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Risk Assessment for Hazardous Materials Incident, Washington County, Tennessee:  
Road Transportation, Rail Transportation, and Hazardous Materials Storage

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A thesis

presented to

the faculty of the Department of Environmental Health

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Master of Science in Environmental Health

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by

Steed Kenlee Stagnolia

August 2007

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James Anderson, PhD.

Keywords: Hazardous Materials, Risk Assessment, Transportation, Storage

## ABSTRACT

Risk Assessment for Hazardous Materials Incident, Washington County, Tennessee:  
Road Transportation, Rail Transportation, and Hazardous Materials Storage.

by

Steed Kenlee Stagnolia

This study was conducted to provide a quantitative risk assessment for road transportation, railway transportation, and storage of hazardous materials in Washington County, Tennessee. A roadside survey, railroad hazardous materials survey, and a chemical inventory were conducted. It revealed an estimated 267,858 HAZMAT shipments per year on primary and secondary roadways and an estimated total of 9.4 x 10<sup>9</sup> tons of HAZMAT shipped by rail per year. There are 49 facilities that store a daily average of 33,722,700 lbs of HAZMAT. The risk of a hazardous materials incident occurring in Washington County is highest for Interstate transportation. The risk for a HAZMAT incident within the county is lower or equal to similar locations in the United States for other roadways surveyed, rail transportation, and fixed storage. Low risk does not mean there is no risk. In order to be prepared for a future incident planning, training, and research should continue.

## DEDICATION

This thesis is dedicated to those people who have supported me, guided me, loved me, and been a source of inspiration through out my life. I thank my Papaw and Mamaw Webb for there great love and their example of great success. I thank my parents Stan and Vickie Stagnolia for their endless support. They have always told me that I could accomplish anything I set my mind to. Through their endless support, encouragement, guidance, and love they have made me what I am today. To my children Tyler, Keegan, Makayla, and Makenzie I thank you for your love and your presence, which has driven me to achieve when I felt all was lost. I am also sorry for the sacrifices that you have made during this journey. This is also dedicated to my wife Brandy Stagnolia. No words could thank you enough for all of the things that you have done. Without you this would not have been possible. Finally, I would like to dedicate this to Larry and Becky Webb for believing enough in me, as to aid me in continuing my education at East Tennessee State University.

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## CHAPTER 1

### INTRODUCTION

#### Background

Washington County, Tennessee encompasses 323 square miles in Northeast Tennessee. It is populated by 107,198 people, 51% of whom live in urban areas. Several industries are based in Washington County. A major chemical company and a United States Army ammunition plant are within 20 miles of the county line. Two rail companies provide service through the County, and 17 motor freight companies operate from the County. There are 13 interconnected Interstates, US Highways, and State Highways that transverse or pass through the County. This network of roads includes two Interstates, I-81 and I-26. I-26 was recently completed and passes through Johnson City, which is the largest city in the county (Johnson City Economic Development Board, 2005). These roadways and railways are used by the transportation companies, industry, and commercial establishments within Washington County, TN. These same transportation thoroughfares (rail and road) are used by many other industries and transportation companies that transport goods through Washington County. I-81 is a major Interstate corridor that runs from the Canadian border in New York State to 23 miles east of Knoxville, Tennessee where it ties into I-40. One of the newest sections of interstate in the United States is the newly completed I-26. It runs from Kingsport in Sullivan County, Tennessee to Charleston, South Carolina. This section of the interstate system is a major corridor through the Appalachian mountains of East Tennessee and Western North Carolina. Both interstates carry a large volume of traffic and are designated as primary Hazardous Materials Transportation routes (United States Congress, 2001). With the

types of industry in the region and two interstate corridors, many hazardous materials are passing through Washington County and stored within the county on a daily basis.

### Objectives

The objective of this study was to evaluate and develop a framework to produce a quantitative risk assessment of a Hazardous Materials incident occurring in Washington County, Tennessee. To accomplish the primary objective several secondary objectives were met. These secondary objectives were: (1) evaluation of the flow of Hazardous Materials within and through Washington County, (2) identifying the types and distribution of hazardous materials shipped annually by roadways through the county, (3) identifying the types and distribution of hazardous materials stored in the county, (4) identifying the types and distribution of hazardous materials shipped annually by rail through the county, and (5) identifying the types and locations of hazardous material incidents that have occurred since 1995 in Washington County.

### Limitations

There were limitations to this study. The railway companies would only provide limited information regarding shipments of hazardous materials through Washington County. In each situation the companies cited 9/11 restrictions for the lack of information. However, a previous study done in 2000 stated that the railway companies felt threatened by request for safety data (O'Brien, 2001). This was prior to September 11<sup>th</sup> 2001. Limitations also occurred in obtaining information regarding the number of hazardous materials (HAZMAT) spills and responses in Washington County. The Washington County/Johnson City Hazardous Materials Incident Response Team maintains no database for HAZMAT responses that they make.

## Significance

There are increasing amounts of Hazardous Materials being shipped in the United States by both rail and road. The study aimed to identify if this trend was occurring in Washington County, TN. The last road side survey performed in the county was conducted in 2001 (O'Brien, 2001). This was prior to the completion of I-26, which has the potential to increase traffic and the number of HAZMAT shipments through Washington County. Studies have shown that as traffic volume increases the number of accidents also increase (Lassarre, 1986; Shibata, Akira & Fukuda, 1994; Zhou & Sisiopiku, 1997). This increased number of HAZMAT Shipments increases the risk of a HAZMAT incident occurring in the county. Presently there is little information about these shipments or the risk posed to the community. Past studies have proven that state and national statistics are often very different from local trends. This means that most local planning is done without proper characterization of hazardous materials shipped locally, their hazard class distribution, or the risk they pose. This study looked at the HAZMAT shipments locally and helps to characterize those shipments and the risk related to them.

Road side surveys were done previously but not to the extent of the surveys performed in this study. This survey ran for 12 months to cover all seasons and months of the year. Each survey session covered a 24-hour period. Secondary road surveys were conducted throughout the 12-month period. For the major roadways there was repetition of hour and day. This study also included a review of hazardous material storage. This review included site surveys of 10% of facilities that store chemicals within the County. This resulted in a risk assessment for roadway traffic moving along the major corridors

through the county. Data gathered during this study allowed identification of high risk chemicals, locations, times, modes of transportation, and storage. This information can be used to properly plan for HAZMAT response in Washington County. It can also be used to train HAZMAT Response Teams and other agencies that have responsibilities during a HAZMAT incident. It will aid in tailoring training that is more specific to the high risk scenarios identified for Washington County specifically. Most importantly this study provides a better characterization of the risk related to HAZMAT stored and moving through the county.

## CHAPTER 2

### LITERATURE REVIEW

The EPA has defined a hazardous material as any substance that could cause a severe health hazard to humans as a result of a short-term exposure during an accident or emergency. These accidents or emergencies are called HAZMAT (Hazardous Materials) incidents. They can occur at any time during manufacture, transportation, storage, use, or disposal of a substance (*49 CFR a 171.8, 172.101*). Over 60,000 chemicals are made and used in the United States, and approximately 2,200 of these have been defined as hazardous by the Department of Transportation (DOT) (Citro & Norwood, 1997). Many of these products are stored in large quantities or shipped through communities daily. This inevitably leads to the risk of a HAZMAT incident occurring that causes injury, death, the need for an evacuation, or combinations of these outcomes. These types of incidents have occurred at both fixed-facilities and during transportation. In 1984 the worst recorded HAZMAT incident took place in Bhopal, India. Approximately 40 metric tons of methyl isocyanate (MIC) was accidentally released killing over 150,000 people (Kales, Polyhronopoulos, Castro, Goldman, & Christiani, 1997). In August 2005 a truck carrying 38,000 pounds of explosives was involved in an accident. It exploded injuring 9 people and leaving a crater 30 feet deep and 75 feet wide on Utah's Highway 6. The highway had to be closed for 3 weeks to allow for repairs (Warburton & Twitchell, 2005).

HAZMAT incidents have occurred in all 50 states. Examples of both fixed facility and transportation incidents can be found in every state. Some incidents have caused severe injuries and deaths. In the 1970s the public began to take notice of the large

number of HAZMAT incidents and the injuries caused by these incidents. This led to research and federal legislation aimed at addressing the problem. Research led to the concept of rerouting vehicles through low population areas. This was thought to lower risk. The highway transportation sector began using alternate routing. Alternate routing was supposed to reduce accidents and injuries. It was hypothesized that by avoiding poor roads, previously high incident areas, and regions of high population that accident rates and injuries to the public would be lowered. Although, the number of injuries fell, accident rates did not. The accident rate actually remained at or only slightly below previous rates (Karkazis & Boffey, 1995). Fixed facilities were subject to new rules and regulations in the late 1970s and the early 1980s. These regulations provide guidelines for proper storage, substance compatibility, storage limits, operating procedures, and storage safety. Eventually legislation made companies responsible for “accidents” that caused damages and injuries (USGAO, 2000). After decades of research, new legislation was passed in congress and regulations were implemented by federal agencies. The transportation industry is now required to follow the Federal Hazardous Materials Transportation Laws of 49 U.S.C. § 5101. Regulations related to these laws are contained in 49 Code of Federal Regulations (CFR) Parts 171-180. These laws were created to help insure the protection of life and property from the risk related to the transportation of hazardous materials (USDOT, 2003). The regulations of 49 CFR Parts 171-180 aimed to reduce the impact of an accident or unintentional release. This is done by clearly defining and classifying Hazardous Materials. The regulations also outline hazard communication, packaging requirements, operational rules, and training. One of the most important sections is 49 CFR § 171.15. This section requires immediate telephone notification of



any serious HAZMAT incident to the US Department of Transportation (USDOT, 2003). In the event the incident involves an etiological agent, notification can be given to the Centers for Disease Control, US Public Health Service (49 CFR § 171.15 (b)).

The Emergency Planning and Community Right-to-Know Act (EPCRA) was created to work with Federal Hazardous Materials Transportation Laws. This act was created to handle incidents that can occur during the transportation of HAZMAT. The scope of the EPCRA covers all forms of transportation. It is an important act because it addresses emergency planning and HAZMAT release notification. These regulations are contained in 40 CFR Part 355. Sections 301-304 have created State Emergency Response Commissions (SERC) and Local Emergency Planning Committees (LEPC). SERCs and LEPCs are responsible for planning emergency responses to HAZMAT incidents in regional and local districts or counties. These commissions and committees plan for scenarios that could result in the release of hazardous materials from transportation and storage incidents (USEPA, 2000). In the event of a HAZMAT incident, a SERC's or LEPC's plan would be carried out by emergency response personnel. The number and type of assets available depend on the plan used and the incident location and size. Section 304, of 40 CFR Part 355 requires the notification of the responsible SERC/LEPC or its designated representative, if an accidental release of a hazardous material occurs. These laws and regulations insure the safe transportation of HAZMAT or proper management of incidents to protect the public, public and private property, and the environment (USEPA, 2000).

By the late 1990s it became clear that it was impossible to eliminate all HAZMAT incidents. With the introduction of the EPCRA focus shifted to HAZMAT training and

planning. This new concept addressed both transportation and fixed facility HAZMAT incidents. This concept relied on industry preparedness and community emergency preparedness to minimize the consequences of HAZMAT incidents. One key point of this training and planning was to increase the knowledge and proficiency of fire, police, and rescue personnel related to HAZMAT situations (Menzies, 2005). By the late 1990s other technologies and methods were being used in an attempt to reduce risk related to HAZMAT incidents. GIS systems made it possible to plan routes and assess risk (Verter & Kara, 2001). Global positioning systems (GPS) aided both the railroads and transportation companies to track HAZMAT shipments. During this period of time standards and practices for marking and placarding HAZMAT cargos became common practice. The Title 40 CFR had outlined and required anyone transporting hazardous materials to properly mark and label all hazardous material Shipments (Horton, Berkowitz, Haugh, Orr, & Kaye, 2003). Placarding allows for responding agencies to quickly identify hazardous materials involved in an incident. With this identification a rapid assessment of risk from the carried substance can be made. The substance can be cross-referenced with the North American Emergency Response Guidebook. This allows responders to make critical decisions about safe distances and proper precautions to handle the incident.

The destruction of the World Trade Center on September 11, 2001, placed new emphasis on the importance of emergency preparedness. Large sums of money became available for training and equipment upgrades. This led to greater access to training for both local communities and rural areas This eventually led to the mandatory creation of local emergency planning committees (LEPCs), regional emergency planning committees

(REPCs), and hazardous materials (HAZMAT) teams (Menzies, 2005). LEPCs and REPCs are responsible for the oversight, planning, and training of assets used during a HAZMAT incident. HAZMAT teams are specialized units that have been created to handle the unique situations related to HAZMAT incidents (USGAO, 2002). Each planning committee and the HAZMAT team work at the common goal of reducing the adverse impacts of HAZMAT incidents. The collapse of the World Trade Centers raised awareness for the need for emergency preparedness and in the occurrence and possibility of HAZMAT incidents. Though it was a tragic event, it benefited the HAZMAT community by providing a massive influx of money and providing opportunities for thousands of responders and emergency personnel to receive training (USGAO, 2005).

Vapor escapes, leaks, and spills cause 76% of HAZMAT incidents. The largest number of incidents occurs at fixed facilities, leaving transportation incidents to account for less than 20% of the overall number (Kales et al., 1997). Despite the high rate of incident occurrence at fixed facilities, a higher risk of injury is characteristic for transportation HAZMAT incidents (Hu & Raymond, 2004). When the total number of tractor-trailer accidents is considered, 6% of the accidents involve a large truck carrying Hazardous Materials (OHMS Website, 2005). The most common roadway transported hazardous material is petroleum derived fuels which includes the many shipments of gasoline that are transported daily on roadways. This explains the high percentage (>51%) of transportation related HAZMAT incidents that involve petroleum fuels (USDOT, 2005). Chlorine and chlorine derivatives are the most common chemicals involved in fixed facility HAZMAT incidents. These substances account for 18% of all incidents and 30 % of human injuries related to HAZMAT fixed facility releases (Kales

et al.). It also helps explain why more people are injured every year in fixed facility incidents than in transportation incidents.

In most cases injuries are not dependent on the size of release but on the toxicity of the substance or substances released (Hu & Raymond, 2004). This shows how variable HAZMAT incidents can be. Each situation differs not only by how the hazardous material is released but, also, in the characteristics of the substance released. A large variety of products and chemicals are considered hazardous. They also interact very differently with the environment they are released into. Compound these factors with a wide range of toxicities for these chemicals and the variability of each situation can be understood (Burgess et al., 2001). It also shows the importance of planning, training and the use of caution when dealing with hazardous materials incidents. They are unpredictable events that have a low probability of occurrence. However, each incident has the possibility to result in a serious or catastrophic outcome (Zografos, Vasilakis, & Giannouli, 2000). From 1996 through 2001 the 15 states that participate in the Hazardous Substances Emergency Events Surveillance Program (HSEES) reported 39,766 HAZMAT incidents of which 3,181 (8%) resulted in deaths or severe injuries (Kaye, Orr, & Wattigney, 2005). Facility employees and the public were most often injured as the result of a HAZMAT incident followed by emergency personnel (Horton, Berkowitz, & Kaye, 2003). In HAZMAT incidents reported to HSEES during 1999–2001, 384 responders were injured in 126 (0.7%) separate incidents. Injuries most commonly associated with these incidents were respiratory irritation and unconsciousness. One third of these responders had previous hazardous materials training, and 50% were wearing turn-out gear only (Zeitz, Berkowitz, Orr, Haugh, & Kaye, 2000). This is an indicator that

more training is needed. It also reveals that not all injuries can be prevented by training. Proper planning and scene awareness are vital to the reduction of injuries to first responders and other emergency workers.

Railroads, highways, and manufacturers are essential to the US economy. The many roadways and railways allow our businesses and consumers access to the world's global markets. This network of paths allow for the movement of large quantities of chemicals and raw materials to commercial businesses, manufacturers, storage points, and individuals throughout the U.S. The U.S. Department of Transportation's Commodity Flow Survey reported that a total of 16 billion tons of raw materials and finished goods were shipped via this system in 2002. The tonnage shipped has increased steadily every year for several decades. The amount shipped in 2002 was 13 billion tons more than the amount shipped in 1993 (U.S. Department of Transportation, 2004). This relates to an average increase in ton-miles per year of 2.4%. The average miles per shipment have increased since 1997 by 6.7% for truck transport and 3.5% for rail (U.S. Department of Commerce, 2003). Mixed freight has shown the largest growth by weight and the amount of all commodities transported has increased by 45%. Transportation has grown so much in the U.S. that 10 of every 100 dollars of the Gross Domestic Product (GDP) is made by transportation or a transportation related activity (U.S. Department of Transportation, 2004). This is all due to the growth of the economy.

Hazardous materials transportation has followed the same increasing trends as total transportation. The CDC (2005) estimated that in the U.S. there are over 800,000 shipments of hazardous material daily by all modes of transport (ground, rail, air, water, and pipeline). When viewed by tonnage trucking shipped 58% and rail 12% of all

hazardous material shipments (U.S. Department of Transportation, 2004). These shipments travel throughout the United States. They pass through rural and highly populated areas often passing schools, subdivisions, commercial centers, hospitals, day care centers and nursing homes (US Department of Transportation, 1999). The American Association of Railroads (AAR) estimates that there are 1.7 million carloads of hazardous materials (6% of all shipments) transported by rail yearly (Association of American Railroads, 2005). The number of rail HAZMAT incidents have dropped by 90% since 1980 (Barkan, Dick, & Anderson, 2003) and by 49% since 1990 (Association of American Railroads, 2005). The accident rate has fallen by 75%. This has been attributed to the more stringent regulations put in place since 1986. It is also attributed to the strengthening of enforcement policies and the greater liabilities placed on the U.S. railway industry (Barkan et al.). For the years 1995-2003 the incident rate has remained constant with only small annual changes (<1%). In 2003 the U.S. General Accounting Office reported that risk associated with the rail transportation of hazardous materials corresponded to the amount of time the substance was in transit (USGAO, 2003). A study carried out at the University of Illinois has shown a direct linear relationship between train speed and the numbers of cars that derailed. This study also showed that elevated speeds increase derailment force and the probability for container failure (Barkan et al.). The rail industry has recently adopted a policy to reduce train speeds through built-up areas and to provide local emergency responders with a list of the top 25 hazardous materials that move through their communities (Association of American Railroads, 2005). This is only an industry policy and is not enforceable by any law or regulation. The disclosure of the top 25 hazardous materials was only adopted in May 2005 and will

take time before the results of this policy can be assessed. Like rail HAZMAT incidents, roadway incidents have seen a large decrease in rates during the 1980s and early 1990s. From 1995 to 2003 there has been an annual average of 13,585 wheeled vehicle HAZMAT incidents. The number of incidents per year ranges from 11,932 in 1997 to 15,806 in 2001. The 135,849 highway HAZMAT incidents account for 86.9% of the total 156,380 transportation HAZMAT incidents reported in the Hazardous Materials Information System (HMIS), between 1995 and 2004 (Office of Hazardous Materials Safety, 2005 ).

National statistics reveal that in the past 10 years (1995-2005) there has been an annual average of 15,648 HAZMAT incidents. This value fluctuates but always falls between 14,000 incidents and 18,000 incidents per year (Office of Hazardous Materials Safety, 2005). Local studies have revealed that national studies have limitations when it comes to local planning (Louch & Kale; 2005, Pine & Marx, 1997). A study done in Louisiana compared data obtained from road side surveys to both state truck inventory data and national HAZMAT shipment data (Pine & Marx). Analysis of these data revealed that state and national data did not reflect the types and number of hazardous cargos being transported on the local roadways surveyed (Pine & Marx). This indicates that the types and numbers of hazardous materials being shipped are unique to local areas. Local planning can be compromised if planning organizations only plan in relation to national or state data. Communities that plan using these data could be unaware of a potential high risk transportation situation that occurs daily. It also makes local roadside surveys an important part of the local planning process. Tennessee reported a 19% increase in HAZMAT incidents in 2002. There is a 40% increase since 2000 with an

average of 716 incidents per year (Tennessee Emergency Management Agency, 2005).

With the state wide increase in incidents, local road side surveys and storage surveys will allow for better training and planning at the local level. More detailed planning and training might help reduce the number of incidents or at least the number of injuries and deaths associated with these incidents. By understanding the risk it may be possible to reduce the accident rates.



CHAPTER 3  
MATERIALS AND METHODS  
Chemical Storage Inventory

Chemical storage within Washington County, Tennessee was assessed through two processes. Tier II reports submitted to the Washington County-Johnson City Emergency Management Agency (WCJCEMA) were reviewed to identify all Hazardous Materials stored in the County. These reports are required by 40 CFR 355. They are used for emergency planning. Reports from 2005 were compiled and placed into a database for easy reference. Each entry includes facility name, facility address, names of stored chemicals, hazard class, maximum stored quantities allowed, daily average quantities stored, the number of days stored and any comments about the storage. This database also includes United States Department of Transportation (USDOT) substance name and UNID numbers. This was done to allow transported substances to be cross-referenced with stored chemicals. Any reports that contained missing, questionable or confusing information, excessive quantities, or extremely hazardous substances were identified for site surveys. Less than 10% of facility reports fit those criteria. The remaining facilities for a site survey were randomly chosen. Surveys were done to help insure the accuracy of reporting and provide a better characterization of Hazardous Materials storage in Washington County. The identified facilities were then contacted by phone to request permission to perform the site survey. In the event that a facility refused to take part in the survey, it was removed from the survey list. Another facility was then randomly selected and contacted. Once 10% of all facilities agreed to a site survey, appointments were made with the facility management. These meetings took place at the facilities with

a facility representative. At each meeting storage records were reviewed and a tour of the facility storage areas took place.

