# OK-EFRA (EHS Flow and Risk Assessment) Tulsa County EFRA Summary Sheet



The purpose of this data sheet is to inform LEPCs, first responders, and other local bodies in a county as to what extremely hazardous substances (EHS) may be transported on local roads. This information is expected to assist county personnel in their emergency preparedness planning activities. The EHS shipment data was collected through an online survey of facilities in the state that store EHS on-site and send or receive such EHS materials on a regular basis. The online survey used data on facilities and their EHS storage collected by Oklahoma Department of Environmental Quality in 2018. The survey data may not include all EHS transported in a county.

### **EHS Flow on County Roads**





# EHS Transported on County Roads

| EHS                  | Stored/Passing<br>Through | Annual Amount (pounds) | Shipments<br>per year | Shipments Frequency                                     | Container                       |
|----------------------|---------------------------|------------------------|-----------------------|---|---------------------------------|
| Ammonia              | Stored/Passing<br>Through | 88,529,600             | 1577                  | Daily, Weekly, Monthly,<br>Quarterly, Yearly            | Cylinder, Tanker                |
| Chlorine             | Stored/Passing<br>Through | 97,827,800             | 347                   | Weekly, Biweekly, Monthly, Bimonthly, Quarterly, Yearly | Drum, Cylinder,<br>Tanker       |
| Hydrochloric<br>Acid | Stored/Passing<br>Through | 8,298,300              | 110                   | Biweekly, Monthly,<br>Bimonthly, Yearly                 | Drum, Railcar,<br>Tanker, Tote  |
| Nitric Acid          | Stored/Passing<br>Through | 125,800                | 29                    | Monthly, Bimonthly,<br>Quarterly, Yearly                | Drum, Tanker,<br>IBC            |
| Phosporic<br>Acid    | Stored/Passing<br>Through | 13,500                 | 4                     | Quarterly   | Tote                            |
| Sodium<br>Cyanide    | Stored/Passing<br>Through | 1,200                  | 12                    | Monthly   | Can                             |
| Sulfuric Acid        | Stored/Passing<br>Through | 13,912,600             | 323                   | Weekly, Biweekly, Monthly,<br>Quarterly, Yearly         | Drum, Tanker,<br>IBC, Can, Tote |
| Sulphur<br>Dioxide   | Stored/Passing<br>Through | 40,100                 | 14                    | Bimonthly, Yearly                                       | Cylinder                        |

Approximated to the nearest hundred

The above information is based on survey data collected in 2018 and may not include all EHS transported in the county. In addition, the following EHS is also stored within the county: Phosphorus

# **OK-EFRA (EHS Flow and Risk Assessment)**

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An assessment of EHS incident risk for roadways was done using a model that incorporated three risk factors: incident probability, shipment frequency, and impact (i.e., population density). The NFPA 704 categories were incorporated into the risk model to establish Flammability, Health, and Instability/Reactivity risks related to EHS incidents on county roadways.

# EHS Incident Risk To puttook Health Risk









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