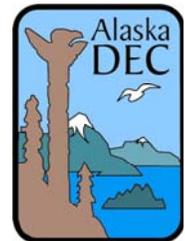




Statewide Hazmat Response Work Group



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

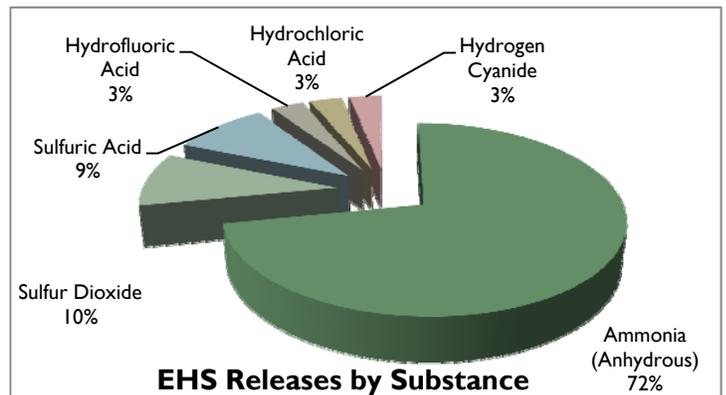
Extremely Hazardous Substance (EHS) Release Summary for Calendar Year 2012 (February 11, 2013)

The State of Alaska experienced a total of 32 extremely hazardous substance (EHS) reported releases during Calendar Year 2012.

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 72% of the total number of releases, followed by sulfur dioxide (10%) and sulfuric acid (9%). There was one reportable release each of Hydrochloric Acid, Hydrofluoric Acid, and Hydrogen Cyanide which constituted the remainder of the total. No other releases of EHS chemicals were reported during the calendar year.

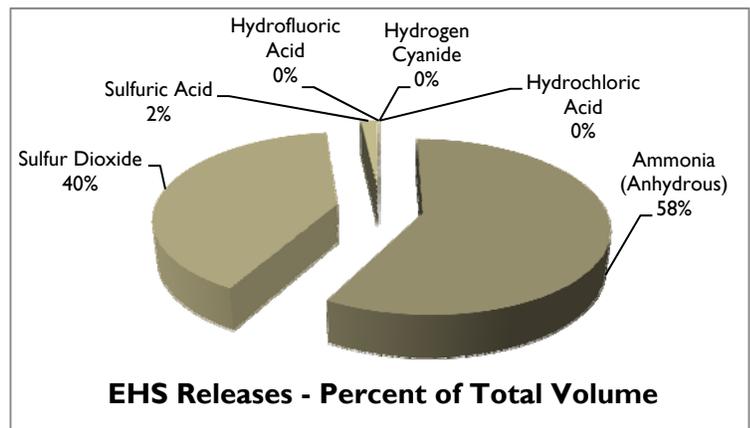
By comparison, in CY2011 Anhydrous Ammonia accounted for 67% of the total number of releases, followed by Sulfuric Acid (17%). Releases from sulfur dioxide also contributed to 78% of the total volume released for CY2011.

| Substance | Number of Releases | Quantity (lbs) |
|---------------------|--------------------|----------------|
| Ammonia (Anhydrous) | 23 | 21,382 |
| Sulfur Dioxide | 3 | 14,850 |
| Sulfuric Acid | 3 | 608 |
| Hydrofluoric Acid | 1 | 40 |
| Hydrochloric Acid | 1 | 4 |
| Hydrogen Cyanide | 1 | 4 |
| Total | 32 | 36,888 |



Significant EHS Releases: The significant EHS releases for Calendar Year 2012 were as follows:

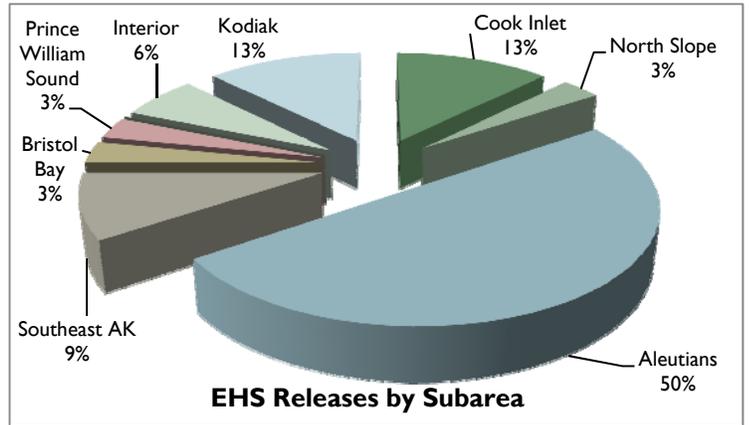
- 20,000 pounds of anhydrous ammonia (July 6, 2012 – Dutch Harbor)
- 7,000 pounds of sulfur dioxide (May 13, 2012 – Nikiski)
- 6,500 pounds of sulfur dioxide (October 23, 2012 – Nikiski)
- 1,350 pounds of sulfur dioxide (September 16, 2012 - Nikiski)
- 500 pounds of anhydrous ammonia (May 10, 2012 – Dutch Harbor)



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 Cook Inlet (13%) and Kodiak (13%) jointly comprised over a quarter of the releases. The Southeast Alaska, Interior, North Slope, Prince William Sound and Bristol Bay subareas reported a few EHS releases, while the Northwest Arctic and Western Alaska subareas did not report any EHS releases for Calendar Year 2012.

In Calendar Year 2011, the Aleutians (50%), North Slope (21%), and Kodiak (13%) subareas accounted for 84% of the total releases, followed by Cook Inlet (8%), Interior (4%), and Southeast Alaska (4%) subareas.

| EHS Releases by Subarea | Number |
|-------------------------|-----------|
| Cook Inlet | 4 |
| North Slope | 1 |
| Aleutians | 16 |
| Southeast AK | 3 |
| Bristol Bay | 1 |
| Prince William Sound | 1 |
| NW Arctic | 0 |
| Interior AK | 2 |
| Kodiak | 4 |
| Western AK | 0 |
| Total | 32 |



EHS Releases by Cause: “Structural/Mechanical” (75%), “Other” (13%), and “Human Factors” (12%) were the primary causes for the EHS releases in the State of Alaska for CY 2012. Examples of “Structural/ Mechanical” causes include equipment failure, valve failure, and seal failure. “Human Factors” causes include cargo not secured and human error.

By comparison in Calendar Year 2011, “Human Factors” causes resulted in 50% of the releases, followed by “Structural Mechanical” causes at 38%.

| EHS Releases by Cause | Number |
|-----------------------|-----------|
| Structural/Mechanical | 24 |
| Human Factors | 4 |
| Other | 4 |
| Total | 32 |