#### Hazardous Material Incident Data

Transportation incidents that involve Hazardous Materials must be reported. Immediate notification of an incident is covered by 49 CFR 171.15. The requirement for detailed incident reports is covered by 49CFR 171.16. These legal requirements result in the generation of a Hazardous Materials Incident Report, DOT Form 5800.1 (USDOT, 1999). Summaries of these reports, by year, are available through the U.S. Department of Transportation (USDOT) or from the Office of Hazardous Materials Safety. Summaries for years 1995-2005 were downloaded from the Office of Hazardous Materials Safety (USDOT, 2005). These summaries were searched to identify Hazardous Materials Incidents that occurred in Washington County, Tennessee. From these summaries a database was created that contains mode of transportation (truck, rail, etc.), city, location, incident date, UN identification number, chemical name, hazard class, quantity (gallons), incident type, injuries, number of persons evacuated, and cause. This database was used to identify historically important chemicals, routes, and modes of transportation related to incidents that have occurred in Washington County, Tennessee. Records maintained by Washington County Johnson City Hazardous Materials Response (WCJCHMR) Team were reviewed and used to compile a database of fixed-facility incidents in Washington County, Tennessee. This database includes type of facility, location, incident date and time, name of chemical(s) involved, quantity or quantities released, type or types of release, injuries, number of persons evacuated, and cause of incident. This database was analyzed to infer any patterns related to fixed-facility incidents within the county.

## Hazardous Materials Traffic Flow Survey

A Hazardous Materials Traffic Flow Survey (HMTFS) was conducted in Washington County, Tennessee. This survey was important because of the completion of Interstate 26 (I-26) through a portion of the county. This study was conducted per guidelines detailed by the United States Department of Transportation Hazardous Materials Traffic Flow Survey Guidelines (USDOT, 1995). This study used the Highway Performance Monitoring System (HPMS) data to characterize roadways and estimate traffic/truck volumes. This was coupled with roadside surveys at six pre-determined sites within the county for 12 months (*Table 1*). Survey sites were chosen to allow surveys of the major transportation routes within Washington County, TN (*Figure 1*). Roadside surveys were conducted for 12 months. Five of the six sites were surveyed each month for a 24-hour period. The remaining site was surveyed for a 48-hour period during the month. Each survey was performed on a different day of the week with weekends included. This allowed for repetition of each survey site for day and season. Total commercial traffic was counted every 3 months. Each survey was conducted by stationing a vehicle at a specified site so both lanes of traffic could be viewed. Orange cones and flashers were used to insure safety of the survey team. Each transportation vehicle that was observed in transit was logged into a computer database or survey log. This log contains site location, date, time, hazard class, UN ID number, and any notes relevant to the shipment. Any unusual observations were annotated in a notes section of the database worksheet or survey log. Thirteen secondary roadways within the county were surveyed for a short period during the 12-month survey period. The secondary roadways included in these surveys (*Table 2*) were randomly surveyed to estimate the

flow of hazardous materials within the county. Each month three of these roadways were surveyed for no less than 1 hour but, no more than 3 hours per site. Each survey was performed by stationing a vehicle at a specified site so both lanes of traffic could be viewed. Orange cones and flashers were used to insure safety of the survey team. Each transportation vehicle observed in transit was logged into a computer database or survey log. This log contains site location, date, time, hazard class, UN ID number, and any notes relevant to the shipment. Any unusual observations were annotated in a notes section of the database worksheet or survey log. All data that were collected on survey logs were placed into the computer database. These data sets were analyzed to determine any significant differences between surveying sites. This allowed for the identification of survey sites that have differing HAZMAT traffic flows. This provides information important for better planning by the WCJCEMA. It also was used to estimate the total number of HAZMAT shipments and identify types and distributions of hazardous materials transported through Washington County, TN.

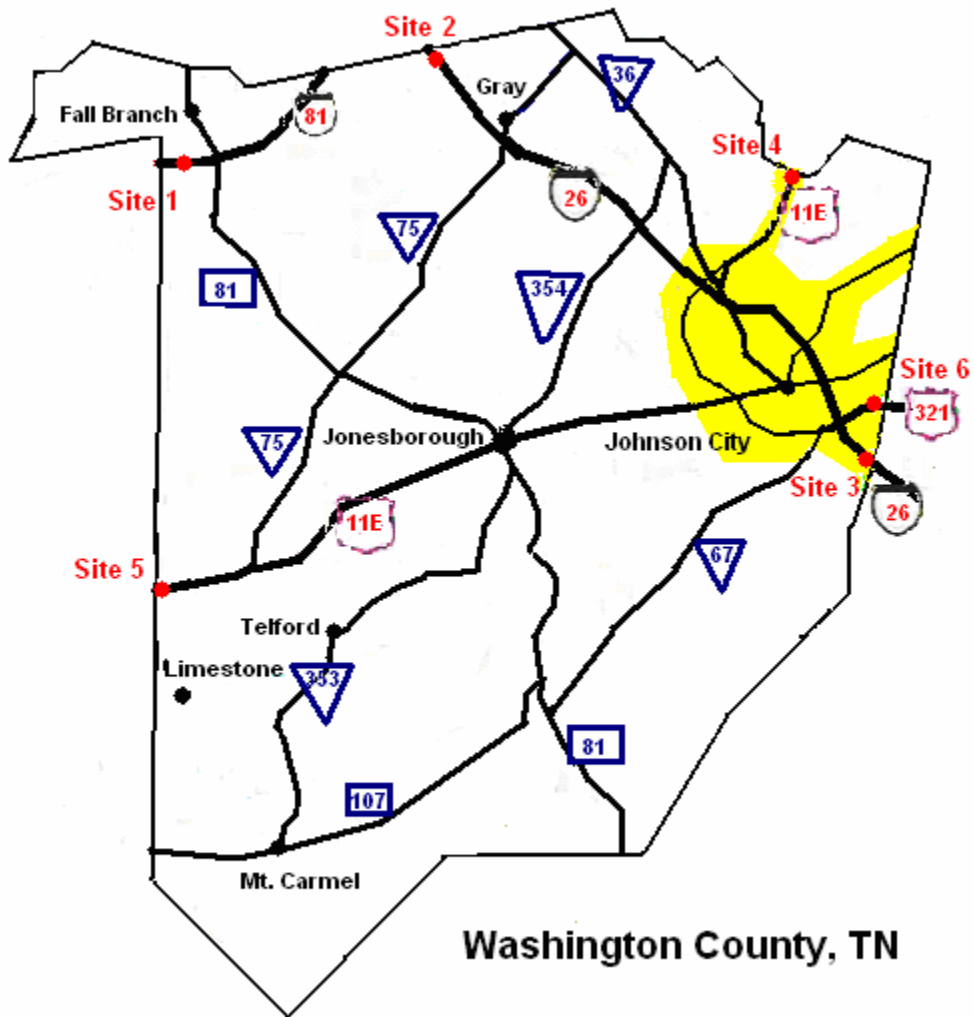


Figure 1. Map Overview of Roadside Survey Sites.

Table 1

*Roadside Survey Site Number, Location, and Coordinates*

<b>Site #</b>	<b>Site Location</b>	<b>Grid Coordinates</b>
1	I-81 near Fall Branch, TN (Exit 50)	N 36° 24.310' W 082° 35.571'
2	I-26 near Eastern Star (Exit 45)	N 36° 25.396' W 082° 30.542'
3	I-26 near Okolona Road (Exit 28)	N 36° 17.516' W 082° 19.474'
4	US-11E at Washington County/Sullivan County Line	N 36° 24.140' W 082° 20.858'
5	US-11E near Jockey Creek	N 36° 14.266' W 082° 37.645'
6	HWY 321 at the Washington County/Carter County Line	N 36° 18.798' W 082° 19.200'

Table 2

*Secondary Roadways to be Surveyed*

<b>United States Highways</b>	
US 19W	US 23
<b>Tennessee State Routes</b>	
TN 34	TN 36
TN 67	TN 81
TN 91	TN 107
TN 353	TN 354
TN 359	TN 381
TN 400	

## Railroad Hazardous Materials Survey

CSX and Norfolk Southern provide rail service within and through Washington County, TN. Both companies were contacted and requests were made for data relating to the amounts of Hazardous Materials shipped from and through Washington County. CSX Bluegrass Regional office in Louisville, KY provided totals for the top 25 hazardous materials shipped through Washington County. The total hazardous materials shipments that originated in Washington County, TN were provided by the CSX Local Office in Erwin, Tennessee through the CSX Bluegrass Regional office. This information was not current for the period of the roadside survey but covered shipments for an entire year. All data from Norfolk Southern were obtained from the Public Affairs office located in Norfolk, Virginia and covers the top 25 hazardous materials shipped through the period of October 2005 to October 2006. All information provided by CSX and Norfolk Southern were compiled and placed into a database containing substance name, hazard class, UN ID number, rail location, and total number of shipments during the year. This database was analyzed to determine the number of hazardous material shipments within the county during a year period. It also identified differences between shipments carried on CSX and Norfolk Southern rail lines. To estimate the total number of HAZMAT rail shipments several rail surveys were performed. This estimation used 4 six-hour surveys for each line, to estimate the number of trains in a 24-hour period. During each survey the number of trains and the number of cars per train were counted. The number of trains counted during the 24 hours was used as the average number of trains per day. The average number of cars per train was determined by adding the total number of cars observed and dividing by the number of trains observed for each line.

## Risk Assessment Framework

The risk assessment for this study follows a six-step framework. This framework was developed by adapting the Environmental Protection Agency's Ecological Risk Assessment Framework (USEPA, 1992) to address risk from the transportation and storage of hazardous materials. The EPA's framework was used as a guide to create six steps that can be used to assess the risk of transporting and storing hazardous materials. The steps in this framework are 1) evaluate the area for the risk assessment, 2) identify transportation routes and storage site, 3) identified heavily shipped and stored hazardous materials, 4) identify types of releases and possible outcomes, 5) determine risk, and 6) draw conclusions and make recommendations.

Step one the evaluation of the area for the risk assessment is used to identify the area of concern, identify the populations within the area, and identify area emergency assets. During this step the State, County, and the Cities within the county were identified. In step two Washington County, Gray, Johnson City, and Jonesborough demographics were reviewed on the U.S. Census Bureau, American Fact Finder website (USCB, 2007). Population numbers for the county as a whole and each incorporated city within the county were viewed. This was done to get a complete picture of the counties population. These demographics were also used to identify rural and urban areas of the county. During this step it was also necessary to consider any populations that could shift. For Washington County this included East Tennessee State University student population and employees of the many businesses that are clustered within the urban areas. Schools, housing areas, and businesses in the urban areas are of concern due to the large number of people that could be exposed if a HAZMAT incident were to occur near them. The



final task of this step was carried out by reviewing emergency assets available to the county.

The second step is to identify hazardous materials transportation routes and storage sites. This step begins with the task of determining the primary routes that hazardous materials are transported on. These routes were determined by considering which roadway routes handle large volumes of traffic within the county. These were the routes used for the roadside surveys. Secondary roadways were observed through out the study to insure no primary routes had been excluded. Rail systems passing through the county were identified and their operators were determined. In addition all rail crossings in the county were counted and identified as active or passive crossing. The final task used TEIR II reports to identify facilities that store hazardous materials onsite in the county.

Step three is to identify the hazardous materials that pose the greatest risk. In this step it is important to determine which types, amounts, and hazard class of substances are transported and stored in the county. To determine this information roadside surveys, rail hazardous materials surveys, and storage inventories were conducted. These data gathering activities were completed to identify substances, amounts, and hazard classes of hazardous materials shipped and stored.

Step four identifies the types of releases possible and the outcomes that could occur from these releases. During this step past incident reports and data gathered were used to consider which releases are possible. Demographics were also used to determine which outcomes are most likely to occur from a release in rural and urban areas. This was also done for each incorporated city. In each case fluctuating populations were

considered. For Johnson City ETSU students were of main concern due to its close proximity to I-26.

In step five risk was determined. After road, rail, and storage data were analyzed, a quantitative risk was assessed for rail, roadway, and storage. Roadway risk was assessed by performing an individual risk calculation for each surveyed roadway. In the event a roadway contained two survey sites, the one way ANOVA for site to include the Fischer's LSD pairwise comparisons were reviewed. If it was determined that a significant difference between the HAZMAT transported through each survey site existed, a separate risk calculations was performed for each survey site. The risk was calculated using the calculations described below in equations 1-3. Risk values for each roadway were then added to obtain a value for the overall roadway risk of a HAZMAT incident. Overall rail risk was obtained by calculating the risk for the three lines that run through the county together. The final calculation was for HAZMAT storage. This calculation encompasses all stored HAZMAT in the county. With one calculation the overall risk value was assessed for the county. In each calculation uncertainty was considered. Uncertainty factors of 1 to 1,000 were used depending on the level of uncertainty. All calculations and their variables are below in the risk calculation section *Equations 1-3*. The final step in each calculation is to divide the specific Washington County incident rate by a reference rate. These reference rates were taken from national rates when possible. Several national rates were unavailable; these values were taken from studies that were conducted in cities, counties, or states similar to Washington County. Roadway rates were taken from *Hazardous materials transportation risk analysis: quantitative approaches for truck and train* (Rhyne, 1994). These values are

weight-averaged state incident rates given for rural and urban areas and roadway type. The train incident rate was taken from the US Federal Rail Administration and is not specific for hazardous materials transportation. The US Federal Rail Administration does not presently have specific state or national hazardous materials incident rates for railways (USDOT, 2004). Storage rates were determined from data compiled from the Risk Management Info Database (Kleindorfer, Feldman, & Lowe, 2000). When each rate was divided by its reference rate a risk value 1 means Washington County's risk is equal to the reference's risk. Values  $>1$  represent a risk greater than the reference's risk. Values  $<1$  represent a risk for Washington County less than the reference's risk. This determines the quantitative risk of the primary objective. This risk is relative risk and compares how likely and incident is to occur in Washington County to other similar locations in the United States.

Step six draws conclusions and creates recommendations for the risk analysis. Where step five gave a quantitative number that fits well into the results of this study step six will be covered extensively in the discussion and conclusions sections of this paper. This step was completed by reviewing all of the material collected and reviewed during the five previous steps of the risk assessment. With consideration to all of the data gathered, major points regarding risk were determined and noted. This included shortcomings of the research and possible missing data. For each of these main points a recommendation or a group of recommendations were prepared for presentation. This step finishes the process of assessing the risk for an incident in Washington County. This frame work (Step 1 through Step 6) is part of the primary objective of this study along

with determining a quantitative risk for the county. With the outlined framework and the risk calculated in Step 5 the objective of this study was completed.

### Risk Calculations

Equation 1: Roadway Risk

$$\frac{AR \times HMS \times SR \times UF}{ADT \times Ds} = \frac{WCIR}{RRo} = \text{Relative Risk of Roadway Incident}$$

AR = Accident Rate = Incidents/Number of Reported Years x 365 days

HMS = Number of Observed Hazardous Materials Shipments

SR = Survey Ratio (Number of Survey Days/Number of Days in Survey Period)

ADT = Average Daily Traffic

UF = Uncertainty Factor

Ds = Days in Calculated Period (Month = 30, Season = 90, Year = 365)

WCIR = Washington County Incident Rate

RRo = Reference Rate Roadway

Equation 2: Railway Risk

$$\frac{AR \times THMS \times AC \times UF}{TS} = \frac{WCIR}{NRa} = \text{Relative Risk of Railway Incident}$$

AR = Accident Rate = Incidents/Number of Reported Years

THMS = Total Number of Pounds of Hazardous Materials Shipments

AC = Active Crossings Modifier (Percentage of Active Crossings)

UF = Uncertainty Factor

TS = Estimated Total Pounds of Rail Shipments per Day

Ds = Days in Survey Period

WCIR = Washington County Incident Rate

NRa = Reference Rate Railway

Equation 3: Overall Storage Risk

$$\frac{As}{F \times Ds} \times IR \times UF = \frac{WCIR}{NRs} = \text{Risk of Storage Incident}$$

As = Stored Amount (Million Pounds)

F = Number of Facilities

Ds = Days Stored

IR = Incident Rate

UF = Uncertainty Factor

WCIR = Washington County Incident Rate

NRs = Reference Rate Storage

## Analysis of Data

### Hazardous Materials Storage

Hazardous materials storage facilities were analyzed for significant differences in the amounts of stored HAZMAT on the premises. The type of industry, the process conducted at each facility, and the size of each facility immediately exposed differences in the amounts and types of HAZMAT. All stored hazardous materials for each facility were totaled. This allowed for the identification of all facilities that store more than 1 million pounds (lbs) of hazardous materials in the county. Gathered data from TEIR II reports were used to determine the total number of facilities storing hazardous materials, the total number of chemicals stored, and the average daily amounts of those chemicals stored. Each stored substance's Department of Transportation UNID and hazard class were then determined. Each stored chemical was then broken into hazard classes. Values for the stored hazard classes were used to identify the most commonly stored classes by percent. The total amount of each hazard class was also determined. This was used to identify the percentage of the total amount stored for each hazard class. The facilities data were analyzed to determine what percentage of facilities storing hazardous materials are located in urban, suburban, and rural areas. The United States Census Bureau population definitions were used to determine which areas of Washington County are urban, suburban, and rural.

### Railway Transportation

Railway information was analyzed to find the 10 common chemicals that are transported through Washington County. Data were analyzed to determine the total number of shipments, the number of shipments by class, and the percentage of each class

shipped. This was determined for CSX Railways and Norfolk-Southern Railways by each rail they operate. Rail data were analyzed to determine if there was a significant difference between the number of shipments by hazard class each rail carrier transports. Significance was determined using paired t-test at a 95% ( $\alpha = 0.05$ ) confidence interval

### Roadway Transportation

Analysis of data derived from the Hazardous Materials Transportation Flow Surveys was analyzed using several different methods. This analysis focused on the number of annual shipments at individual survey sites. For each site the total number of observed shipments for the year, the season, and the month were determined. These data sets were analyzed to determine what percentage of each hazard class transported through each site for the year, season, and month. This was used to make an estimation of the total number of hazardous materials shipments through Washington County, Tennessee for month, season, and year. These analyses also allowed for the identification of the top 10 substances and hazard classes shipped through Washington County. Data sets from individual sites were analyzed in the same manner as the yearly total. The total observed shipments for each site were analyzed to determine the total number of observed shipments for the year, season, and month. Further data tabulation determined the total number of observed shipments and the percentage of observed shipments by hazard class for the year, season, and each month. To measure the volume of traffic moving through each site during a 24-hour period it was necessary to determine the average hourly traffic flow. To determine an hourly traffic pattern each observed shipment was placed into a time group (0-23). This was done for each site by year, month, and season. Each time group was averaged by the number of days observed. This determined the hourly average

of HAZMAT shipments observed. Each average was then plotted against its time group to show the average daily pattern of hazardous materials passing through the indicated site by year, season, and month. All road data were statistically analyzed using Minitab<sup>®</sup> 14 statistical software. Roadside surveys were placed into a database. These monthly databases were then combined into 4 seasonal groupings. Each seasonal grouping contained 3 months. The groupings began with Season 1 as winter and included December, January, and February. Each grouping after Season 1 contained the 3 sequential months following and were identified as Season 2: Spring, Season 3: Summer and Season 4: Fall. Data sets were tested for normality and homogeneity of variance. Data for site and season did not pass a test for normality or homogeneity of variance. Data for hazard class by site and season did not pass a test for normality. It also did not pass a homogeneity of variance test. A Log (X + 1) transformation was performed making site and season data normal. Several other attempts to transform the hazard class data were conducted, but no acceptable transformation was identified. The normalized site data were then run through a one-way ANOVA for site. This was followed by a post-hoc Fisher's LSD. This was done to determine the differences between each group. This same procedure was performed using the normalized season data. The hazard class data sets were determined to be non-parametric. A set of Mann-Whitney rank tests were performed. In the first set of tests each set of hazard class data were tested for differences by site. In the second set of test each set of hazard class data was tested for differences by season. The H<sub>0</sub> of these analyses was that all sites have the same distribution of hazard classes being transported through them regardless of season. This was done to determine if one site poses significantly different risk than others. Data related to time were put

into a category of 0-23 hours by both seasons and site. These data were not normal. In order to find differences between time distributions, two sets of Mann-Whitney rank tests were performed. The first compared time pairwise by season and the second pairwise by site. The final focus of roadway data analysis was related to the data gathered from surveying the 13 other roadways that cross the county. This set of roadway data was pooled and analyzed to determine the total number of hazardous material shipments observed. The number of shipments and the percentage of each hazard class were determined and used to estimate the yearly number of shipments via these roadways.

