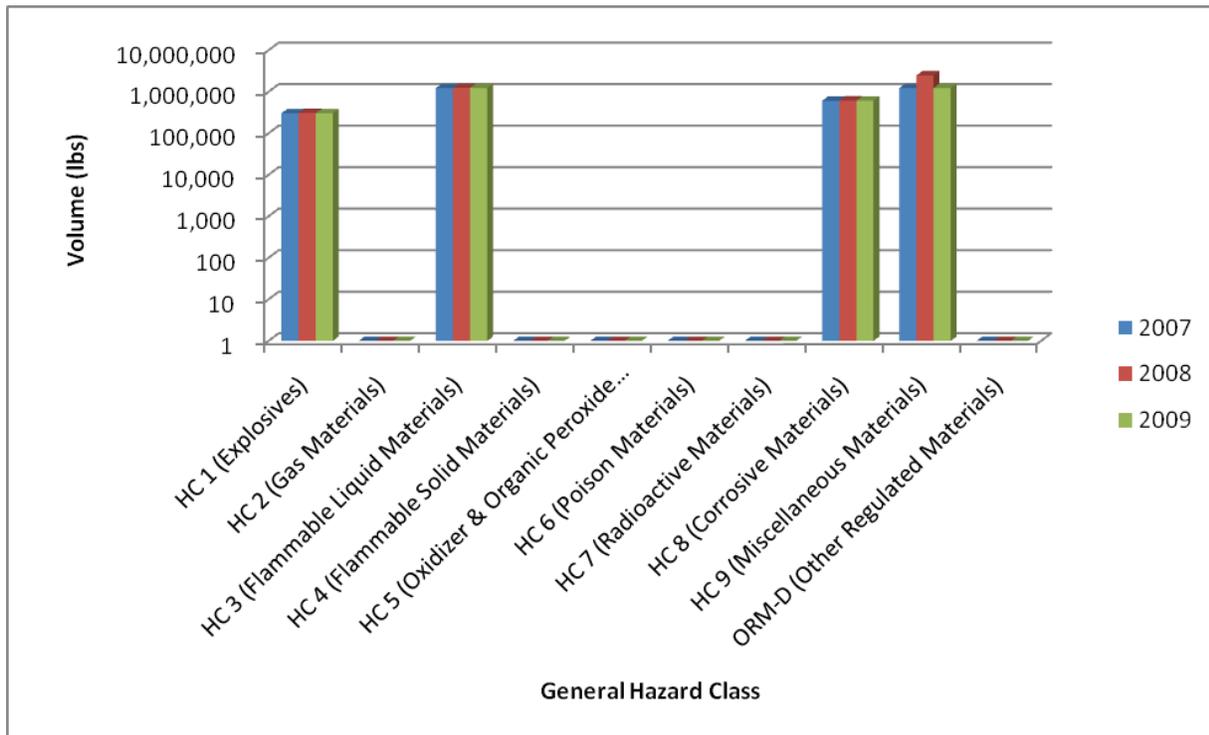


5.6 Bristol Bay

The transportation of hazardous materials through the Bristol Bay Subarea (BB) includes two modes of transportation: air and marine. The breakdown of hazardous materials volumes from year to year by Hazard Class is depicted in Figure 5-26 below.

Figure 5-26. Volumes of Hazardous Materials Shipped into Bristol Bay presented on a log scale



In general, HC 3 commodities (Flammable Liquid Materials), HC 9 (Miscellaneous Materials), and HC 8 commodities (Corrosive Materials) consistently dominated the volume of hazardous materials commodities shipped within the Bristol Bay Subarea. Figures 5-27, 5-28, and 5-29 below depict the volume of hazardous materials by hazard class as a percentage of the total volume shipped within the subarea for each calendar year.

Figure 5-27. BB Hazardous Materials Percentage of Total Volume by Hazard Class for 2007

