



Southwest Ohio Commodity Flow Study Brown, Butler, Clermont, Hamilton, and Warren Counties

Purpose: To identify the types, quantities, and locations of hazardous materials originating, terminating, or moving through our region in order to improve preparedness, response, recovery and mitigation of future incidents. The Study provides a snapshot of the hazardous materials commodities that are transported via river, rail, truck and pipelines.

Commodity Flow Study

- Over 575 assessment hours (river, rail, and truck)
- 47,498 commercial motor vehicles counted
- 5,538 hazmat placards captured

Assessment Data:

- 360 compressed gas bulk transport
- 151 cryogenic bulk transport
- 4,379 liquid bulk transport
- 43,207 cargo bulk transport
- Traffic volume during 4 hour period represents approx. 0.0005% of annual traffic volume.
- 36% - Percentage of HazMat carriers compared to commercial motor vehicle traffic observed on particular routes throughout the region.
- 8% - Regional average (truck traffic volume) of HazMat carriers compared to commercial motor vehicles.

Findings:

The top 5 HazMat commodities transported:

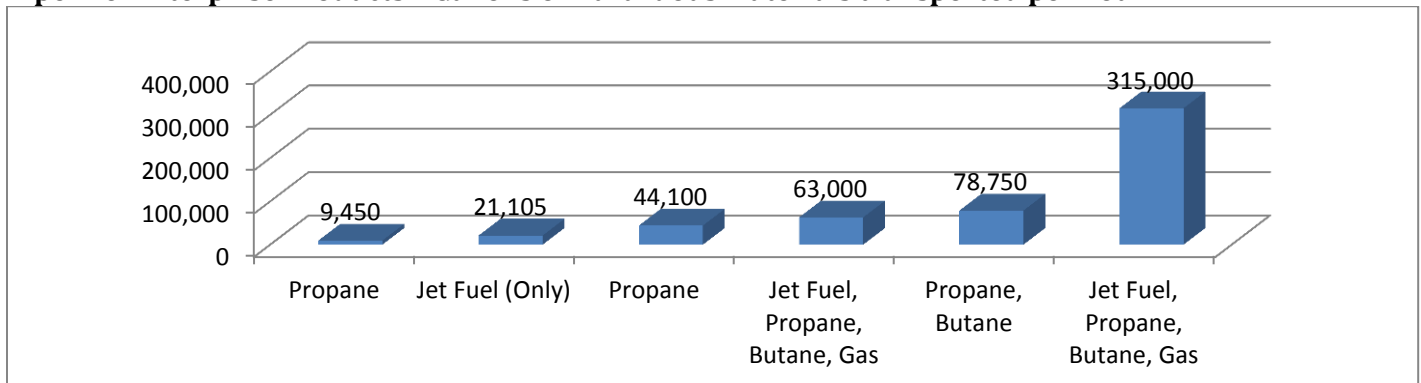
River

1. Gasoline/Aviation Fuel
2. Distillate Fuel Oil
3. Lube Oil and Greases
4. Petro, Bitumen, Coke and Asphalt
5. Crude Petroleum

