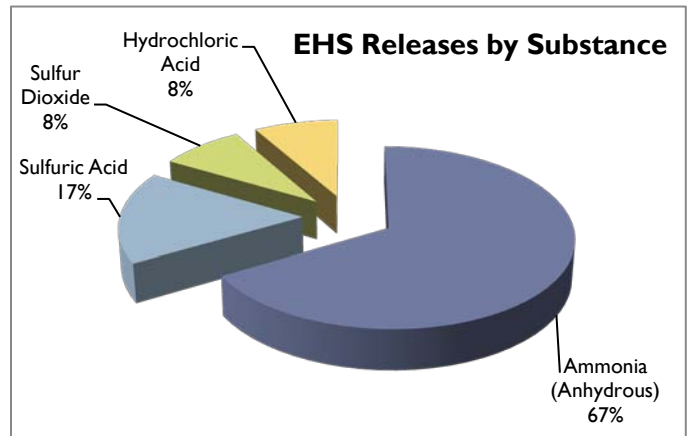
Extremely Hazardous Substance (EHS) Release Summary for Calendar Year 2011 (February 1, 2012)

The State of Alaska experienced a total of 24 extremely hazardous substance (EHS) releases during Calendar Year 2011.

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. Anhydrous ammonia accounted for 67% of the total number of releases, followed by sulfuric acid (17%). Hydrochloric acid (8%) and sulfur dioxide (8%) releases constituted the remainder of the total. No other releases of EHS chemicals were reported during the calendar year.

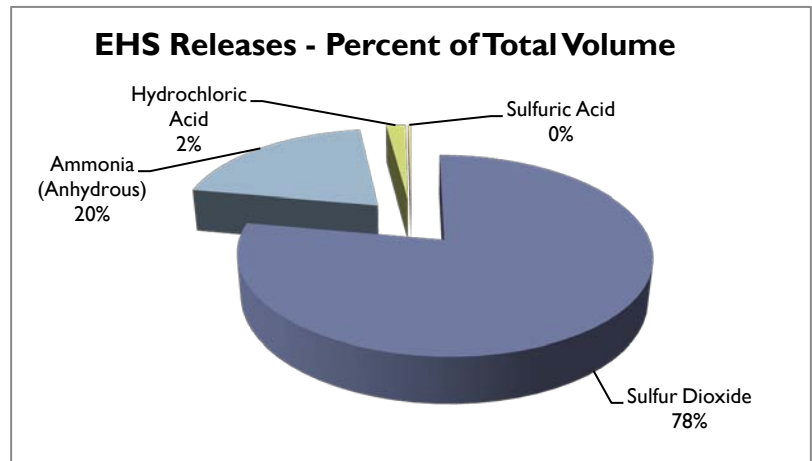
By comparison, in CY2010 sulfuric acid accounted for 55% of the total number of releases, followed by anhydrous ammonia (20%). Releases from sulfuric acid also contributed to 56% of the total volume released for CY2010.

Substance	No. of Releases	Qty (lbs)
Ammonia (Anhydrous)	16	866
Sulfuric Acid	4	11
Sulfur Dioxide	2	3,359
Hydrochloric Acid	2	80
Total	24	4,316



Significant EHS Releases: The significant EHS releases for Calendar Year 2011 were as follows:

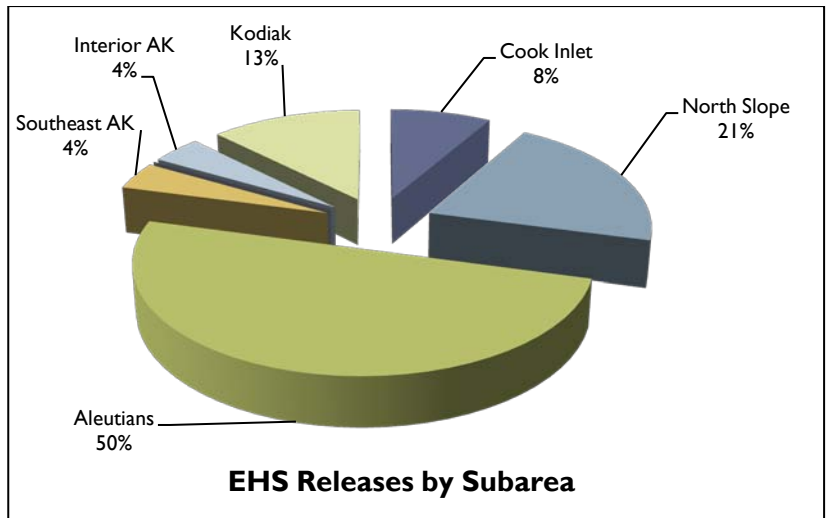
- 2,950 pounds of sulfur dioxide (November 21, 2011 – Nikiski)
- 409 pounds of sulfur dioxide (February 7, 2011 – Nikiski)
- 300 pounds of anhydrous ammonia (October 22, 2011 – Dutch Harbor)
- 126 pounds of anhydrous ammonia (October 14, 2011 - Dutch Harbor)
- 90 pounds of anhydrous ammonia (July 21, 2011 – Sitka)



EHS Releases by Location: In terms of EHS releases by subarea, the Aleutians accounted for 50% of the total number of releases throughout the State, while the North Slope (21%) and Kodiak (13%) jointly comprised over a third of the releases. The Kodiak, Cook Inlet, Interior Alaska, and Southeast Alaska subareas reported a few EHS releases, while the Bristol Bay, Northwest Arctic and Western Alaska subareas did not report any EHS releases for Calendar Year 2011.

In Calendar Year 2010, the North Slope (50%), Aleutians (15%), and Interior (15%) subareas accounted for 80% of the total releases, followed by 5% each for the Prince William Sound, Kodiak, Cook Inlet, and Northwest Arctic subareas.

EHS Releases by Subarea	Number
Cook Inlet	2
North Slope	5
Aleutians	12
Southeast AK	1
Bristol Bay	0
Prince William Sound	0
NW Arctic	0
Interior AK	1
Kodiak	3
Western AK	0
	24



EHS Releases by Cause: “Human Factors” (50%) and “Structural/Mechanical” causes (38%) were the leading causes for nearly 90% of the EHS releases in the State of Alaska for CY 2011. Examples of “Human Factors” causes include cargo not secured and human error. “Structural/Mechanical” causes include equipment failure, valve failure, and seal failure.

By comparison in Calendar Year 2010, “Structural/Mechanical” causes resulted in 50% of the releases, followed by “Human Factors” causes at 30%.

EHS Releases by Cause	Number
Structural/Mechanical	9
Human Factors	12
Other	2
Unknown	1
Total	24