#### Incident Data

Incident data were analyzed to determine the total number of incidents and the percentage of incidents by mode of transportation. The hazard classes of substances involved in HAZMAT incidents were analyzed. This determined the total number and percentage for each hazard class involved. Percentages were determined for incidents by season, month, day of the week, and time of day. Locations of incidents were analyzed to determine the total number of incidents and percentages for each occurring in urban, suburban, and rural areas. US Census Bureau population density data were used to determine which locations these occurred in. US Census definitions were used to identify these areas. Urban was identified as an area with a population density of at least 1,000 per square mile. Suburban is an area adjacent to an urban area with a density of at least 500 people per square mile up to 1,000 people per square mile. Rural areas are areas with less than 500 people per square mile. These analyses were conducted to determine what chemicals and locations have historically been involved with incidents in Washington County.



## CHAPTER 4

### RESULTS

#### Chemical Storage Inventory

The Chemical Storage Inventory was conducted through TIER II reviews and facility visits. This inventory supported the secondary objective of identifying the types, amounts, and distribution of materials stored in Washington County. This resulted in the identification of 49 facilities that store hazardous materials. This does not cover all facilities in the county that store hazardous materials, but it does cover approximately 85%. Amounts that fall below the reportable amount are not tracked. Schools, gas stations, and other businesses that store small amounts do not provide TIER II reports. This means that a large amount of stored hazardous materials are unaccounted for. However, an incident could occur at any of these locations. All facilities that do submit reports and their respective stored hazardous materials are provided in *Appendix A7*. The respective hazard classes are outlined in *Appendix 1, Table A1*. This inventory showed that a total of 33,722,700 lbs of hazardous materials are stored in Washington County, TN. Six facilities in the county store more than 1 million pounds of hazardous materials (*Table 3*). The three largest hazard classes make up 59% of the total pounds of hazardous materials stored in the County (*Figure 2*). The top three are hazard class 8 (corrosive) with 9,196,105 lbs, hazard class 2.3 (poisonous gasses) with 7,706,420 lbs, and hazard class 4.1 (flammable solids) with 7,572,220 lbs. However, these quantities are misleading because the 7,700,000 lbs of Uranium tetrafluoride (UF<sub>4</sub>) stored at Aerojet Industries is listed as hazard class 8 and hazard class 2.3. This large amount of Uranium tetrafluoride makes up 22.8% of the stored hazardous materials, by weight, stored in Washington

County (*Figure 2*). This large amount of UF<sub>4</sub> is a high risk. However, it is only a risk at one facility. Without Uranium tetrafluoride included, hazard class 4.1 (flammable solids) at 7,572,220 lbs., 9 (miscellaneous dangerous goods) at 5,100,460 lbs, and 4.2 (spontaneously combustible material) at 3,519,030 lbs. make up the top 3 stored classes (*Figure3*). The total pounds of these three hazard classes make up 62% of all stored hazardous materials without the inclusion of Uranium tetrafluoride. It also reduces hazard class 8 from 22% to 8% and hazard class 2.3 from 19% to <1% of stored HAZMAT (*Figure 2*). The number of hazard class storage areas from each facility was tallied together. Over 50% (151 storage areas) of storage areas by hazard class are made up of hazard class 3 (flammable) with 33% (90 storage areas) and hazard class 8 (corrosive) with 23% (61 storage areas) (*Figure 4*). This indicates that most storage facilities have more than one flammable storage area on site. It also helps response teams to see that though they may be responding to another hazard class, that danger related to class three is still present. The values for hazard class storage areas, storage by lbs. with UF<sub>4</sub> and storage by lbs. without UF<sub>4</sub> show how important it is to understand the way these materials are stored (*Table 4*). It also shows how a different perspective can change the way risk can be perceived.

Table 3

*Facilities Storing More than 1 Million Pounds of Hazmat*

<b>Facility</b>	<b>Pounds (lbs.) of HAZMAT Stored</b>
Aerojet Ordnance of Tennessee	9,744,966
Terra Mulch Products, LLC	6,065,000
Waste Management	4,867,500
Superior Industries International, Inc.	4,421,500
Excel-Polymers, LLC	1,605,700
American Water Heater Company	1,186,500

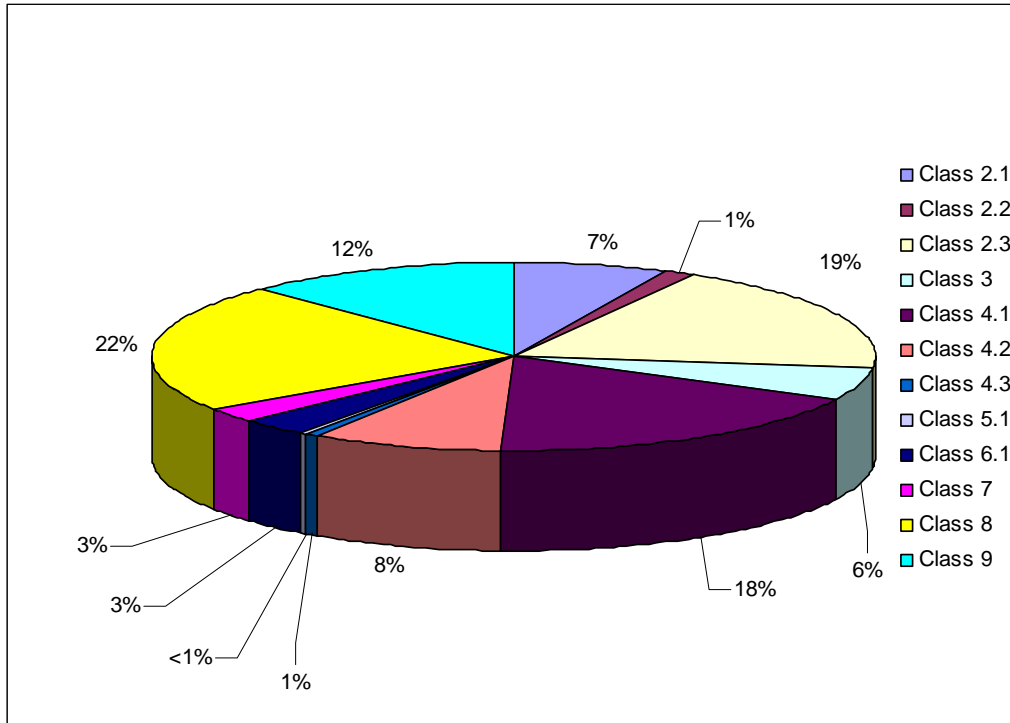


Figure 2. Distribution of Hazardous Materials Storage (percent of lbs stored) by Hazard Class with UF<sub>4</sub> included.

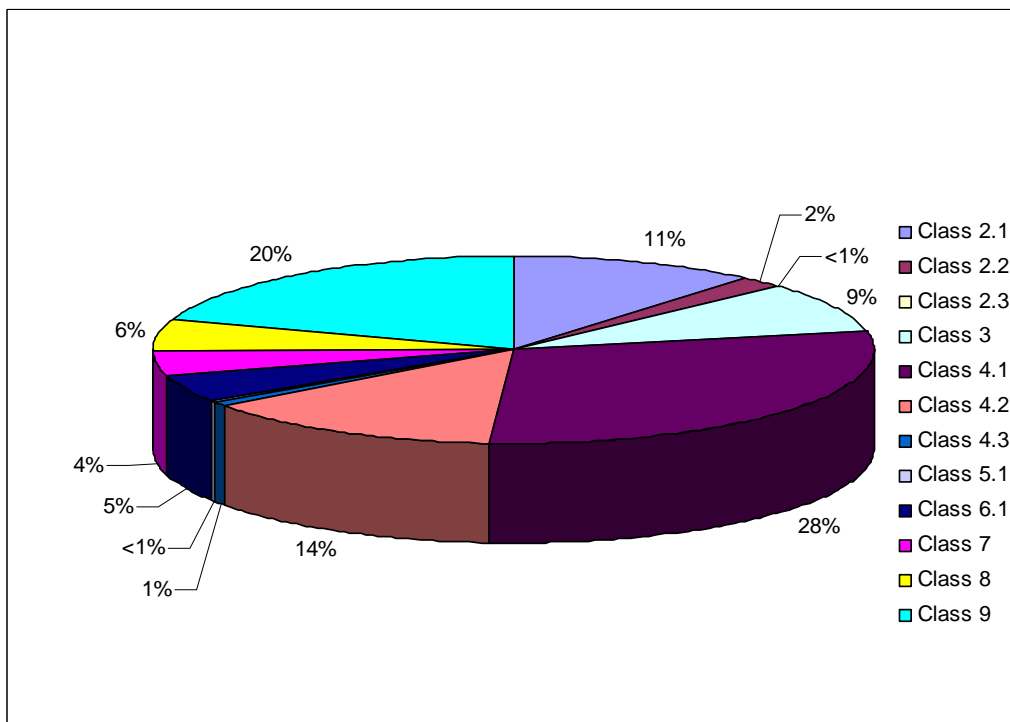


Figure 3. Distribution of Hazardous Materials Storage (percent of lbs stored) by Hazard Class with UF<sub>4</sub> excluded.

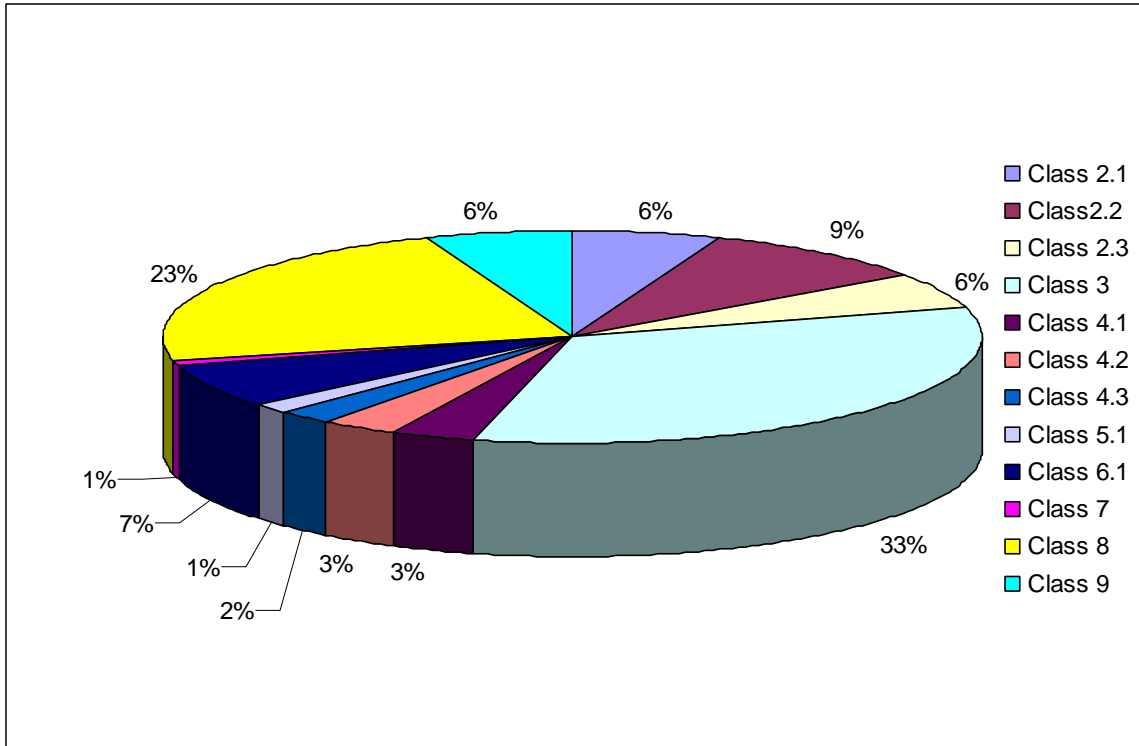


Figure 4. Distribution of Hazardous Materials Storage Areas by Hazard Class.

Table 4

Values for Hazard Class for Each Comparison.

By Hazard Class		By Pounds		By Pounds without UF <sub>4</sub>	
Class	Number of Storage Locations	Class	Pounds	Class	Pounds
<b>2.1</b>	16	<b>2.1</b>	2888480	<b>2.1</b>	2888480
<b>2.2</b>	24	<b>2.2</b>	509096	<b>2.2</b>	509096
<b>2.3</b>	15	<b>2.3</b>	7706420	<b>2.3</b>	6420
<b>3</b>	90	<b>3</b>	2316878	<b>3</b>	2316878
<b>4.1</b>	9	<b>4.1</b>	7572220	<b>4.1</b>	7572220
<b>4.2</b>	8	<b>4.2</b>	3519030	<b>4.2</b>	3519030
<b>4.3</b>	6	<b>4.3</b>	276450	<b>4.3</b>	276450
<b>5.1</b>	4	<b>5.1</b>	35555	<b>5.1</b>	35555
<b>6.1</b>	18	<b>6.1</b>	1252776	<b>6.1</b>	1252776
<b>7</b>	2	<b>7</b>	1050000	<b>7</b>	1050000
<b>8</b>	61	<b>8</b>	9196105	<b>8</b>	1496105
<b>9</b>	16	<b>9</b>	5100460	<b>9</b>	5100460

## Hazardous Materials Incidents

Secondary objective 5 was to identify the types and location of incidents that have occurred within the county. This includes the incidents that have occurred due to roadway transportation, rail transportation, and the storage of hazardous materials. There have been 12 roadway HAZMAT incidents in Washington County, Tennessee since 1993. During this time 50% occurred between 1993 and 1997. The other 50% occurred from 2001 to 2004, with the year 2001 recording the highest number (3) of incidents (*Figure 5*). Years 1998, 1999, 2000, 2002, and 2005 recorded no incidents. This indicates there is no predictable pattern to the number of incidents each year. The total number of incidents reveals that 6 incidents involved hazard class 8 (corrosive) materials totaling 78.38 lbs. The largest amount of hazardous materials spilled was from hazard class 5.1, totaling 570.01 lbs of material (*Figure 6*). This total is 74% of all hazardous materials spilled during the 12 incidents from 1993 to 2005 by pounds. Though hazard class 8 (corrosive) was involved in the most spills, more pounds of hazard class 5.1 were spilled. The time, date, location, substance involved, UNID, hazard class, and amount spilled are listed in *Table 5*. The location of each incident is shown in *Figure 7*. Five incidents happened within the city limits of Johnson City, 1 occurred on I-26, 1 occurred on I-81, and 3 occurred at the same address in Gray, Tennessee. Of the 12 total incidents 2 incidents occurred in rural areas, 4 in urban areas, and 6 in suburban areas (*Table 6*). The past incidents show that the urban and suburban populations tend to be at risk when incidents occur in the county.

Railway incident databases were searched for incidents that occurred in Washington County, Tennessee and several incidents prior to 1990 were found. The goal

of this study was to use data no earlier than 1993 to provide an incident rate that was current for rail practices used and for the materials being shipped today. Between 1993 and 2006 there have been no railway incidents in Washington County, Tennessee.

Although chemical incidents have occurred in Washington County, Tennessee no database reporting or tracking these incidents exists. No nationally reported incidents were reported after 1995. This does not mean that the Washington County/Johnson City Hazardous Material team has not responded to any storage HAZMAT incidents from 1993 to 2005. This lack of data produced no results and creates uncertainty in the overall risk assessment.

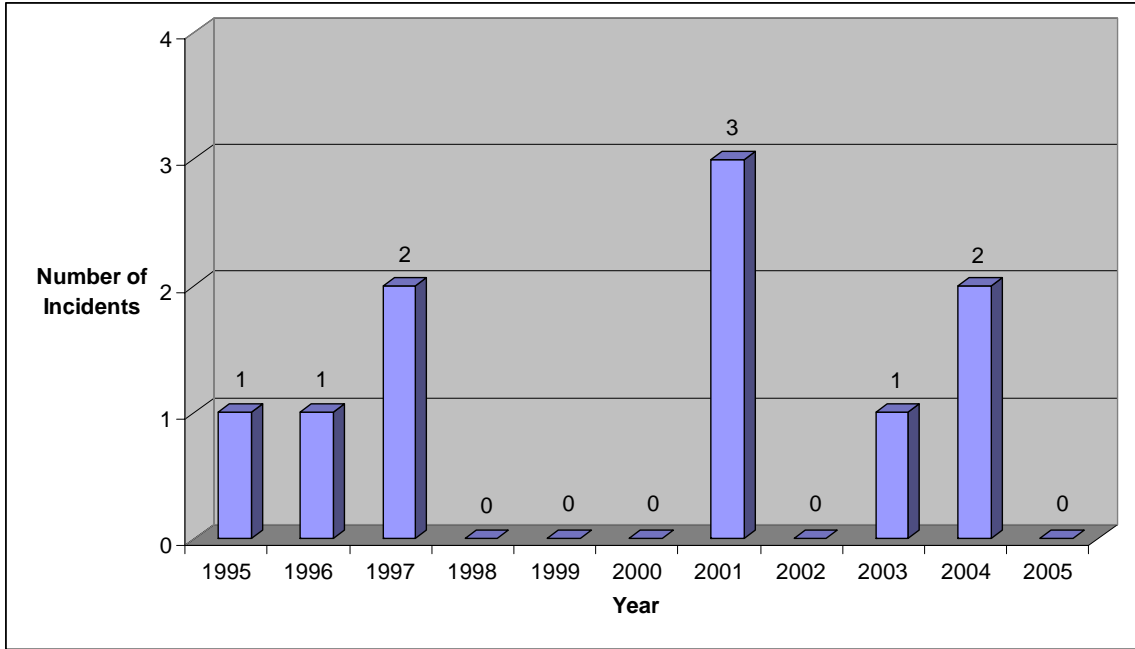


Figure 5. Incidents by Year 1995-2005.

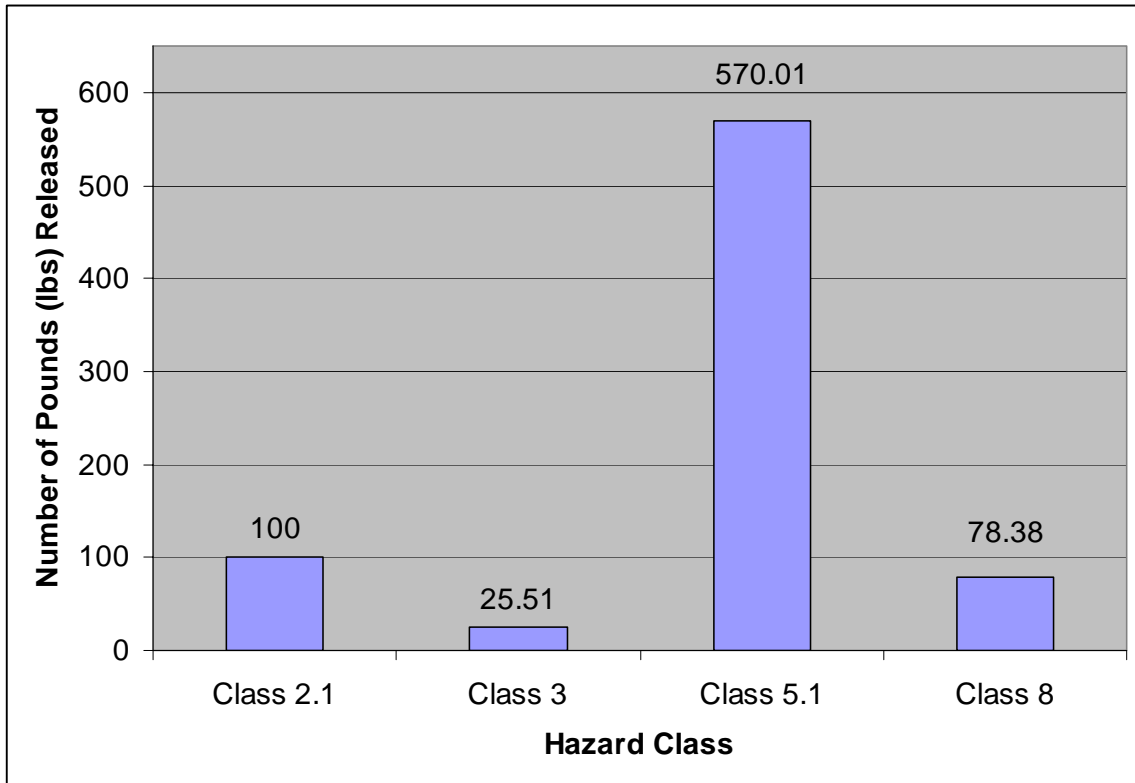


Figure 6. Amount (lbs.) of HAZMAT Released by Hazard Class.