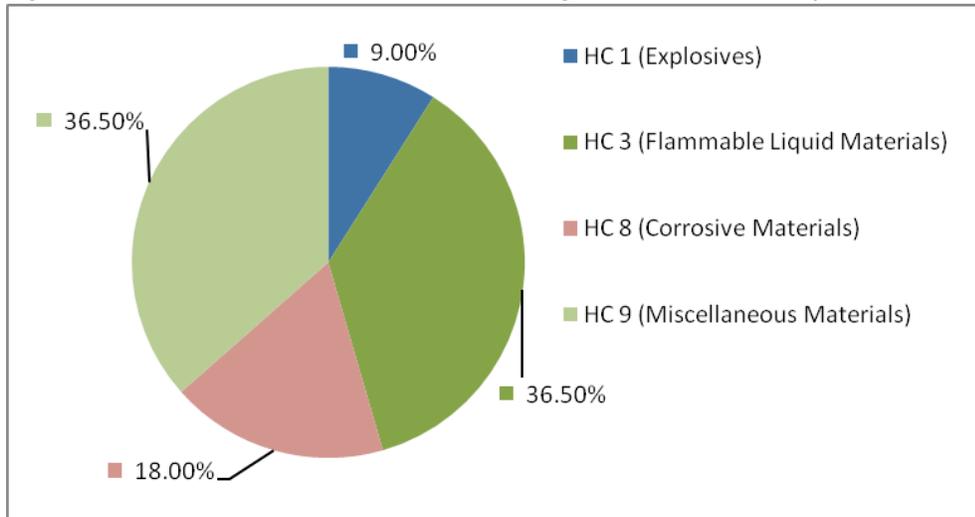


Figure 5-28. BB Hazardous Materials Percentage of Total Volume by Hazard Class for 2008

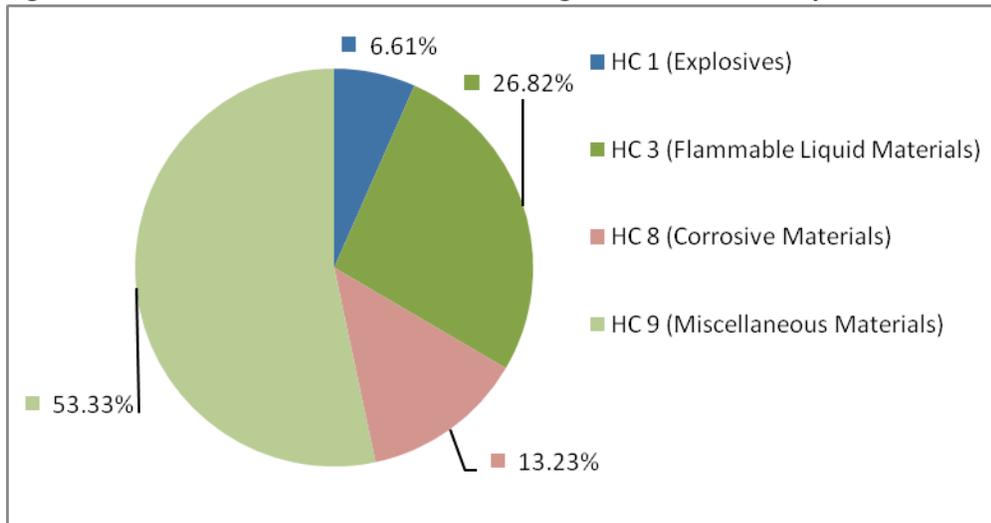


Figure 5-29. BB Hazardous Materials Percentage of Total Volume by Hazard Class for 2009

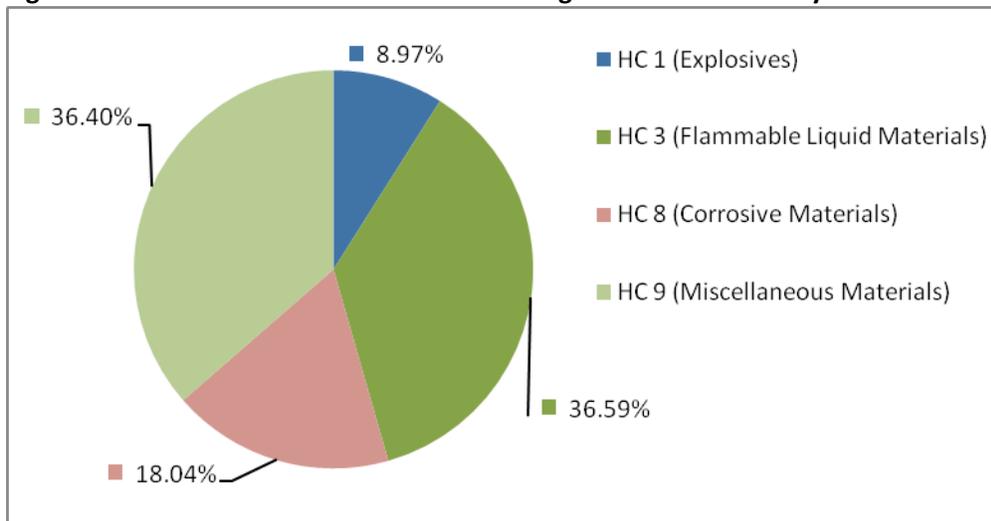


Table 5-42 lists the volumes of hazardous materials shipped within the Bristol Bay subarea by hazard class for each calendar year evaluated for this study.