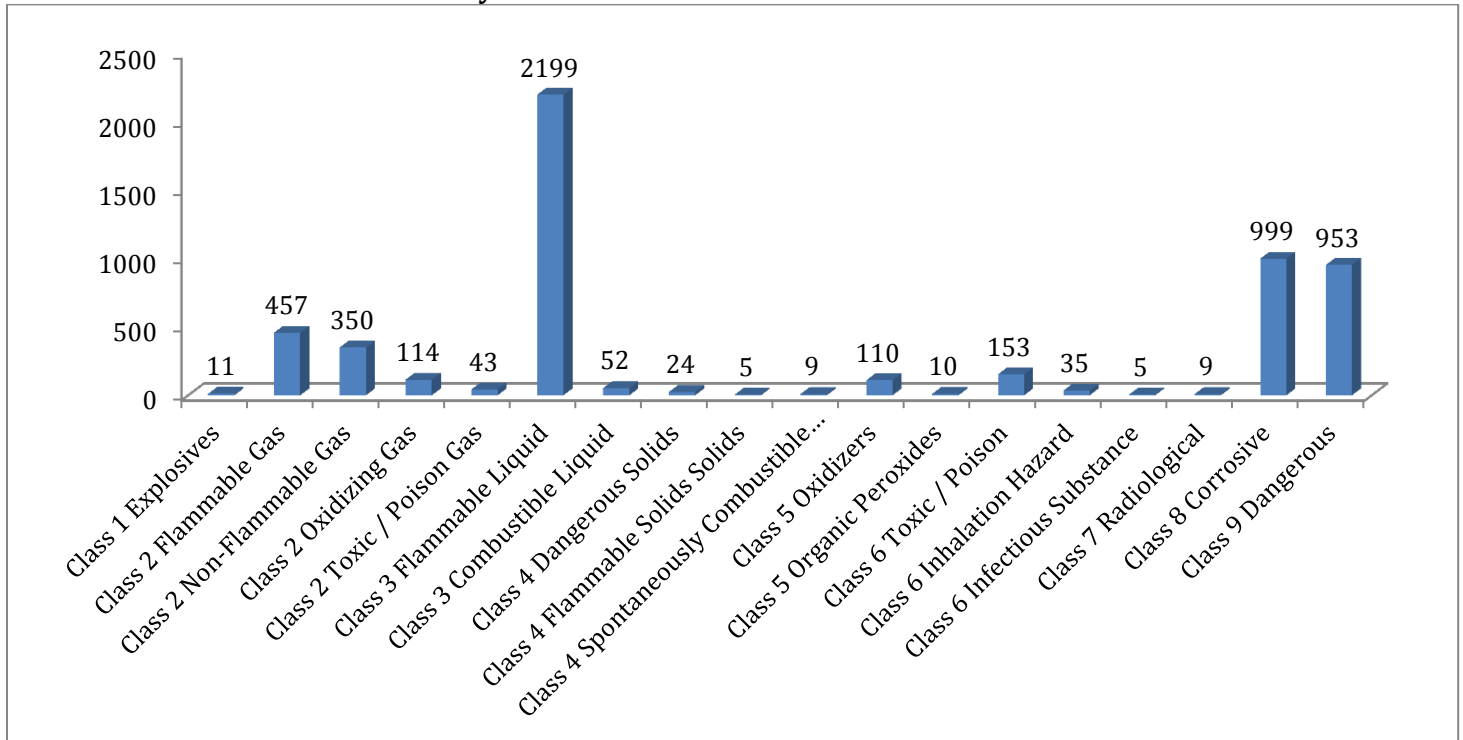
Rail

1. Petroleum Gases
2. Sodium Hydroxide
3. Sulfuric Acid
4. Alcohol NOS
5. Acrylonitrile

Pipeline: Enterprise Products – Gallons of Hazardous Materials transported per hour



Truck: Hazardous Material Count by Hazard Class



Recommendations

- Further consider Tier II transportation analysis.
- Consider evaluation of equipment placement.
- Evaluate personnel training and placement.
- Evaluate effectiveness of designated hazardous materials routes.
- Train and exercise scenarios involving hazardous materials responses on a regular basis.
- Plan alternate routes circumventing high volume hazardous materials locations accounting for distances (circumvention) of up to one mile.
- Conduct enforcement/compliance on hazardous materials loads with a particular emphasis on Dangerous placarding to ensure proper compliance with regulations.
- Continue to develop pipeline resources, maps, quantities, locations, products, and contacts.
- Continue to develop railroad resources, maps, quantities, locations, products, and contacts.
- Strive towards consistent information flow from railroads. (data similarities)
- Evaluate preparedness for waterway hazardous materials incident at the local level.
- Work collaboratively with waterway response entities.
- Treat all commercial motor vehicle incidents and crashes as potential hazardous materials events.