Table 5

*Roadway Incidents in Washington County 1993-2005*

<b>Time</b>	<b>Date</b>	<b>Location</b>	<b>Substance</b>	<b>UNID</b>	<b>Hazard Class</b>	<b>Amount Spilled (lbs)</b>
08:46	2/5/93	I-81 Mile Post 41, Johnson City	Flammable Liquid NOS	1993	3	0.01
08:30	3/15/94	2301 Silverdale, Johnson City	Adhesives	1133	3	0.25
09:30	6/6/95	Love St., Johnson City	Resin Solution	1866	3	0.25
07:00	4/23/96	344 Bob Jobe Rd, Gray	Flammable Liquid NOS	1993	3	25.00
09:00	12/15/97	11E East of Jonesborough	Nitric Acid	2031	8 5.1	70.00
00:30	11/14/97	I-81 Mile Post 38, Gray	Propane	1075	2.1	100.00
08:00	9/19/01	344 Bob Jobe Rd, Gray	Cupriethylenediamine	1761	8	12
08:00	6/27/01	344 Bob Jobe Rd, Gray	Sodium Hydroxide Solution	1824	8	0.25
16:50	1/17/01	402 Steel St., Johnson City	Ammonium Nitrate	1942	5.1	500.00
08:40	3/31/03	107 Rose Dr., Gray	Sodium Hydroxide Solution	1824	8	6.00
11:25	7/23/04	Wilson Ave., Johnson City	Nitric Acid	2031	8 5.1	0.01
09:00	5/17/04	2722 S Roan St., Johnson City	Caustic Alkali Liquid, NOS	1719	8	2.00



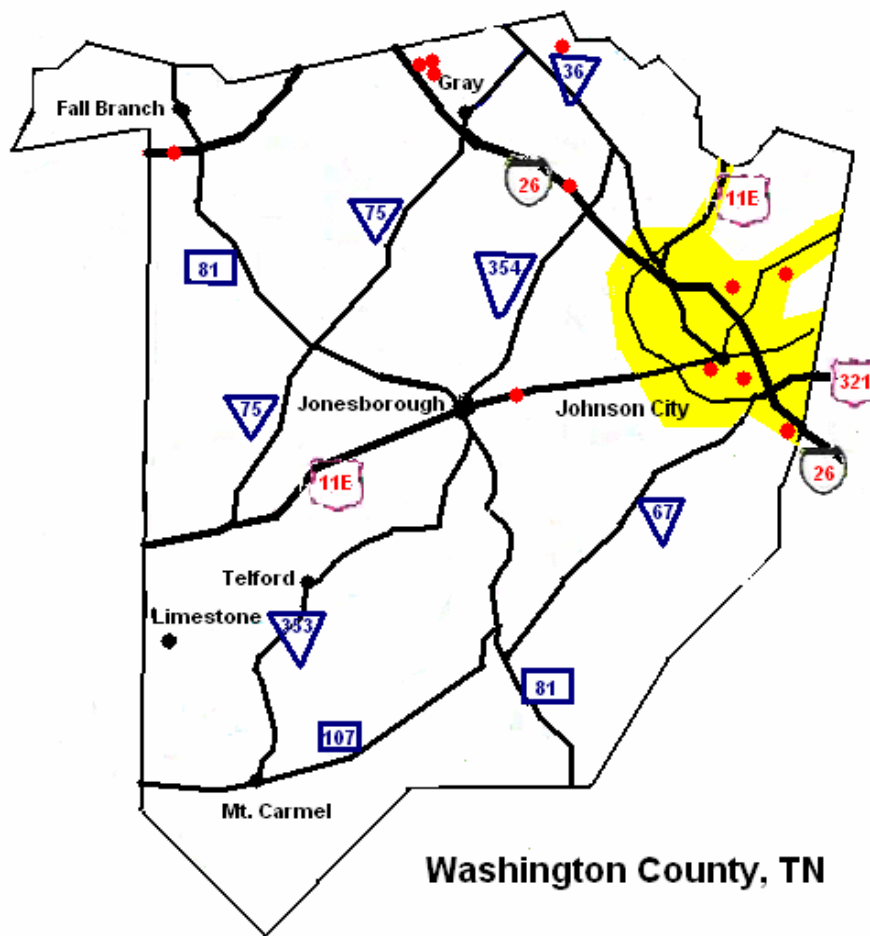


Figure 7. Location of Incidents in Washington County, Tennessee.

Table 6

Number of Roadway Incidents by Rural, Suburban and Urban Areas

Rural	Suburban	Urban
2 (17%)	6(50%)	4 (33%)

## Road Side Surveys

The road side surveys were conducted to 1) evaluate the flow of hazardous materials within and through the county and 2) identify the types and distribution of materials shipped annually within the county. These surveys were pivotal in reaching the primary goal of producing a quantitative risk for Washington County. The year-long surveys resulted in a total of 84 survey days. Each roadway was observed 14 times throughout the year. Each site was observed at least 1 day a month and 2 days for each day of the week during the year. These surveys resulted in a total count of 8,020 vehicles transporting hazardous materials (*Table 7* and *Figure 8*). Interstate 81 carried 2,877 HAZMAT shipments (36% of all HAZMAT shipments) through Washington County. I-26 carried 19% (1,817 shipments) on the northern boundary with Sullivan County and 23% (1,529 shipments) at the eastern boundary where I-26 crosses into Carter County (*Figure 9*). This large volume of HAZMAT traffic indicates that both interstates within the county are major corridors through the county. The top 10 HAZMAT shipments identified in this study are listed in *Table 9* along with their hazard class, UNID and total shipments observed. There were 4,004 hazard class 3 (flammable and combustible) shipments that make up 46% of all HAZMAT shipments (*Figure 10*). Hazard class 3 (flammable and combustible) poses the most risk for road transportation to the county. There were 65 vehicles that carried multiple bulk shipments of chemicals and 1,122 vehicles that carried a placard but no UNID numbers. The 1,122 vehicles without UNID included 368 vehicles placarded as “Dangerous”. These vehicles pose a special risk to first responders and emergency crews. During a HAZMAT incident the risk of injury or death increases if crews do not know what substance or substances they are dealing with.

The majority of shipments occurred during the day with 6,197 (76.2%) of all HAZMAT shipments observed between 6:00 am and 7:59 pm. This leaves only 23% of shipments that occur outside of this time period. A total of 1,022 (12.5%) of those shipments were observed in the early morning (12:00 am – 5:59 am) and 916 (11.3%) were observed in the late evening (8:00 pm – 11:59 pm) (*Figure 11*). Secondary site surveys resulted in 36 individual surveys. This resulted in a count of 48 additional HAZMAT shipments. Based on this study approximately 209,887 shipments travel primary routes and 57,971 shipments travel secondary routes throughout Washington County each year. This makes the total annual estimated hazardous material shipments through the county 267,858 (*Table 8*). There are no significant differences ( $p= 0.792$ ) between the hazardous materials shipments observed when seasons are considered. Significant differences were found when hazardous materials shipments were compared by survey site ( $p<0.0001$ ). I-81 (site 1) was significantly different from all sites except I-26 at Eastern Star Road (site 2). This same site showed significant differences from both survey sites on 11E (site 4 and site 5) and the survey site on Highway 321 (site 6). I-26 at Okolona Road (Site 3) was also significantly different from site 4, site 5, and site 6. Shipments by site and season are presented in *Figure 12*. This indicates that risk does not change seasonally; however, varying degrees of risk are present by individual roadways. This gives a clear indication that some roadway have a higher possibility of an incident occurring. Similar results were returned from statistical analysis of hazard class distributions. By season, hazard class distributions were not significantly different. By site several significant differences were revealed. I-81 (site 1) was significantly different from survey site 11E near Jockey Creek (site 5) ( $W=320.5$ ) and Highway 321 (site 6) ( $W=326.0$ ). The hazard

class distribution of I-26 at Eastern Star Road (site 2) was significantly different from both survey sites on 11E (site 4 and site 5) (W=316.5, W=317.0) and the survey site on Highway 321 (site 6) (W=318.5). No other sites showed significant differences in hazard classes. These results reveal no seasonal differences in hazard class distributions by season. Hazard class distributions are significantly different for each roadway. No significant difference was found for survey sites that lay along the same road. This finding also shows that there is no defined pattern of distribution for all roads. Hazard class distributions for each site are presented in *Figure 13 – Figure 18*. The results from these statistical tests are in *Appendix 2*.

Table 7

*Total Yearly Observed HAZMAT Shipments for each Survey Site*

<b>I-81</b>	<b>I-26 (Exit 45)</b>	<b>I-26 (Exit 28)</b>	<b>11E Sullivan County Line</b>	<b>11E Greene County Line</b>	<b>HWY 321</b>
2,877	1,817	1,529	629	662	506

Table 8

*Total Estimated Yearly HAZMAT Shipments for Washington County*

	<b>Observed Shipments</b>	<b>Estimated Shipments</b>
<b>Primary Roads</b>	8,020	209,887
<b>Secondary Roads</b>	48	57,971
<b>Total Estimated HAZMAT Shipments</b>		267,858

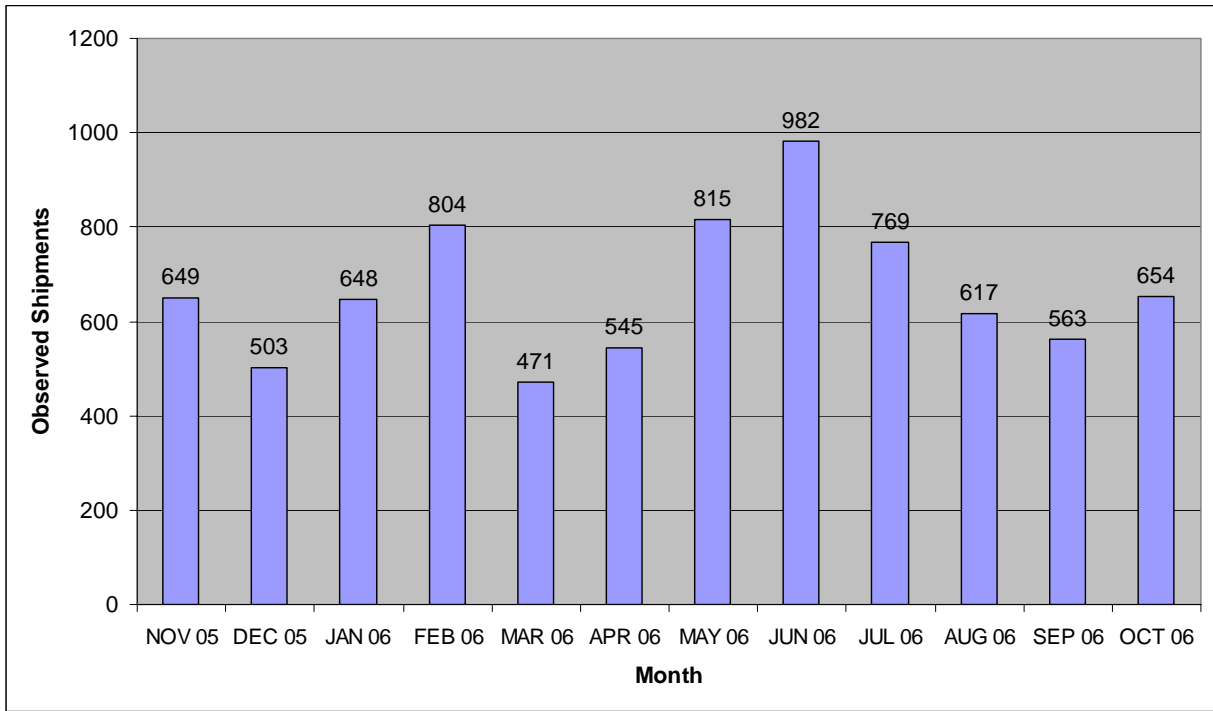


Figure 8. Total Number of HAZMAT Shipments at All Survey Sites by Month.

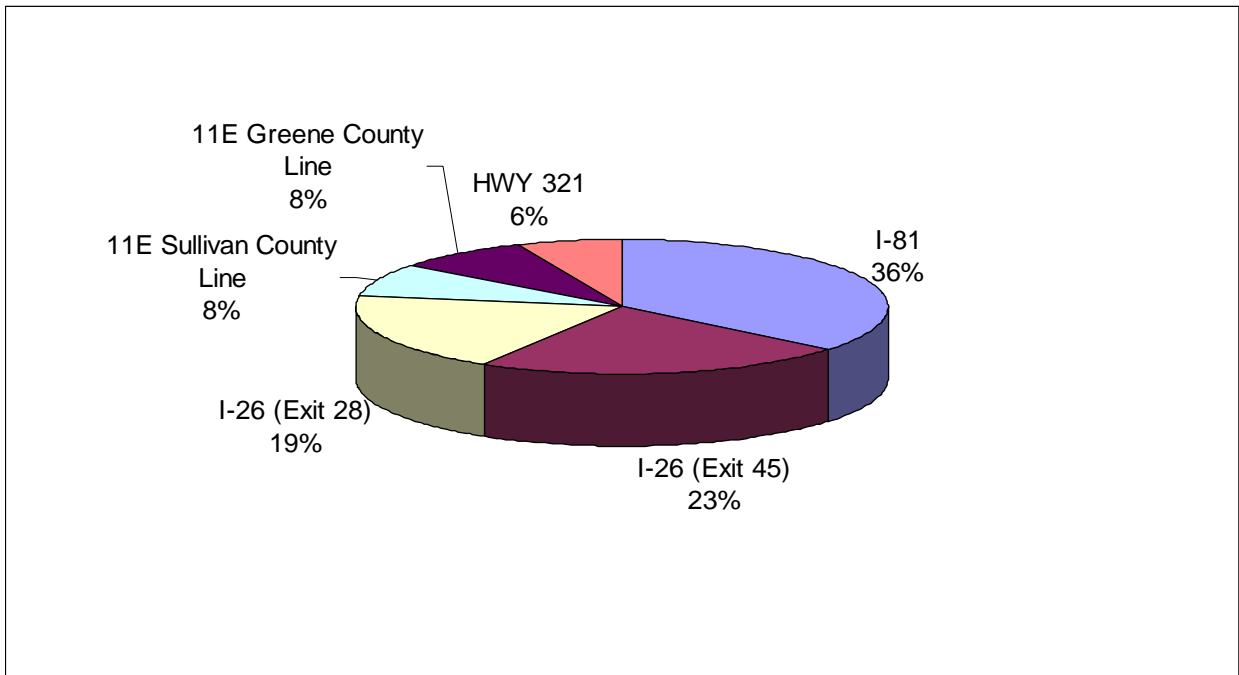


Figure 9. Percentage of Total HAZMAT Shipments Observed at All Sites.

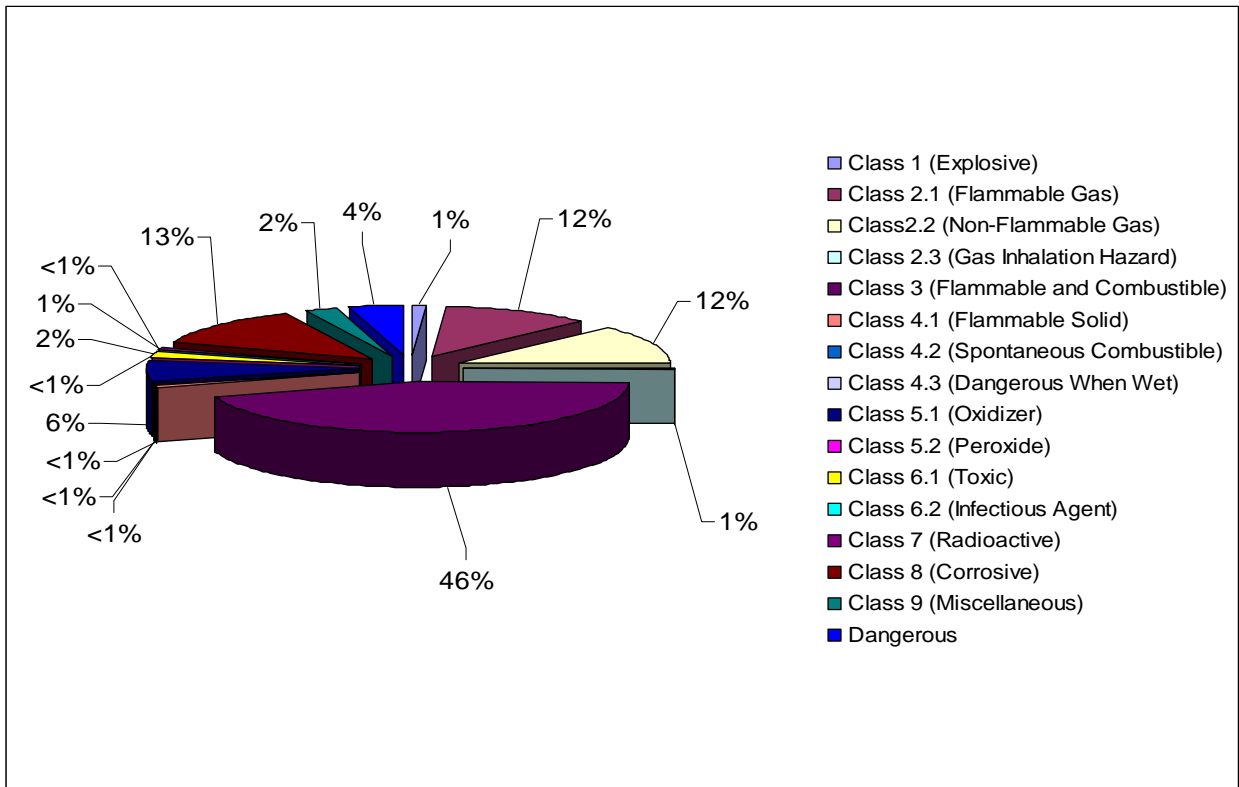


Figure 10. Percentage of Total HAZMAT Shipments by Hazard Class.

Table 9

*Top Ten Substances Shipped by Roadway*

Substance	Hazard Class	UNID	Observed Shipments
Gasoline	3	1203	2610
Petroleum Gases, Liquefied	2.1	1075	738
Oxygen	2.2	1073	442
Flammable liquids, n.o.s.	3	1993	419
Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	2.2	1977	144
Corrosive liquids, n.o.s.	8	1760	130
Corrosive liquid, acidic, inorganic, n.o.s.	8	3264	120
Oxygen, compressed	2.2	1072	115
Carbon dioxide, refrigerated liquid	2.2	2187	112
Elevated temperature liquid, n.o.s.	9	3257	108

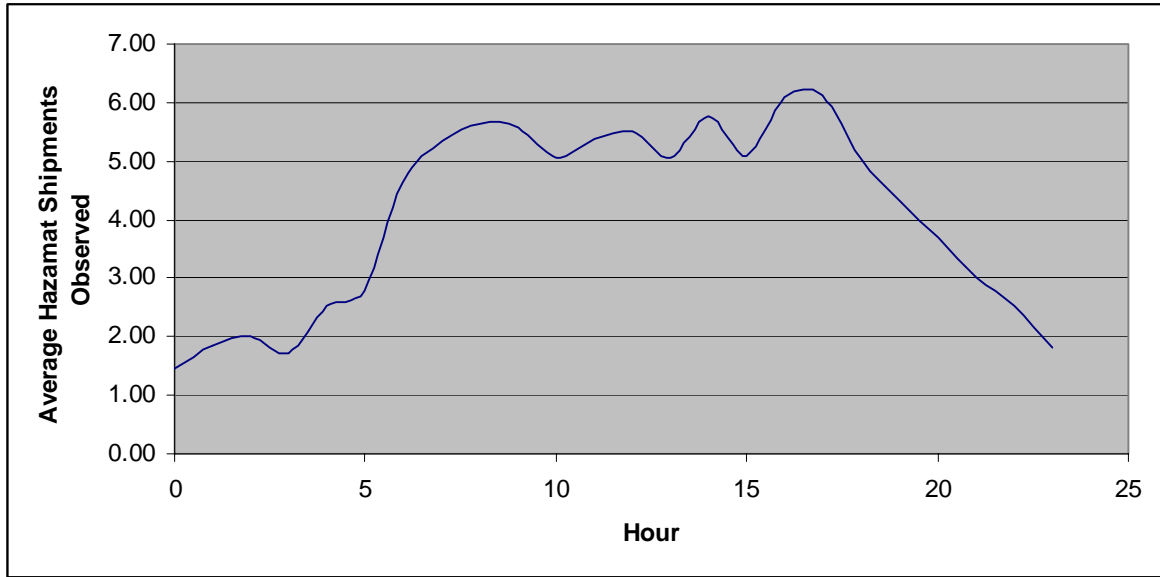


Figure 11. Yearly Average of Observed HAZMAT Shipments for All Sites by Hour.

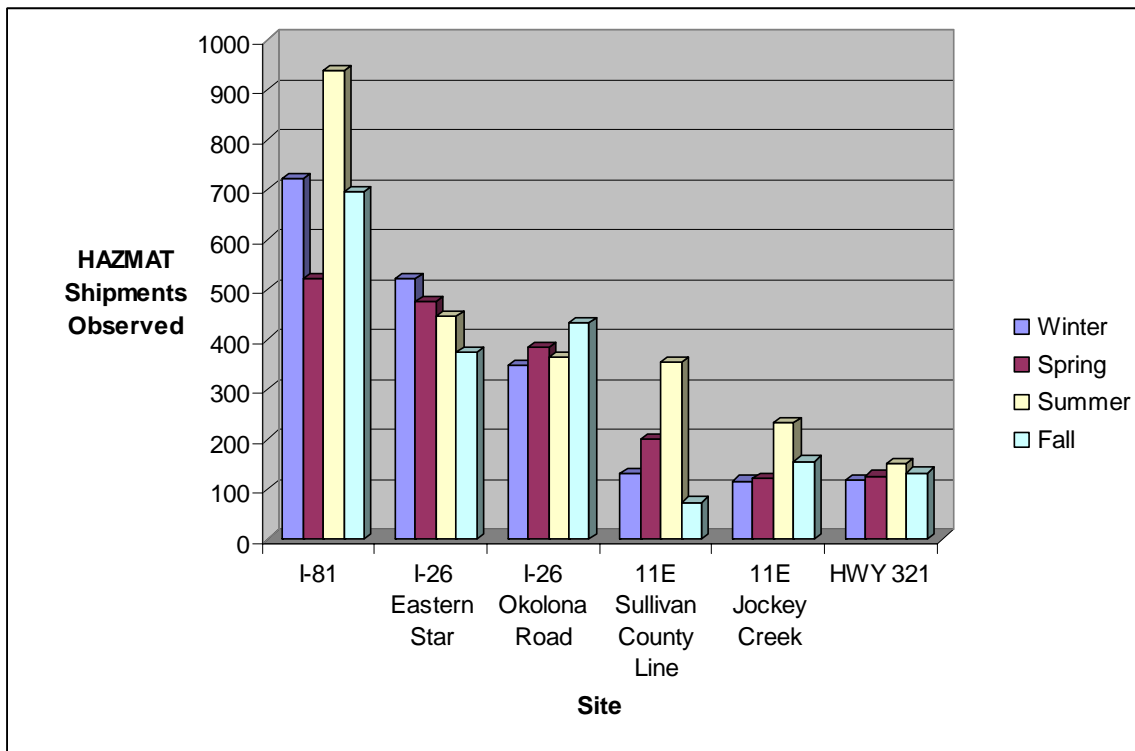


Figure 12. Observed HAZMAT Shipments by Site and Season.