Table 5-42. Volumes of Hazard Class Transported within BB Subarea by Calendar Year

Hazard Class	2007 (Total Volume in lbs)	2008 (Total Volume in lbs)	2009 (Total Volume in lbs)
HC 1 (Explosives)	303,750	308,925	305,325
HC 2 (Gas Materials)	-	-	-
HC 3 (Flammable Liquid Materials)	1,231,875	1,252,864	1,244,663
HC 4 (Flammable Solid Materials)	-	-	-
HC 5 (Oxidizer & Organic Peroxide Materials)	-	-	-
HC 6 (Poison Materials)	-	-	-
HC 7 (Radioactive Materials)	-	-	-
HC 8 (Corrosive Materials)	607,500	617,850	613,850
HC 9 (Miscellaneous Materials)	1,231,875	2,491,127	1,238,263
ORM-D (Other Regulated Materials)	-	-	-

A more detailed evaluation of each hazard class is provided below. A shipment volume threshold was not established for the Bristol Bay subarea due to the limited number and volumes of shipments reported.

HC 1 Explosives: The primary explosives that were transported through the Bristol Bay Subarea were HC 1.0 (unspecified hazard class) and the volumes of the shipments were very consistent from year to year. The primary mode of transportation for these commodities was via air – therefore the volumes shipped, as noted in the previous section, are artificial and based on an algorithm generated from some discussions with the air carrier. However, it is apparent that based on the consistency of the volumes transported, the number of hazardous materials shipments in the Bristol Bay Subarea via aircraft remained fairly consistent. Table 5-43 lists the primary HC 1 commodities shipped within the Bristol Bay Subarea.

Table 5-43. Primary Hazard Class 1 Commodities Shipped within the BB Subarea

Hazard Class	Hazardous Material Description	UN ID Number
1.0	Ammunition	0006

HC 2 Gas Materials: There were no gas materials shipped within the Bristol Bay Subarea according to the data evaluated for this study.

HC 3 Flammable Liquid Materials: The shipments of HC 3.0 within the Bristol Bay Subarea were primarily shipped via aircraft. Fuel barges also make deliveries to the Bristol Bay subarea, but this information was not captured in this dataset. The volumes shipped via aircraft, as noted in the previous section, are somewhat artificial and based on an algorithm generated from discussions with the air carrier. However, the volume

changes reflect the changes in the number of hazardous materials shipments into the Bristol Bay Subarea. Table 5-44 lists the primary HC 3 commodities shipped within the Bristol Bay Subarea.

Table 5-44. Primary Hazard Class 3 Commodities Shipped within the BB Subarea

Hazard Class	Hazardous Material Description	UN ID Number
3.0	Gasoline	1203
	Flammable Liquid, Toxic, N.O.S.	1992
	Flammable Liquid, N.O.S.	1993

HC 4 Flammable Solid Materials: There were no Flammable Solid Materials transported within this Subarea during this time period according to the data evaluated.

HC 5 Oxidizer and Organic Peroxide Materials: No Oxidizer or Organic Peroxide Materials were shipped in this Subarea according to the data evaluated for this study.

HC 6 Poisons: No Poisons were reported for this Subarea.

HC 7 Radioactive Materials: No Radioactive Materials were reported for this Subarea.

HC 8 Corrosive Materials: The volumes of HC 8.0 shipments within the Bristol Bay Subarea remained nearly equivalent from year to year. No discernible trend noted. Table 5-45 lists the primary HC 8 commodities shipped within the Bristol Bay Subarea.

Table 5-45. Primary Hazard Class 8 Commodities Shipped within the BB Subarea

Hazard Class	Hazardous Material Description	UN ID Number
8.0	Amines, Liquid, Corrosive, N.O.S. or Polyamines, Liquid, Corrosive, N.O.S.	2735
	Corrosive Cleaning Supplies	1760
	Batteries, Wet, Filled with Acid	2794

HC 9 Miscellaneous Materials: The volume of HC 9.0 commodities shipped within the Bristol Bay Subarea saw an increase between 2007 and 2008 and then dropped but remained higher than 2007 levels in 2009. The increase in 2008 could be attributable to the increase in the Alaska Permanent Fund Dividend checks during this timeframe. Table 5-46 lists the primary HC 9 commodities shipped within the Bristol Bay Subarea.

Table 5-46. Primary Hazard Class 9 Commodities Shipped within the BB Subarea

Hazard Class	Hazardous Material Description	UN ID Number
9.0	Engines / Vehicles	3166

Figure 5-30 depicts the volume of hazardous materials shipped each year within the Bristol Bay Subarea by Hazardous Material Name for volumes exceeding 10,000 pounds.

Figure 5-30. Hazardous Material Commodities by Hazardous Material Name (Greater than 10,000 lbs) for the Bristol Bay Subarea, for 2007 through 2009, presented on a log scale.