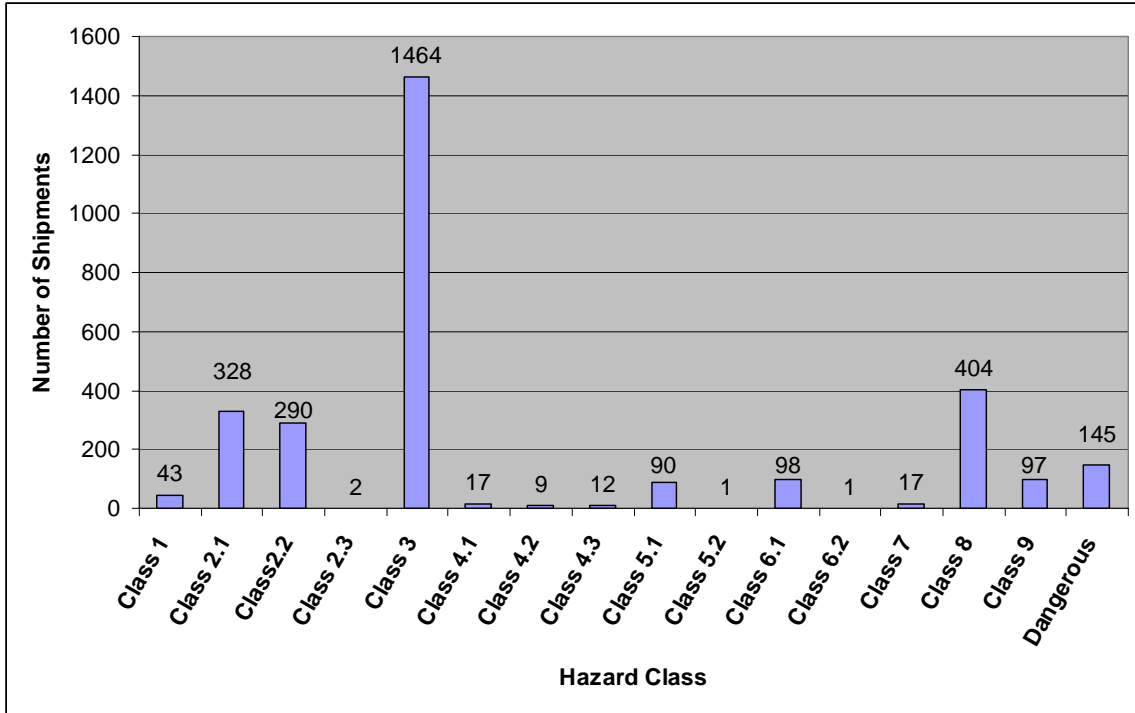


Figure 13. Number of Shipments by Hazard Class for I-81.

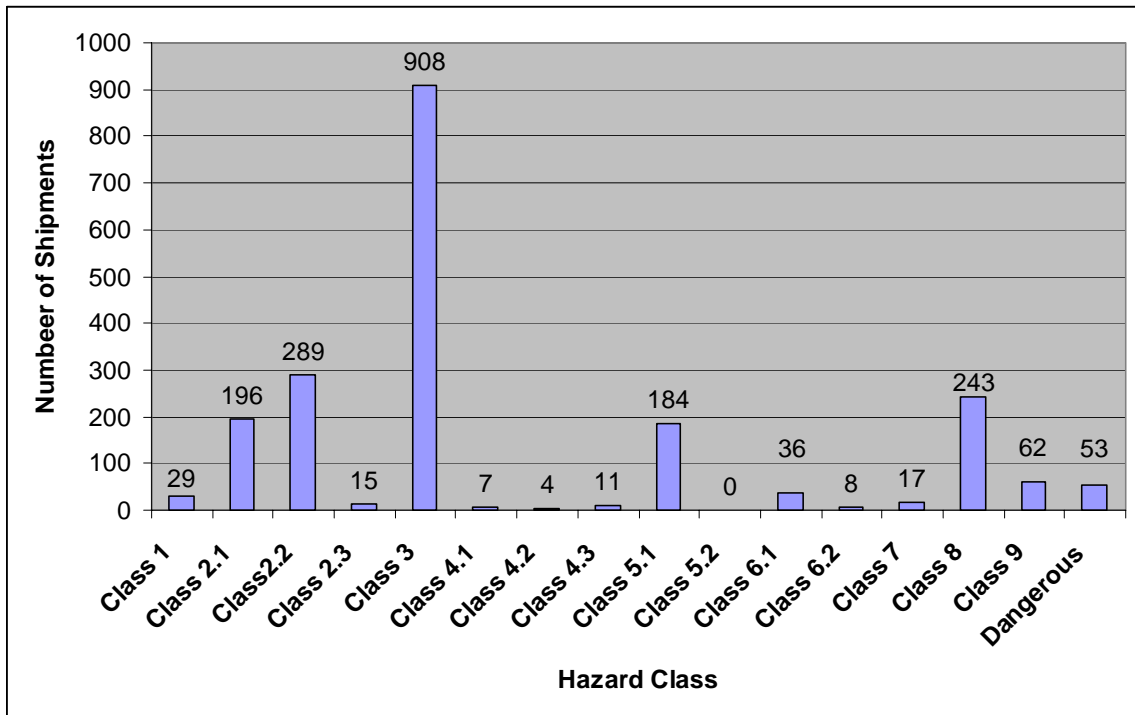


Figure 14. Number of Shipments by Hazard Class for I-26 Eastern Star.



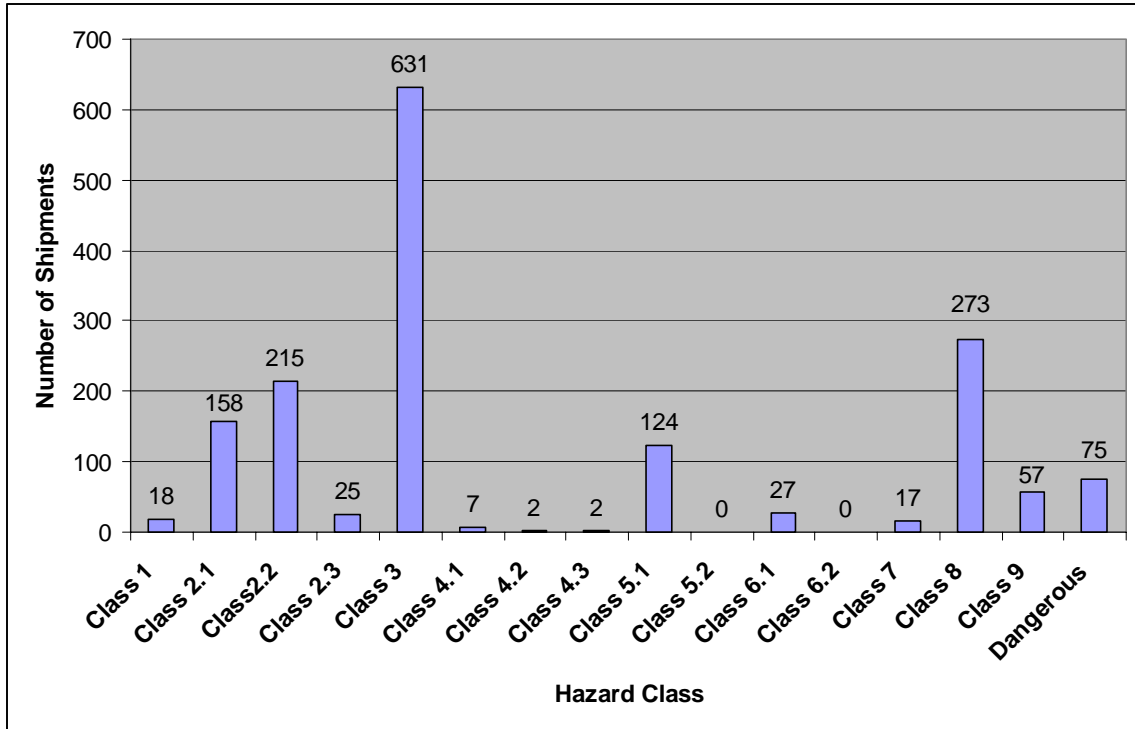


Figure 15. Number of Shipments by Hazard Class for I-26 Okolona Road.

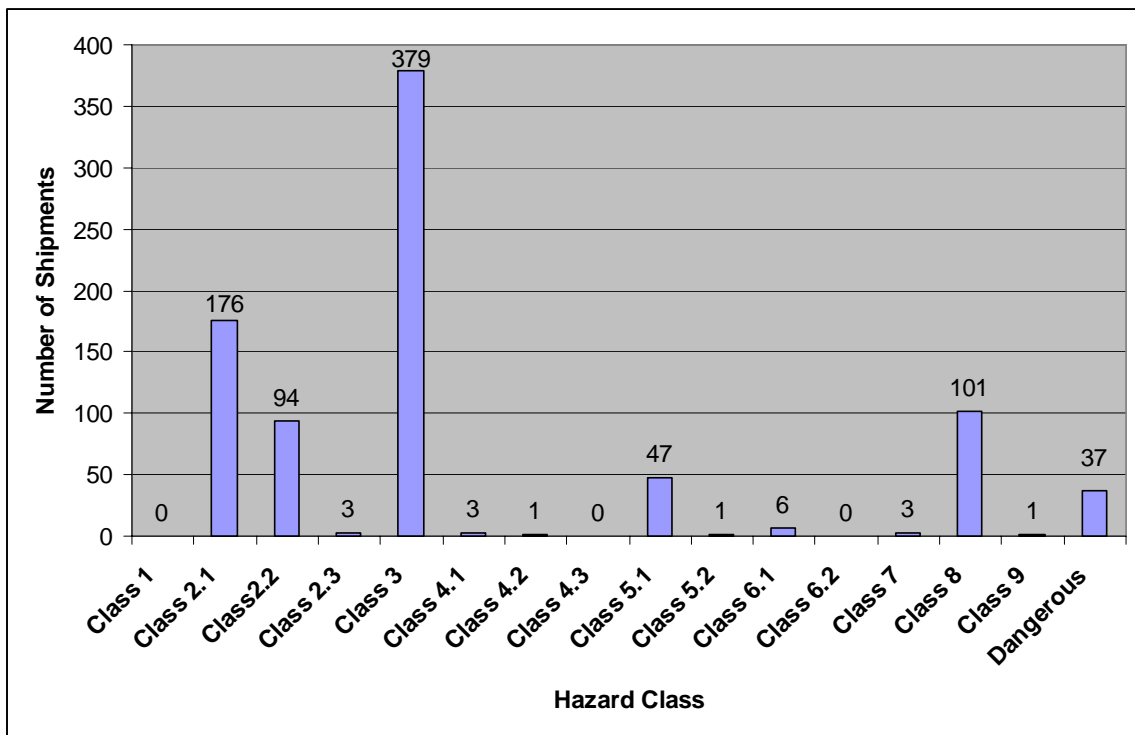


Figure 16. Number of Shipments by Hazard Class for 11E Sullivan County Line.

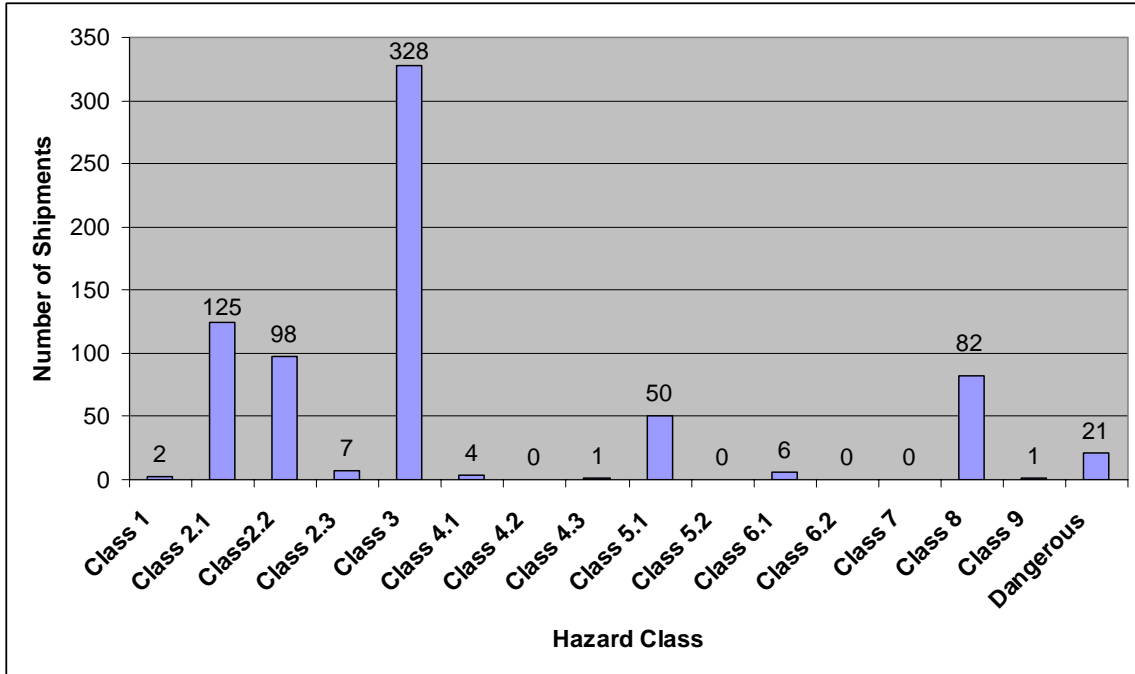


Figure 17. Number of Shipments by Hazard Class for 11E Jockey Creek.

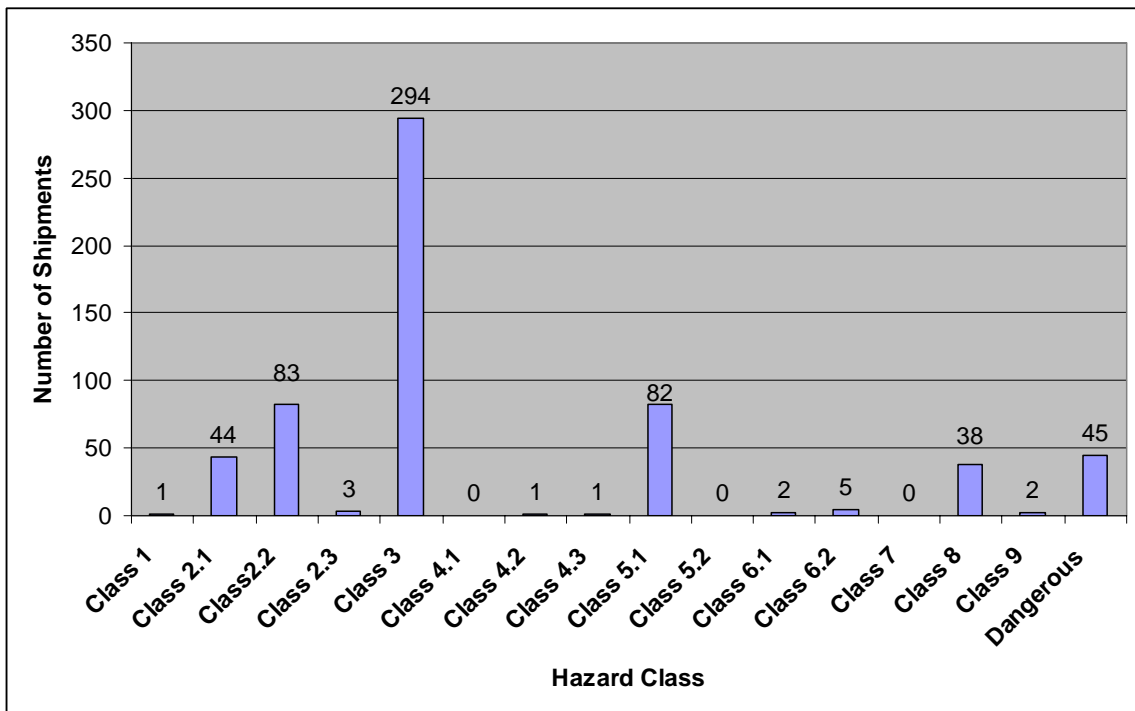


Figure 18. Number of Shipments by Hazard Class for HWY 321.

## Railway Data

Railway data were used to complete secondary objective 4 to identify the types and distribution of hazardous materials shipped through the county by rail. Railway data indicated that there are no significant differences between the distributions of hazard classes carried on the three rail lines within Washington County, Tennessee. There were differences between the most common substances transported. This indicates that despite no difference in distribution each rail line carries a distinctive group of chemicals. *Table 10* shows the 10 top transported materials, their hazard class, UNID, and the number of loads reported for all substances transported on all lines. The total numbers of loads by hazard class for all three lines are given in *Table 11*. The percentage of each hazard class carried by all lines is shown in *Figure 19*. The top 25 substances and the number of loads for each rail line are included in *Appendix 6*.

Table 10

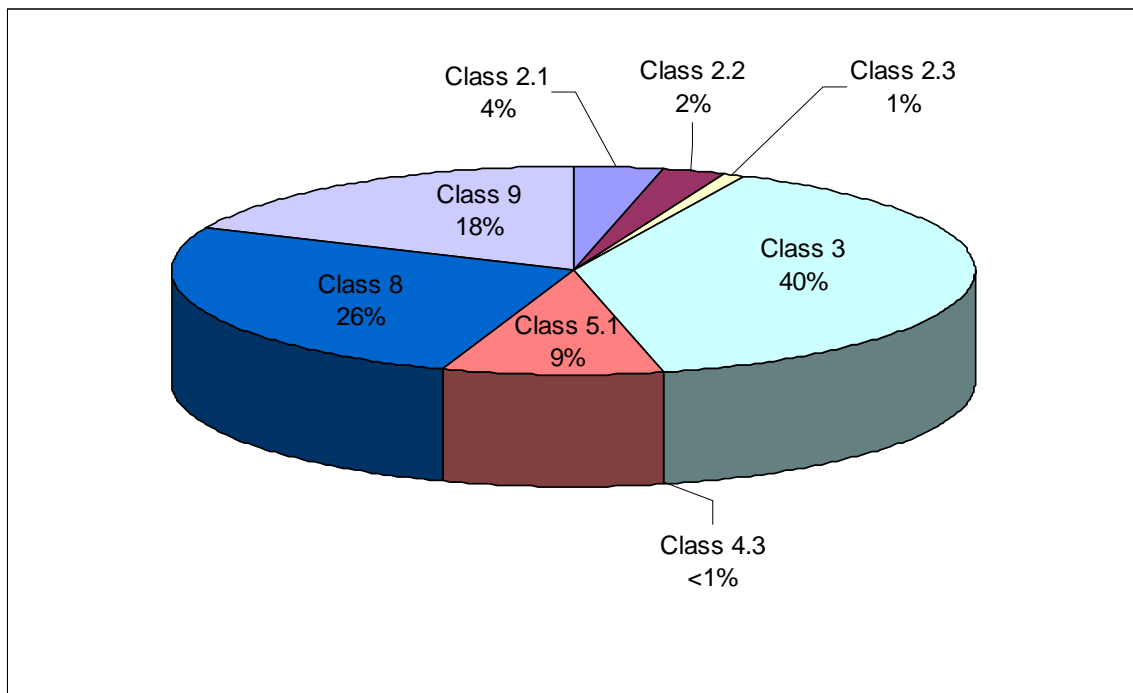
*Top Ten Hazardous Materials Transported by Rail*

Substance	Hazard Class	UNID	Number of Loads
Elevated temperature material	9	3257	3,036
Xylenes	3	1307	2,832
Ammonium nitrate	5.1	1942	2,506
Alcoholic beverages	3	1824	2,071
Combustible liquid, n.o.s.	3	1993	1,970
Sodium hydroxide	8	2218	1,925
Environmentally hazardous materials	9	3077	1,640
Acrylic acid, inhibited	8	2280	1,362
Acetic anhydride	8	1715	1,344
Petroleum gasses, liquefied	2.1	1075	1,254

Table 11

*Number of Loads of HAZMAT for All Rail Lines by Hazard Class*

<b>Hazard Class</b>	<b>Number of Loads</b>
2.1	1,254
2.2	841
2.3	361
3	13,697
4.3	57
5.1	3,096
8	9,157
9	6,448



*Figure 19. Percentage by Hazard Class for All Rail Lines.*

## Risk Assessment

The primary objective of this study was to develop a frame work to produce a quantitative risk assessment of a hazardous materials incident occurring in Washington County, Tennessee. The framework developed and outlined in the Materials and Methods section was used to produce the quantitative values included in this section. The results here work in conjunction with the quantitative value to give an overview of the risk. Without these results the quantitative values would have little meaning.

### Step 1: Evaluate the Area for Risk Assessment

This risk assessment was conducted for Washington County, in the state of Tennessee. This county is located in the Northeastern region of the state. The US Census Bureau list identifies 1 city (Johnson City), 1 town (Jonesborough), and 4 census-designated places (Fall Branch, Gray, Midway, and Oak Grove) within the county. The populations for the county and these areas are given in *Table 12*. When general demographic data was reviewed 51% (55,469 persons) of the county's population is found in the city limits of Johnson City. This means if an incident were to occur within the city limits a large population could be exposed or would require evacuation. The next largest population is in the town of Jonesborough. It contains 3.8% (4,168 persons) of the county's population just as Oak Grove contains another 3.8% (4,072 persons). When age data were reviewed children less than 5 years of age were 6.3%, children between 5-17 years of age were 5.4%, adults (18-64) were 74.1%, and seniors above 65 years of age were 14.2% of the total county population. Sensitive populations are low; however, many schools lay along the interstates and 11E. In the event of an incident school locations

should be immediately evaluated. By population density Washington County is 70% rural (< 500 persons/square mile), 25% suburban (500-1,000 persons/square mile), and 5% urban (>1,000 persons/square mile). Despite the low percentage of urban and suburban areas, 33% of incidents in the county have happened in urban areas and 50% in suburban areas. This trend will continue due to the location of transportation and storage areas. Two special populations were identified. The first are the 11,455 (Dishner, 2006) students enrolled at East Tennessee State University and the employees that come to work from outside of the county. Both of these populations attend school and/or work close to the primary routes that carry hazardous materials. Large evacuations could be required depending on the time, day, and month of an incident.

Table 12

*Washington County and City Populations*

<b>Location</b>	<b>Population*</b>
Washington County	107,198
Johnson City (City)	55,469
Jonesborough (Town)	4,168
Fall Branch (Census-Designated Place)	1,031
Gray (Census-Designated Place)	1,273
Midway (Census-Designated Place)	2,491
Oak Grove (Census-Designated Place)	4,072

\* From US Census Bureau 2005 population estimation.

Step 2: Identify Transportation Routes and Storage Sites

The first transportation routes identified were roadway hazardous materials transportation routes. All major interstate routes that move through Washington County, Tennessee were identified as hazardous materials transportation routes. These interstate routes are I-81 and I-26. Other roadways including US-11E and HWY 321 were

identified as primary routes. This is due to the industries and businesses they service. Each of these roadways and their respective road side survey sites were identified in *Table 1*. The characteristics and Average Daily Traffic (ADT) values for these roadways are included in *Table 10*. Secondary roads were identified as high traffic routes in the county. These roadways are identified in *Table 2*. None of these roads revealed a high volume of hazardous materials shipments. This indicates that the major routes for HAZMAT transportation by road are I-81, I-26, 11E, and highway 321.

The railroad hazardous materials routes were identified as the three major rail lines operated by Norfolk-Southern and CSX. Two lines are operated by Norfolk-Southern. The first runs between Kingsport, Tennessee and Johnson City, Tennessee. The second runs between Bristol, Tennessee and Johnson City Tennessee. Each passes through several parts of the county. The CSX line passes through Washington County, Tennessee and runs between Kingsport, Tennessee and Erwin, Tennessee. Both Norfolk-Southern and CSX provided the top 25 substances transported via these lines. Neither company provided the average daily number of trains or the average number of cars per train. The estimated number of trains from the 6-hour surveys revealed that approximately 55 trains a day proceed through the county (*Table 14*). During the survey it was determined that there were 126 active crossings presently being used. The total number of these crossings presently using active crossing warnings was 39 or 31% of all crossings. Crossings are of concern due to the increased risk of accidents at them.

All facilities that store hazardous materials were determined from TEIR II reports. The results from the storage facilities have been presented in the chemical inventory results section of this paper. These facilities store a wide variety of hazard classes. They

store a range of 90 lbs to 9,744,966 lbs of hazardous materials. When the locations of these facilities were reviewed, 28 facilities or 58.3% were located within the cities of Johnson City, Jonesborough, or Gray. Twenty of the facilities were within the city limits of Johnson City, accounting for 41.6% of all facilities in the county. This reveals a distribution of facilities where majority are located in an urban or suburban areas. In relation to risk this means that incidents in these facilities could expose, injure or cause the evacuation of a large portion of the population.

Table 13

*Roadway Transportation Route Characteristics and Average Daily Traffic*

<b>Roadway</b>	<b>Characteristics</b>	<b>Average Daily Traffic*</b>
I-81	4 lane, median divided, excellent surface, federal interstate system	28,763
I-26	4 lane, median divided, excellent surfaced, federal interstate system	5,300
US-11E	4 lane, median divide/2 lane, undivided, good surface, state/federal funding	19,733
HWY 321	4 lane, median divided, state funded with federal subsidies	32,460

\* 2005 ADTs from the Tennessee Department of Transportation



Table 14

*Estimated Number of Trains and Average Number of Cars*

<b>Rail Line</b>	<b>Daily Average Number of Trains</b>	<b>Average Number of Cars</b>
Norfolk-Southern (from Kingsport)	22	95
Norfolk-Southern (from Bristol)	15	110
CSX	18	102

Step 3: Identify Heavily Shipped/Stored Materials

The most heavily shipped hazardous materials for roadway transportation were identified by combining all roadway shipments. By hazard class 45% of all shipments are class 3, followed by hazard class 8 at 13% and hazard class 2.2 at 12%. The top 3 shipped substances were Gasoline (UNID 1203), Propane (UNID 1075), and Oxygen (UNID 1073). These data were gathered from the road side surveys. Rail data indicated that by hazard class Flammable (3) made up 40% of all HAZMAT transported on the three lines operated in Washington County. This is followed by 26% for corrosives (8) and 18% for class 9 (miscellaneous). The top 3 substances were Elevated temperature materials (UNID 3257), Xylenes (UNID 1307), and Ammonium nitrates (UNID 1942). This indicates that hazard class 3 is the most shipped HAZMAT by class. This relates to it being the most likely substance to be involved in a transportation incident. The most heavily stored hazardous materials in Washington County are Uranium tetrafluoride (UNID 3308), Flammable solids, organic n.o.s. (UNID 1325), and Hazardous waste and liquid n.o.s. (UNID 3082). When hazard classes are considered without regards to amounts, 33% of substances are class 3 (flammable), 23% are corrosive (class 8), and 9%

are non-flammable gas (class 2.2). The total amount of hazardous materials stored in Washington County Tennessee is 41,423,470 lbs.

Step 4: Release Routes and Outcomes

Roadside surveys, railway data reviews, and TEIR II report reviews have shown that all hazard classes are stored and transported through Washington County, Tennessee. Due to the wide variety of chemicals stored and transported through the county, all types of releases are possible for roadway traffic, rail traffic, and storage. In each type of release there are many different outcomes possible (*Table 15*). Each release and outcome are listed individually; however, an incident could occur that results in multiple types of releases and multiple outcomes.

Table 15

*Point of Release, Type of Release and Outcomes*

<b>Released From</b>	<b>Type of Release</b>	<b>Outcome</b>
Rail	Gas release Liquid release Solid release Fire (vapor/particulates)	Evacuations, Injuries, Acute and Chronic illness, Death, BLEVE, Fire damage, Lost time, Closures
Road	Gas release Liquid release Solid release Fire (vapor/particulates)	Evacuations, Injuries, Acute and Chronic illness, Death, BLEVE, Fire damage, Lost time, Closures
Storage	Vapor release Liquid release Solid release Fire (vapor/particulates)	Evacuations, Injuries, Acute and Chronic illness, Death, BLEVE, Fire damage, Lost time, Closures

### Step 5: Risk Determination

Part of the primary objective was to produce a quantitative risk assessment. This step was used to quantify the risk from roadway transportation, railway transportation and storage of hazardous materials. This is an important step, without it we are only able to say risk is low, medium, or high. Having a quantitative number will help to put the individual and overall risk into perspective. This was accomplished through the use of 3 equations to determine the incident rate, which was compared to a reference rate to identify a quantifiable bracketed relative risk.

In each of these calculations an Uncertainty Factor was used. As this factor increases the risk level also increases. Risk factors are assigned by the amount of uncertainty you have in your data. Uncertainty was assessed for any data that were extrapolated or derived from several data sets, incomplete data, unreliable data, and limited data. To determine uncertainty a criterion was used to assess a factor of 1 to 1,000. If all data used in a calculation are reliable, solid data a factor of 1 was assessed. If one or more sets of incomplete, extrapolated, derived, or limited data were used a factor of 10 was assessed. In the event that one to three data sets or values were incomplete, extrapolated, derived, or limited a factor of 100 was used. If all data sets used were incomplete, extrapolated, derived or limited then an uncertainty factor of 1,000 was assessed. These factors are intended to create a conservative risk calculation. This means that as uncertainty increases risk will increase. Each roadway, railway, and storage incident rate was compared to a reference rate to determine relative risk. This relative risk indicates how likely Washington County is to have a HAZMAT incident in relation to similar areas in the US. The criteria used to choose reference values were created to find

values that were relevant to HAZMAT transportation and storage in Washington County. The first choices for values were valid studies in Washington County, TN or the State of Tennessee. This was followed by studies from national databases that contained information from locations similar to Johnson City and Washington County Tennessee. In the event that no values fitting these criteria could be found, values were taken from values reported in two or more scientific references, or combined studies related to specific transportation routes and storage practices. If the second set of criteria could not be met, values from national databases were used. The risk calculated is the relative risk. This indicates how likely Washington County is to have a HAZMAT incident in relation to similar areas in the US. The Washington County incident rates are bracketed to show the range for the calculated risk. This is done because it is impossible to determine the absolute risk with incomplete data. If the relative risk is equal to 1 then the risk is the same as other locations similar to Washington County, Tennessee. If the value is less than 1 the risk is lower. If a value is greater than 1 the risk of an incident is higher. The magnitude of this risk is determined by taking the value and subtracting it from 1. The value from this calculation indicates the number of times higher Washington County's risk is. This relative risk can be used to understand the risk to the county. It also allows emergency management agency to plan and train for the incidents that show the greatest risk.

Roadway risk was assessed by using *Equation 1*. For this equation the accident rate was determined by taking the number of incidents and dividing the value by the number of reportable years, times 365 days. This rate is then multiplied by the number of hazardous shipments observed and the survey ratio. The survey ratio is a ratio determined

by dividing the number of survey days by the total number of days in the survey period. This modifier is used to insure that the calculated risk is not overestimated by the observation of a few heavy traffic days. The total for the multiplied accident rate, observed hazardous materials shipments, and the survey ratio are then divided by the average daily traffic (ADT) that has been multiplied by 365 days. The ADT was determined from Tennessee Department of Transportation roadway counts conducted in 2005. The state uses multiple counts to create an average daily traffic count. These counts are available for specific roadways at several points on the TDOT website (TDOT, 2005). This value was multiplied by 365 days to estimate total traffic for a year period. The value from this calculation was multiplied by 100 for the roadway data due to the limited amount of survey data and the estimation of total yearly traffic. This gives the incident rate for a HAZMAT incident in Washington County as incident per year. This was then divided by the reference incident rate to determine the relative risk. Risk was calculated for I-81, I-26, 11E, and Highway 321. Both 11E and I-26 contained two survey points. However, the two survey points from each road were compared statistically to one another. There was no significant difference. Therefore, the data from both survey points were combined to assess risk for the roadway. These variables and final calculations are in *Table 16*.

Data provided by the railroads was used to assess risk for the county by using *Equation 2*. Due to a lack of cooperation from the rail companies, it was necessary to estimate the weight of hazardous materials shipped and the weight of all shipments transported through the county. The number of hazardous materials loads reported was multiplied by the standard rail car transportation weight of 280,000 lbs. This same

standard weight was used and multiplied to the estimated 2,054,341 loads that are transported through the county each year. This estimation showed that the total of all shipments through the county was 575,215,666,667 lbs with 9,356,148,000 lbs of hazardous materials. These estimations and the railways refusal to provide information on all shipments through the county resulted in an uncertainty factor of 100 to be used in the railway risk calculation. To determine this risk the incident rate was taken from a Transportation Research Board publication (Anderson & Barkan, 2004). This rate deals with all freight and is not specific to hazardous material. This accident rate was multiplied by the total pounds of hazardous materials shipments and an active crossing modifier. Most rail accidents and rail hazardous materials incidents occur at rail crossings. The Federal Railroad Administration indicates that active crossings guards reduce the likelihood of an accident by 97%. This modifier is a ratio of non-active guarded crossings divided by all crossings. As the number of non-active guarded crossings increase the ratio approaches 1. As the value approaches 1 the overall calculated risk increases. This accounts for the added risk unguarded or passive guarded crossings present. This value is then divided by the total number of pounds shipped through the county to give the incident rate as incident per year. This value was multiplied by the uncertainty factor of 100. The relative risk was calculated by dividing the Washington County Rate by the reference rate for rail. This rate is the rate for all railway incidents stated by the FRA. The relative risk is presented in *Table 17*.

The overall storage risk was calculated from *Equation 3*, using data gathered from the chemical storage inventory. To calculate the risk the millions of pounds stored were divided by the number of storage facilities times the number of days stored. Due to lack

of data regarding hazardous materials storage incidents in the county, it was required that another incident rate be used. A number of sources were reviewed. An incident rate of  $4.5 \times 10^{-10}$  was derived from Risk Management Program Info (RMP) database (Belke, 2000; Kleindorfer, Feldman, & Lowe, 2000). This was derived by taking the total number of incidents and dividing it by the total millions of pounds of all stored hazardous materials listed in the database. This rate was then divided by 1,000,000 to determine the incident rate per pound as  $4.5 \times 10^{-16}$ . Fifty-nine percent (59%) of all chemicals stored in Washington County were listed or fit into one of the groups of substances listed. Uranium tetrafluoride (UF<sub>4</sub>), Vanadium, 3 heavy metal compounds, and 2 pesticides were among the substances that could not be placed into a group. Literature reviews indicated low incident rates for these substances. In most instances these were qualitative rates (Chinander, Kleindorfer, & Kunreuther, 1998; Kleindorfer, *et al.*, 2003; USDOE, 2001). In all, 110 of the 186 individual substances stored in the county were listed in the RMP Info database. The results of the amount stored was divided by the number of facilities, times the days stored. This value was then multiplied by the incident rate. This gives an incident rate for Washington County as incident per Mlbs per year. This value was then divided by the RMP Info database incident rate to determine the relative risk.

For each substance listed in the RMP Info database an incident rate per pound was determined and an incident rate for each substance was determined. This was done by dividing the RMP Info database incident rate by 1,000,000 to determine the incident rate per lbs per year. This is multiplied by the amount of each specific substance stored in the county. This gives an incident rate as incident per year for the specific substance stored. *Table 19* lists the 10 substances stored in the county with the highest incident rates,

therefore, which present the greatest risk. These rates are only for specific substances and do not indicate the rate for storage at all facilities in the county.

In *Table 20* the relative risk for each transportation and storage location. The high value for this relative risk is the calculated risk value. The reason for this is that the use of uncertainty factors makes risk calculations conservative and may overestimate. By using bracketed relative risk we are able to say the risk falls between two given values.



Table 16

*Calculated Risk for Roadway Incident in Washington County, Tennessee*

Location	Variable	Value	County Incident Rate (Incident /Year)	Reference Incident Rate (Incident /Year)	Risk
<b>Roadway</b>					
I-81	IR	0.003			
	HMS	2,877			
	SR	0.038			
	ADT	28,763			
	Ds	365			
	UF	100	$3.1 \times 10^{-6}$	$2.2 \times 10^{-6}$	1.4
I-26	IR	0.003			
	HMS	3,346			
	SR	0.077			
	ADT	10,600			
	Ds	365			
	UF	100	$1.9 \times 10^{-5}$	$7.3 \times 10^{-6}$	2.6
11E	IR	0.003			
	HMS	1,291			
	SR	0.077			
	ADT	39,467			
	Ds	365			
	UF	100	$2.1 \times 10^{-6}$	$2.1 \times 10^{-6}$	1.0
HWY 321	IR	0.003			
	HMS	506			
	SR	0.036			
	ADT	32,460			
	Ds	365			
	UF	100	$4.6 \times 10^{-7}$	$1.0 \times 10^{-6}$	0.5

Table 17

*Calculated Risk for Railway Incident in Washington County, Tennessee*

Location	Variable	Value	County Incident Rate (Incident /Year)	Reference Incident Rate (Incident /Year)	Risk
<b>Railway</b>					
	IR	0.000000039			
	THMS	9,356,148,000			
	AC	0.31			
	TS	575,508,266,666			
	UF	100	$1.9 \times 10^{-8}$	$3.9 \times 10^{-8}$	0.5

Table 18

*Calculated Risk for Storage Incident in Washington County, Tennessee*

Location	Variable	Value	County Incident Rate (Incident Per Mlbs/Year)	Reference Incident Rate (Incident Per Mlbs/Year)	Risk
Storage	As	33.7			
	F	49			
	Ds	365			
	IR	$4.5 \times 10^{-16}$			
	UF	10	$8.4 \times 10^{-6}$	$4.5 \times 10^{-10}$	0.02

Table 19

*Ten Stored Substances with Highest Incident Rates*

Substance	Pounds (lbs) Stored	Incident Rate (Incident per Year/lbs)*	County Incident Rate (Incident/Year)**
Propane	2,877,350	$1.2 \times 10^{-9}$	$3.5 \times 10^{-3}$
Hydrogen, Gas	10,400	$2.4 \times 10^{-7}$	$2.5 \times 10^{-3}$
Nitric, Gas	32,400	$4.7 \times 10^{-8}$	$1.5 \times 10^{-3}$
Chlorine	4,790	$1.6 \times 10^{-7}$	$7.7 \times 10^{-4}$
Petroleum Distillates, Hydrotreated	600,000	$7.5 \times 10^{-10}$	$4.5 \times 10^{-4}$
Phosgene	55	$2.5 \times 10^{-6}$	$1.4 \times 10^{-4}$
Hydrogen Chloride	470	$2.5 \times 10^{-7}$	$1.2 \times 10^{-4}$
Flammable Coolant	85,000	$7.5 \times 10^{-10}$	$6.4 \times 10^{-5}$
Petroleum Distillates Naphthenic	85,000	$7.5 \times 10^{-10}$	$6.4 \times 10^{-5}$
Quenching Oil	85,000	$7.5 \times 10^{-10}$	$6.4 \times 10^{-5}$

\* RMP value

\*\* RMP value x the number of lbs stored in Washington County, Tennessee

Table 20

*Roadway, Railway and Storage Relative Risk*

<b>Location</b>	<b>Relative Risk (Low Value - High Value)</b>
<b>Roadway</b>	
I-81	0.14 - 1.4
I-26	0.3 - 2.6
11 E	0.1 - 1.0
HWY 321	0.05 - 0.5
<b>Railway</b>	0.05 - 0.5
<b>Storage</b>	0.002 - 0.02

Step 6: Conclusions and Recommendations

Through the five previous steps information was gathered in order to see the many facets of the risk involved in the shipment and storage of hazardous materials within Washington County, Tennessee. In this section several conclusions will be drawn and listed in *Table 21*. From these conclusions several core recommendations will be made and presented in *Table 22*. These conclusions will be further discussed in detail in Chapter 5 and Chapter 6.

Table 21

*Risk Assessment Conclusions*

1. The Interstates in Washington County, Tennessee pose the highest risk for a hazardous materials incident occurrence.
2. There is a lack of local databases for all incidents in Washington County, Tennessee.
3. Within the county there are 49 facilities storing a daily average of 33,722,700 lbs of HAZMAT, an estimated 209,887 yearly roadway HAZMAT shipments and 9,356,148,000 lbs of HAZMAT shipped by rail yearly.
4. Major populations lay adjacent to all major railways and roadways that pass through Washington County, Tennessee.

Table 22

*Risk Assessment Recommendations*

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- 1.** The creation and maintenance of local incident database containing all incidents that occur in the county.
  - 2.** Continued data collection by rail surveys, road surveys, and reviews of TEIR II reports.
  - 3.** Training tailored to high risk scenarios in cooperation with storage and transportation companies.
  - 4.** Better incident rates for general chemical storage by weight and railway hazardous material incidents.
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## CHAPTER 5

### DISCUSSION

This study was done to evaluate and develop a framework to produce a quantitative risk assessment for a Hazardous Materials incident occurring in Washington County, Tennessee. To complete this objective a chemical storage inventory, 102 road side surveys and a railroad hazardous materials survey were done. A risk assessment framework adapted from the Environmental Protection Agency's Ecological Risk Assessment Framework (USEPA, 1992) was created to address risk from the transportation and storage of hazardous materials. This was used in conjunction with the data collected in the field to produce a quantitative risk assessment. When related to national rates Washington County, TN is just as likely or less likely overall to have a hazardous materials incident. The only elevated risk comes from hazardous materials transported by roadway. Roadway incident values still fell close to reported national values. Highway 321 leading to Elizabethton in fact fell below, with a relative risk of 0.005 - 0.5. Highway 11E was equal with a risk value of 1.0 and I-81 was only 0.4 times more likely to have an incident. I-26 was the most hazardous of the roadways, with a risk value of 2.6. Railway and storage values were below national rates at 0.5 and 0.02 respectively. The low end relative risk shows that with proper information we may see lower risk. This was to be expected due to the low number of incidents that have been reported each year in Washington County, Tennessee. The last railway HAZMAT incident was prior to 1986, and there are no storage incidents reported on any national database. Members of the WCJCEMA report no serious incidents since 1982. During this time period there has only been one roadway incident that had a spill over 100 lbs. This

information indicates a county with low incident rates. However, it should be remembered that risk is different from an incident rate. It takes into account what could happen.

This assessment is conservative due to the amount of uncertainty in the data used to assess the risk. With the right data this risk could be lower or higher. This uncertainty comes from several issues. The first is the number of roadside surveys completed. It was only possible to survey the six survey sites 14 times during the year. Though this was ambitious, 14 days of the year at one site only covers 336 hours of observation, or 3.8% of the entire year. This means that only a small snapshot of the hazardous materials shipped through each site was observed. These observations also covered different days of the year. There was not enough data to prove significant differences in the number of shipments by day, it was obvious that some days see more HAZMAT traffic than others. This means that some of the heaviest traffic day may have been missed during the year. Rail data was another source of uncertainty. Hazardous materials shipments were reported as shipments and not by weight. The railway companies also refused to provide data for the total amount of shipped material, average daily number of trains, or the average number of cars for these trains. In each instance estimations had to be used to determine the risk. This was compounded by the fact that there are presently no incident rates specifically for railway hazardous materials incidents. Uncertainty for HAZMAT storage comes from a lack of an assessable, complete national or local database related to incidents.

The risk value for hazardous materials storage was low, but many of the substances stored in large amounts are not listed in the RMP info Database. Many of

these substances are stored in large amounts by a few facilities. The total 33,722,700 lbs of hazardous material are stored at 49 facilities. There is a wide range in the amounts stored. Aerojet is the largest store of HAZMAT, storing 9,744,966 lbs. There are 7,700,000 lbs of Uranium tetrafluoride (UF<sub>4</sub>) and 800,000lbs of Depleted Uranium. Each of these substances has special considerations if, an incident were to occur. Having this large amount of material stored onsite presents a great risk. It also raises the possibility for an incident to occur. However, this was not the only facility storing large amounts. In all there were 6 facilities that stored a daily averages over 1 million pounds. Regardless of the material, storing 1 million pounds of any hazardous material poses a large risk. Having six facilities that store these large amounts significantly increase Washington County's risk. The facilities are clustered within the county, with 37 facilities located within the city limits of Johnson City. These facilities pose the risk of exposing large populations in the event of an incident. Six others are located in Jonesborough and Oak Grove, each containing 3. These facilities are in suburban areas and also pose the risk of exposing many people. The other 9 facilities are in the rural areas of the county. One of the nine is Aerojet that lies west beyond Jonesborough along 11E. This would seem to reduce its risk to the populations within the county. However, the amount of hazardous materials stored would create a large hot zone if a serious incident were to occur. The clustering of facilities is important when you consider coverage by emergency assets. Each facility can be reached by roadway in less than 20 minutes by emergency vehicles. This still would not affect a situation that had already gotten out of hand.

Road and rail transportation is dominated by the transportation of class 3 (flammable and combustible). This means that the risk of an incident involving hazard

class 3 is high. However, that is where the similarities stop. For the amount of hazardous materials shipped via roadways in the county the risk is average. The interstates in the county do have an elevated risk that is very low. I-26 is 1.6 times higher than the national value. The raised risk on this roadway is due to a higher percentage of vehicles transporting HAZMAT. I-81 has a risk value of 1.4, which is only slightly elevated. This elevated risk is due to the high number of observed vehicle carrying hazardous materials. Though the largest numbers of HAZMAT shipments were observed on I-81, I-26 was found to have the highest incident rate at  $1.9 \times 10^{-5}$ . This comes from the fact that a larger portion of the traffic on I-26 is carrying hazardous materials. Both interstates carry a large number of HAZMAT shipments, but the Daily Average Traffic (ADT) values are very different. I-81 has an ADT of 28,763 vehicles per day where I-26's is only 5,300 vehicles per day. This helps to explain why I-26 has a higher risk than I-81. A review of roadway incidents showed that most incidents occur in Johnson City from 8:00 am to 9:30 am and involve a class 8 (corrosive) material. This is important to identify because during this time most people in the county are at work/school or in transit. It also shows that there is a potential for a large portion of the population to be exposed including young children who are highly susceptible. In many cases this could be from vapor that is often associated with class 8 spills. Roadway incidents show no pattern by year. For instance in 2001 there were 3 incidents. The year before and after there were no incidents. In 2003 there was one. For the WCJCEMA this is very important. No pattern helps WCJCEMA to stress to its employees to always be ready. The road side survey revealed that 76.2% of all observed HAZMAT shipments occurred from 6:00 am to 7:59 pm. When we look at the time period between 07:00am to 10:59 am, 22.2% of all



shipments were observed. This large volume of HAZMAT vehicles on the road increases the likelihood for an incident to occur. It also relates that the time period between 6:00 am to 8:00 pm has the most potential for an incident to occur. During this period there are two work related rush hour traffic periods, two time periods where children are being bussed, and it is normal business hours. Urban areas during this period are densely packed, which could lead to increased injuries, exposures, and evacuations. There were several other issues identified during the road side surveys that are of concern. The standard practice of placarding aims to make the identification of HAZMAT shipments possible. This is especially helpful during an incident. During the road side surveys discrepancies in placarding were noted. Some shipments were noted to have placarding that followed labeling guide lines instead of placarding guideline. This often resulted in shipments labeled with more than one placard for the same substance. In the event of an incident it may appear that emergency crews are dealing with more than one substance. Shipments were noted to have placards but no UNID, in total there were 754 of these shipments identified. This most often occurred with corrosive (hazard class 8). Corrosives do tend to act similar; however, there is always the exception. There are also alkaline and acidic corrosives, a UNID could help to identify exactly what substance is being dealt with. Other shipments were clearly marked with a UNID but had no placards present. In the event of an accident every distinguishing mark helps. Many times if an emergency crew can not determine the UNID at a distance, they can recognize a placard. There is also a concern related to 368 shipments labeled as “Dangerous”. Though this is a valid placard, it fails to identify what categories of hazards are present. Shipments placarded dangerous should be approached with caution. The large mega stores in the

Washington County area and throughout the US tend to carry a large variety of items. If non-compatible items are in the same transportation container when an incident occurs emergency personnel could be injured by unforeseen reactions. It became clear during the survey that the correct method of placarding vehicles is still misunderstood or not properly done in some cases. This raises the risk for injuries when an incident occurs.

Railway risk was lower than roadway risk. Washington County is less likely to have a hazardous materials incident from railway transportation than similar communities. The bracketed relative risk was 0.002 – 0.02. There is a large amount of uncertainty in rail transportation. It has often been stated that what you do not know can not hurt you. With risk this is a false. With risk what you do not know, you do not understand and you can not plan for. Only through better cooperation with the railroads will there be enough information to accurately assess the risk of rail transportation through the county. The railways in Washington County pass through all of the urban and suburban areas. This heightens the risk for exposure, injuries, evacuations, and death. However, the longest lengths of track pass through rural areas. Here the possibility of an accident decreases due to fewer crossings but increases due to higher speeds. In all, only 31% of crossings are protected by active crossing guards. This also increases the likelihood of an incident in the county. Rail incidents tend to be more serious and take longer to control. If it happens in Washington County, rural areas may not be a buffer large enough to prevent evacuations from the suburban areas. With the small amount of information gathered in this study a generalization can be made. This would be that an incident could occur anywhere and probably would involve a class 3 substance.

In total an estimated 209,887 roadway HAZMAT shipments and 9,356,148,000 lbs of railway HAZMT shipments pass through Washington County, Tennessee. All of the major road ways and the rail lines converge in Johnson City. In the event of a HAZMAT incident there is the potential exposure of 55,469 people who live there on a regular basis. Depending on the time of day and the month of the year this number could increase. Many businesses operate year round between the hours of 9:00 am to 10:00 pm daily. This includes a mall, a university, many hotels, and many restaurants directly off of the exits within the city. The university itself lies between the CSX and Norfolk-Southern rail lines at the center of town. These businesses and the university must be considered when a HAZMAT incident occurs. If a rail, road, or storage incident occurs during business operation or school hours a significantly larger population must be considered for exposure, injury, death, evacuation, or shelter in place scenarios. The broader overview of Washington County shows a county that facilitates the transportation of a wide variety of hazardous materials. In each case these materials pass through, originate or are delivered to geographical areas where many people live, attend school, work, or frequent. In many cases these hazardous materials are stored in close proximity to these populations. In each instance, stored or transported, we can find that all hazard classes are represented. This creates a situation where on a daily basis there is the potential for a spill, leak, or fire that involves a hazardous material close to a large population. This release could be in the form of a gas, liquid, or solid. It also has the potential to be released into the air, water, or surfaces of communities in Washington County. When released exposure, injury, death, property loss, time loss, and environmental destruction are a possibility.

## CHAPTER 6

### CONCLUSION

Within Washington County, Tennessee there is a risk related to the storage and transportation of hazardous materials. This is no indication to what the outcome of such an incident will be. However, due to the types and amounts of substances moving through and stored, in the county there is the possibility for a catastrophic occurrence. If this occurs in Johnson City it could mean that a large number of people could face exposure, evacuation, injury, and possibly death. It also creates a logistical scenario where a large number of assets will be needed to handle the movement and treatment of victims of the incident. This risk can be managed by continued data collection, continued research, planning, and training related to the risk.

Due to the risk from HAZMAT transportation and storage in the county it is important that HAZMAT data continue to be collected. The more data gathered the easier it is to characterize the risk of storage and transportation of these substances. There is a wide variety of materials that are transported through the county. It is important that the emergency agencies in the county continue to train for the wide variety of HAZMAT scenarios that could occur in the county. The interstate corridors and railways in the region continue to facilitate the movement of more HAZMAT each year and will continue in the coming years. This risk will grow as the population of the county grows. With increases in population alone, the risk of exposure itself increases. The county has had the assets to handle previous incidents. The question that must be asked is are there enough for future incidents. What would happen if several tanker cars or a single

highway tanker of Fuming sulfuric acid or Phosgene were to wreck (with release) in the highly populated center of Johnson City?

The creation of a local incident database that is accessible to all members of the emergency services community and for research is recommended. This database should incorporate information related to rail, road, and storage incidents that occur in the county. As many past incidents and all new incidents should be logged into the databases as they occur. This will make it possible to determine relevant local incident rates for the county. In many cases it may be necessary that national incident rates be used for chemicals stored in the county. For many substances stored in the county there are presently no reliable national incident rates. Further studies should be undertaken that would yield a national incident rate for these substances that could be used to better quantify the risk in Washington County. Further research could also inevitably produce an incident rate for general storage. However, this rate would still create a high level of uncertainty when calculating risk.

Data collection within the county should continue. WCJCEMA should continue to review and compile TEIRII reports. These reports were vital to this study. They helped to identify the facilities that store large amounts of hazardous materials in the county. By reviewing the information provided by these reports types, amounts and the classes of HAZMAT stored could easily be determined. The WCJCEMA could also benefit by inputting the information from these reports into EPA's Computer-Aided Management of Emergency Operations (CAMEO<sup>®</sup>). This program can be used to catalog county facilities and data on the chemicals stored onsite. In the event of a HAZMAT incident CAMEO<sup>®</sup> can provide specific information for each chemical involved. This includes information

on fire and explosive hazards, health hazards, firefighting techniques, cleanup procedures, and required protective clothing. It can also be linked to MARPLOT<sup>®</sup> mapping program to provide a visual representation of the site the incident is occurring at and its outlying area.

Data collection should continue through further research. Roadway data can be improved by several different types of road side surveys. Studies should be undertaken focusing on individual roads. This would allow for more survey days on an individual roadway. This would help to remove some of the uncertainty associated with the wide range of HAZMAT vehicles counted during the year. A study of the secondary roadways would also reduce uncertainty. A comprehensive study of the secondary roads may reveal a higher number of HAZMAT shipments than estimated in this study. Rail data would also benefit from further research. Rail side surveys could be used to reduce the amount of uncertainty related to rail risk. These surveys could be used to determine the average number of trains that travel each line and the average cars on those trains. Rail side surveys would help to address rail related issues. However, a closer working relationship with WCJCEMA and the rail lines that operate in the county could remedy this problem. To make the most of further research, this relationship could be expanded to create a cooperative between the rail companies, WCJCEMA, and the ETSU Department of Environmental Health (ETSUDEH). As trust and formal connections between the railways, WCJCEMA, and ETSUDEH build transparency and communication will be the result. This will allow for future researchers to have greater access to rail data. It could also result in a joint ETSU/Rail Company research project. This cooperative will also

benefit the WCJCEMA. It will allow it to plan and conduct relevant training with both CSX and Norfolk-Southern.

This study can be used as a guide to the emergency services in the county. The findings of this study should be used to tailor the training conducted in Washington County. Training should prepare all agencies to manage and resolve issues related to the findings of this study. Training scenarios should include high risk hazard classes, times, and locations as defined by this study. These scenarios should also consider the possible releases and outcomes discussed in the risk assessment. Training conducted must be done in the urban and suburban areas. The rural areas must not be neglected. Recorded roadway incidents show that 17% of incidents occurred there. There are also miles of train tracks and roadways that pass through rural areas of the county. Rural areas also posse special problems not encountered in the urban/suburban environments. In many cases access is restricted and needed infrastructure may not be available.

Storage related training should also be conducted. Training should be tailored with considerations to facilities in the county that store large amounts. Opportunities for training in conjunction with storage facilities should be sought out and taken. Some exotic hazardous materials are stored and used in the county including UF<sub>4</sub>, Vanadium, Tungsten powder, Titanium tetrachloride, Thiram, and Rehnium. These substances and others have special considerations. At a minimum familiarization training should be conducted to raise the awareness of these hazardous materials to emergency services personnel. These materials provide future research opportunities. Better data regarding their storage, incident rate, and past incidents would help to characterize the risk these materials pose to the county.

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## APPENDIXES

### Appendix A: Hazard Classification System and DOT System

Table A1

*Hazard Classification System*

<b>Hazard Class Number</b>	<b>Classification</b>
1.1	Explosive (mass explosion hazard)
1.2	Explosive (projection hazard)
1.3	Explosive (predominately a fire hazard)
1.4	Explosive (no significant blast hazard)
1.5	Very insensitive explosive/blasting agent
1.6	Extremely insensitive detonating substances
2.1	Flammable gas
2.2	Non-flammable gas
2.3	Gas inhalation hazard
3	Flammable and combustible
4.1	Flammable solid
4.2	Spontaneously combustible liquid
4.3	Dangerous when wet materials
5.1	Oxidizer
5.2	Peroxide
6.1	Poisonous material
6.2	Infectious substance
7	Radioactive material
8	Corrosive material
9	Miscellaneous hazardous material

Table A2

*DOT Placarding Hazard Classification System*

<b>Hazard Class</b>	<b>Classification</b>
1	Explosive
2.1	Flammable gas
2.2	Non-flammable gas
2.3	Gas inhalation hazard
3	Flammable and combustible
4.1	Flammable solid
4.2	Spontaneous combustible
4.3	Dangerous when wet
5.1	Oxidizer
5.2	Peroxide
6.1	Toxic
6.2	Infectious agent
7	Radioactive material
8	Corrosive
9	Miscellaneous material
Dangerous	Mixed hazardous materials

Appendix B: Road Side Survey Results

**Minitab Output Two-way Analysis of Variance for Site and Season**

Analysis of Variance for Log (X+1)

Source	DF	SS	MS	F	P
season	3	0.1068	0.0356	2.17	0.134
site	5	1.8111	0.3622	22.05	0.000
Error	15	0.2464	0.0164		
Total	23	2.1643			

**Minitab Output One-way Analysis of Variance for Season**

Analysis of Variance for Log (X+1)

Source	DF	SS	MS	F	P
season	3	0.107	0.036	0.35	0.792
Error	20	2.058	0.103		
Total	23	2.164			

**Fisher's pairwise comparisons for Season**

Family error rate = 0.192

Individual error rate = 0.0500

Critical value = 2.086

Intervals for (column level mean) - (row level mean)

	1	2	3
2	-0.4030 0.3696		
3	-0.5363 0.2363	-0.5196 0.2530	
4	-0.3663 0.4063	-0.3496 0.4230	-0.2163 0.5563

**Minitab Output One-way Analysis of Variance for Site**

Analysis of Variance for Log (X+1)

Source	DF	SS	MS	F	P
site	5	1.8111	0.3622	18.46	0.000
Error	18	0.3532	0.0196		
Total	23	2.1643			

**Fisher's pairwise comparisons for Site**

Family error rate = 0.330

Individual error rate = 0.0500

Critical value = 2.101

Intervals for (column level mean) - (row level mean)

	1	2	3	4	5
2	-0.0156 0.4006				
3	0.0569 0.4731	-0.1356 0.2806			
4	0.4269 0.8431	0.2344 0.6506	0.1619 0.5781		
5	0.4569 0.8731	0.2644 0.6806	0.1919 0.6081	-0.1781 0.2381	
6	0.5194 0.9356	0.3269 0.7431	0.2544 0.6706	-0.1156 0.3006	-0.1456 0.2706

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Season 1 Vs. Season 2**

Season 1 N = 16 Median = 39.5  
 Season 2 N = 16 Median = 31.0  
 Point estimate for ETA1-ETA2 is -0.0  
 95.2 Percent CI for ETA1-ETA2 is (-41.0,47.1)  
 W = 263.5  
 Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 1.0000  
 The test is significant at 1.0000 (adjusted for ties)  
 Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Season 1 Vs. Season 3**

Season 1 N = 16 Median = 39.5  
 Season 3 N = 16 Median = 48.5  
 Point estimate for ETA1-ETA2 is -4.5  
 95.2 Percent CI for ETA1-ETA2 is (-95.1,40.0)  
 W = 254.5  
 Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.7345  
 The test is significant at 0.7343 (adjusted for ties)  
 Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Season 1 Vs. Season 4**

Season 1 N = 16 Median = 39.5  
 season 4 N = 16 Median = 18.5  
 Point estimate for ETA1-ETA2 is 5.5  
 95.2 Percent CI for ETA1-ETA2 is (-33.0,48.0)

W = 279.5

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.5718

The test is significant at 0.5714 (adjusted for ties)

Cannot reject at alpha = 0.05

### **Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

#### **Season 2 Vs. Season 3**

Season 2 N = 16 Median = 31.0

Season 3 N = 16 Median = 48.5

Point estimate for ETA1-ETA2 is -5.0

95.2 Percent CI for ETA1-ETA2 is (-100.0,39.1)

W = 252.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.6647

The test is significant at 0.6646 (adjusted for ties)

Cannot reject at alpha = 0.05

### **Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

#### **Season 2 Vs. Season 4**

Season 2 N = 16 Median = 31.0

season 4 N = 16 Median = 18.5

Point estimate for ETA1-ETA2 is 4.0

95.2 Percent CI for ETA1-ETA2 is (-32.1,45.9)

W = 281.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.5340

The test is significant at 0.5336 (adjusted for ties)

Cannot reject at alpha = 0.05

### **Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

#### **Season 3 Vs. Season 4**

Season 3 N = 16 Median = 48.5

season 4 N = 16 Median = 18.5

Point estimate for ETA1-ETA2 is 7.5

95.2 Percent CI for ETA1-ETA2 is (-24.9,106.9)

W = 285.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.4397

The test is significant at 0.4392 (adjusted for ties)

Cannot reject at alpha = 0.05

### **Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

#### **Site 1 Vs. Site 2**

site1 N = 16 Median = 66.5

site2 N = 16 Median = 32.5

Point estimate for ETA1-ETA2 is 4.5

95.2 Percent CI for ETA1-ETA2 is (-35.9,88.9)

W = 275.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.6923



The test is significant at 0.6922 (adjusted for ties)  
Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 1 Vs. Site 3**

sitea1 N = 16 Median = 66.5

sitea3 N = 16 Median = 26.0

Point estimate for ETA1-ETA2 is 10.0

95.2 Percent CI for ETA1-ETA2 is (-26.1,90.9)

W = 279.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.5847

The test is significant at 0.5844 (adjusted for ties)

Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 1 Vs. Site 4**

sitea1 N = 16 Median = 66.5

sitea4 N = 16 Median = 3.0

Point estimate for ETA1-ETA2 is 16.5

95.2 Percent CI for ETA1-ETA2 is (0.1,98.0)

W = 316.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.0523

The test is significant at 0.0516 (adjusted for ties)

Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 1 Vs. Site 5**

sitea1 N = 16 Median = 66.5

sitea5 N = 16 Median = 5.0

Point estimate for ETA1-ETA2 is 17.0

95.2 Percent CI for ETA1-ETA2 is (1.0,97.9)

W = 320.5

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.0348

The test is significant at 0.0344 (adjusted for ties)

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 1 Vs. Site 6**

sitea1 N = 16 Median = 66.5

sitea6 N = 16 Median = 2.5

Point estimate for ETA1-ETA2 is 17.0

95.2 Percent CI for ETA1-ETA2 is (1.1,98.0)

W = 326.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.0205

The test is significant at 0.0201 (adjusted for ties)

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 2 Vs. Site 3**

sitea2 N = 16 Median = 32.5

sitea3 N = 16 Median = 26.0

Point estimate for ETA1-ETA2 is 4.5

95.2 Percent CI for ETA1-ETA2 is (-39.9,51.0)

W = 274.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.7203

The test is significant at 0.7201 (adjusted for ties)

Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 2 Vs. Site 4**

sitea2 N = 16 Median = 32.5

sitea4 N = 16 Median = 3.0

Point estimate for ETA1-ETA2 is 14.0

95.2 Percent CI for ETA1-ETA2 is (0.0,62.1)

W = 316.5

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.0500

The test is significant at 0.0496 (adjusted for ties)

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 2 Vs. Site 5**

sitea2 N = 16 Median = 32.5

sitea5 N = 16 Median = 5.0

Point estimate for ETA1-ETA2 is 15.0

95.2 Percent CI for ETA1-ETA2 is (-0.0,62.0)

W = 317.0

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.0479

The test is significant at 0.0474 (adjusted for ties)

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 2 Vs. Site 6**

sitea2 N = 16 Median = 32.5

sitea6 N = 16 Median = 2.5

Point estimate for ETA1-ETA2 is 15.0

95.2 Percent CI for ETA1-ETA2 is (1.0,101.1)

W = 318.5

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.0418

The test is significant at 0.0415 (adjusted for ties)

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 3 Vs. Site 4**

sitea3 N = 16 Median = 26.0

sitea4 N = 16 Median = 3.0

Point estimate for ETA1-ETA2 is 16.0

95.2 Percent CI for ETA1-ETA2 is (-3.0,72.0)  
W = 299.0  
Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.1935  
The test is significant at 0.1923 (adjusted for ties)  
Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 3 Vs. Site 5**

sitea3 N = 16 Median = 26.0  
sitea5 N = 16 Median = 5.0  
Point estimate for ETA1-ETA2 is 16.5  
95.2 Percent CI for ETA1-ETA2 is (-2.0,74.0)  
W = 303.5  
Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.1416  
The test is significant at 0.1401 (adjusted for ties)  
Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 3 Vs. Site 6**

sitea3 N = 16 Median = 26.0  
sitea6 N = 16 Median = 2.5  
Point estimate for ETA1-ETA2 is 17.0  
95.2 Percent CI for ETA1-ETA2 is (-1.0,74.9)  
W = 305.0  
Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.1269  
The test is significant at 0.1257 (adjusted for ties)  
Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 4 Vs. Site 5**

sitea4 N = 16 Median = 3.0  
sitea5 N = 16 Median = 5.0  
Point estimate for ETA1-ETA2 is 0.0  
95.2 Percent CI for ETA1-ETA2 is (-7.0,26.1)  
W = 266.5  
Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.9399  
The test is significant at 0.9395 (adjusted for ties)  
Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 4 Vs. Site 6**

sitea4 N = 16 Median = 3.0  
sitea6 N = 16 Median = 2.5  
Point estimate for ETA1-ETA2 is -0.0  
95.2 Percent CI for ETA1-ETA2 is (-4.0,34.0)  
W = 273.5

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.7345  
 The test is significant at 0.7325 (adjusted for ties)  
 Cannot reject at alpha = 0.05

**Minitab Output Mann-Whitney Confidence Interval and Test for Hazard Class**

**Site 5 Vs. Site 6**

sitea5 N = 16 Median = 5.0

sitea6 N = 16 Median = 2.5

Point estimate for ETA1-ETA2 is -0.0

95.2 Percent CI for ETA1-ETA2 is (-5.0,18.0)

W = 269.5

Test of ETA1 = ETA2 vs. ETA1 not = ETA2 is significant at 0.8505

The test is significant at 0.8494 (adjusted for ties)

Cannot reject at alpha = 0.05

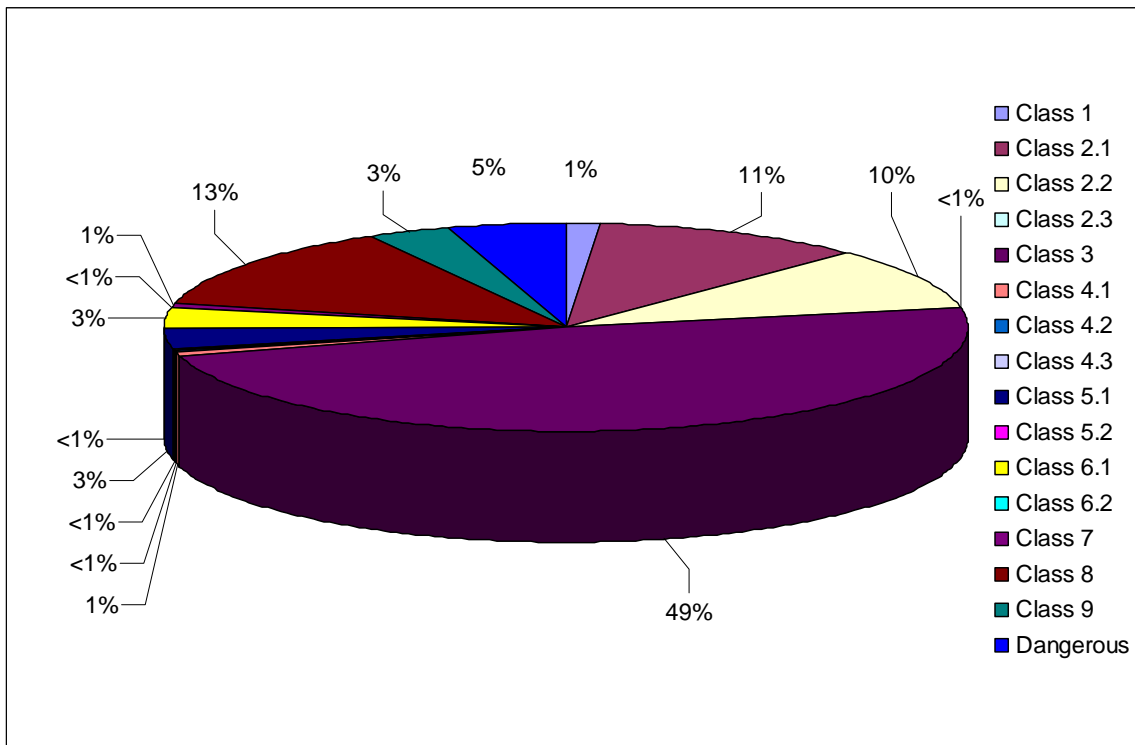


Figure A1. Hazard Class of Shipments by Percentage for I-81.

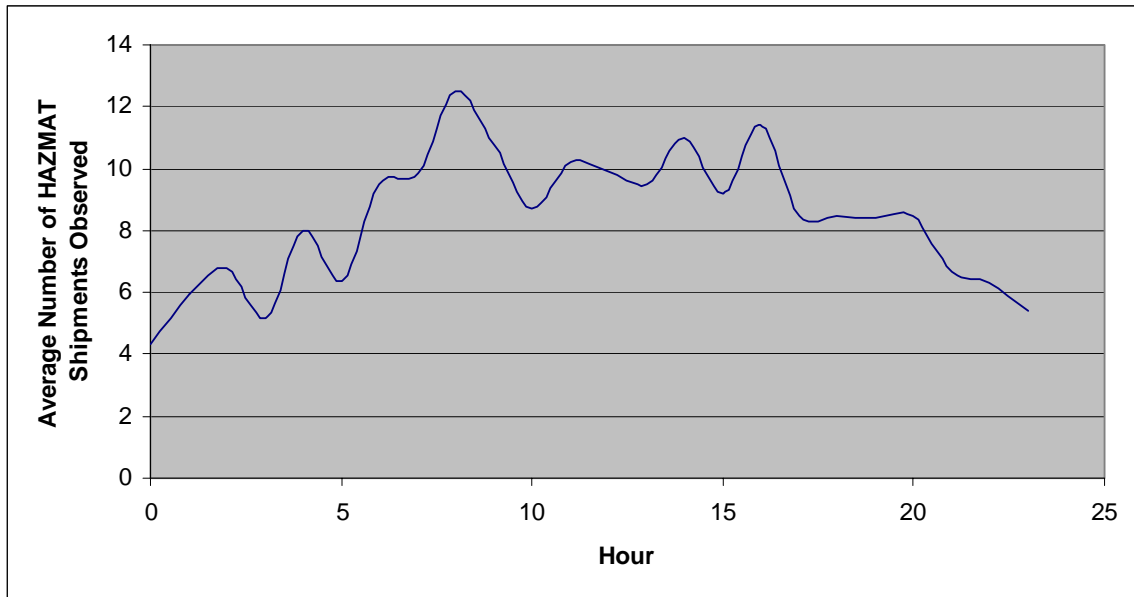


Figure A2. Yearly Average Number of Shipments per Hour I-81.

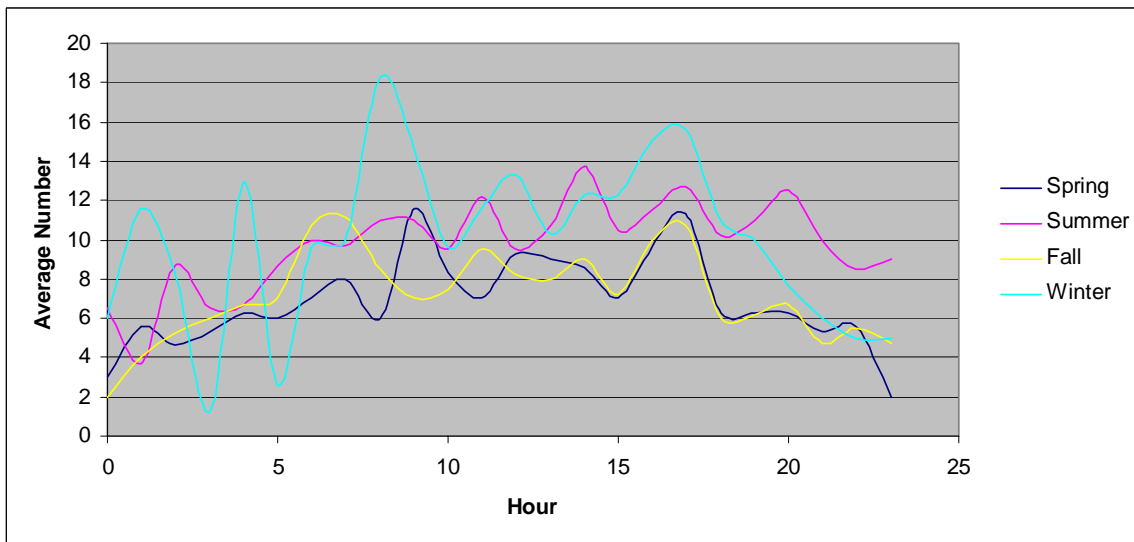


Figure A3. Seasonal Average Number of Shipments per Hour I-81.

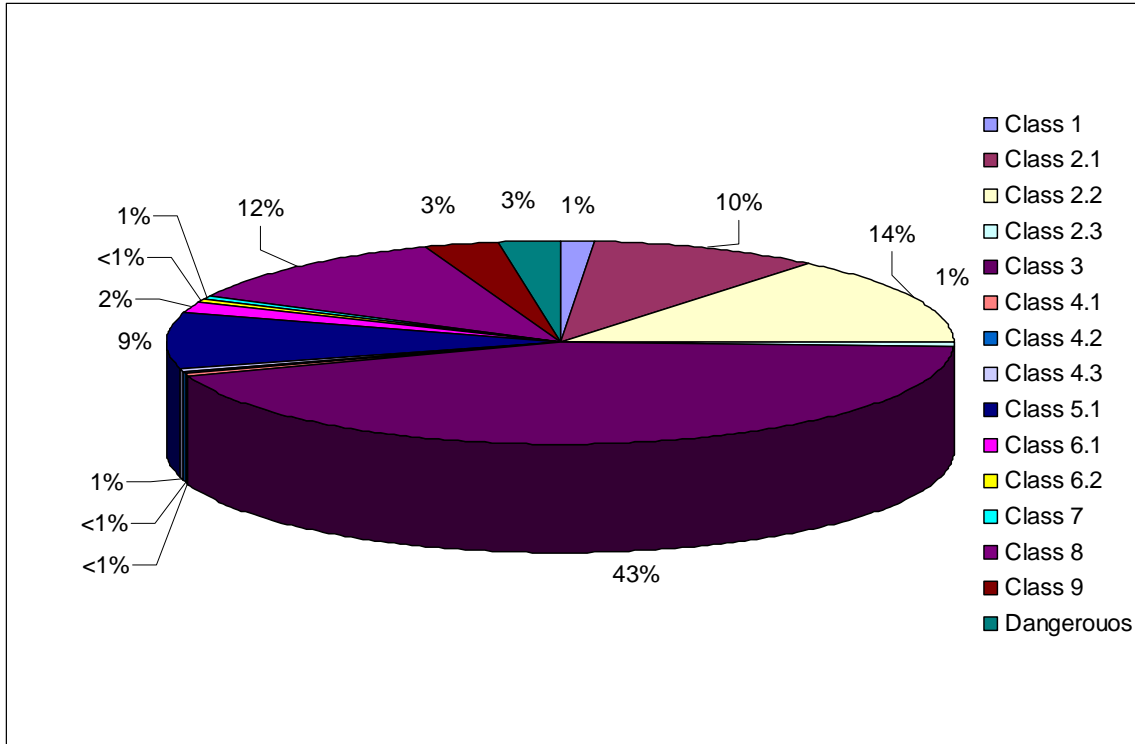


Figure A4. Hazard Class of Shipments by Percentage for I-26 at Eastern Star Rd.

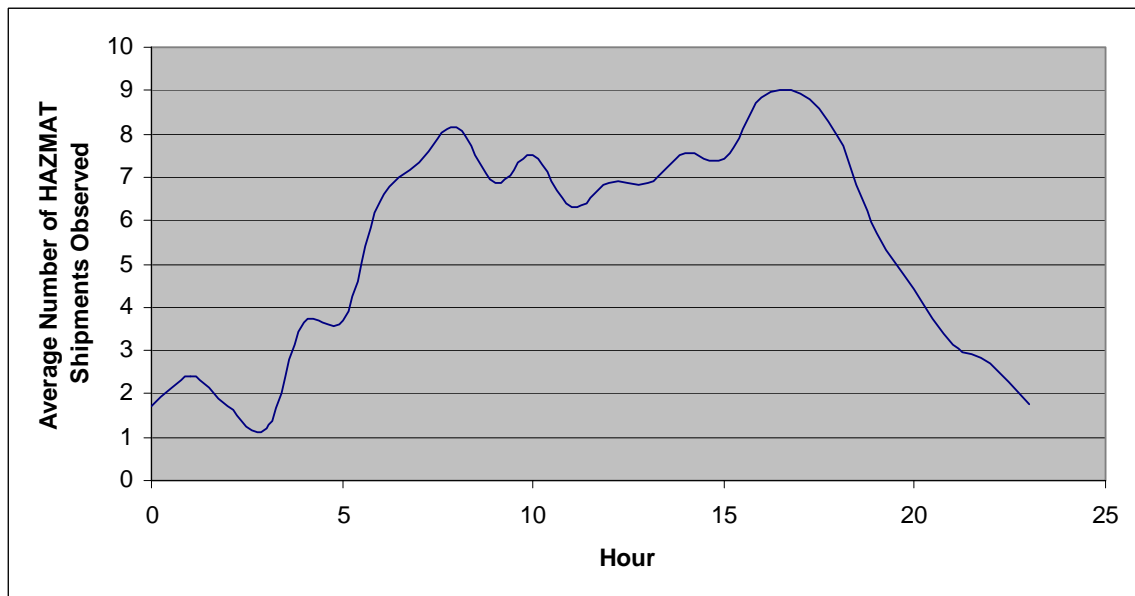


Figure A5. Yearly Average Number of Shipments per Hour I-26 Eastern Star Rd.

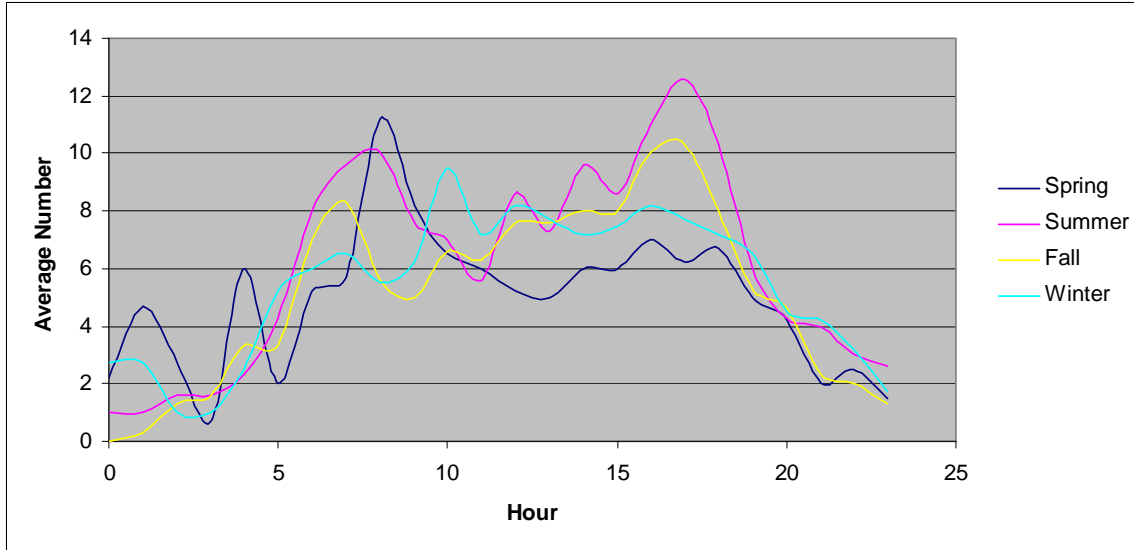


Figure A6. Seasonal Average Number of Shipments per Hour I-26 Eastern Star Rd.

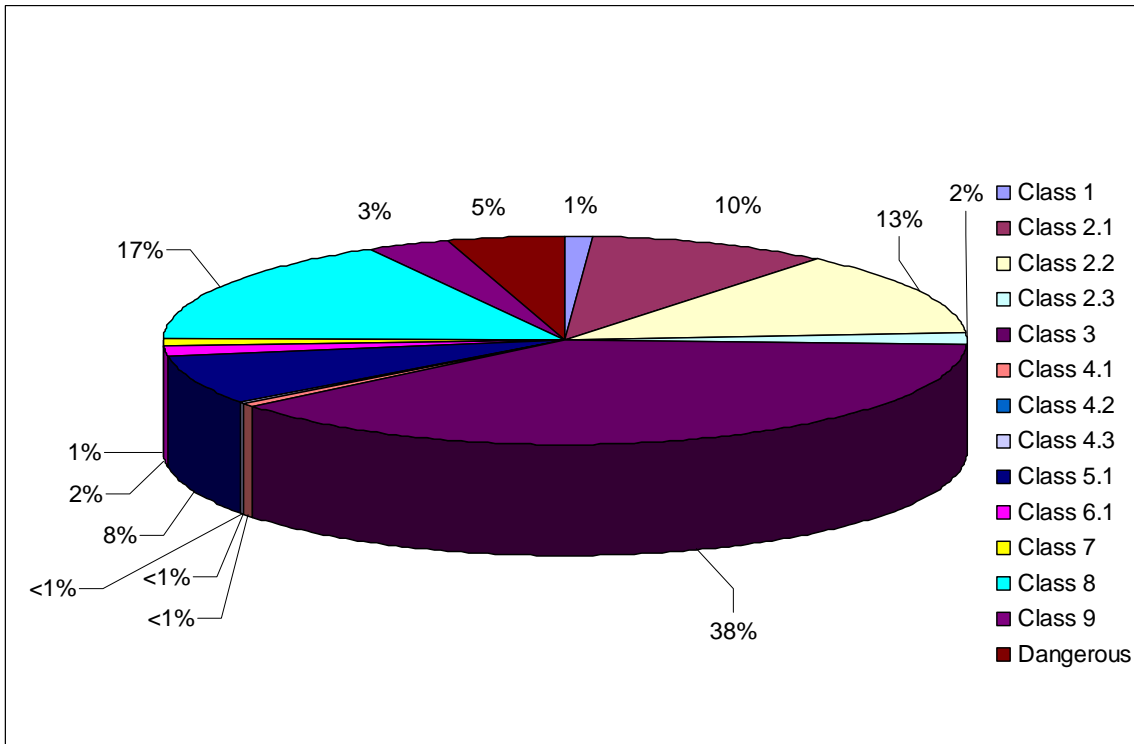


Figure A7. Hazard Class of Shipments by Percentage for I-26 at Okolona Rd.

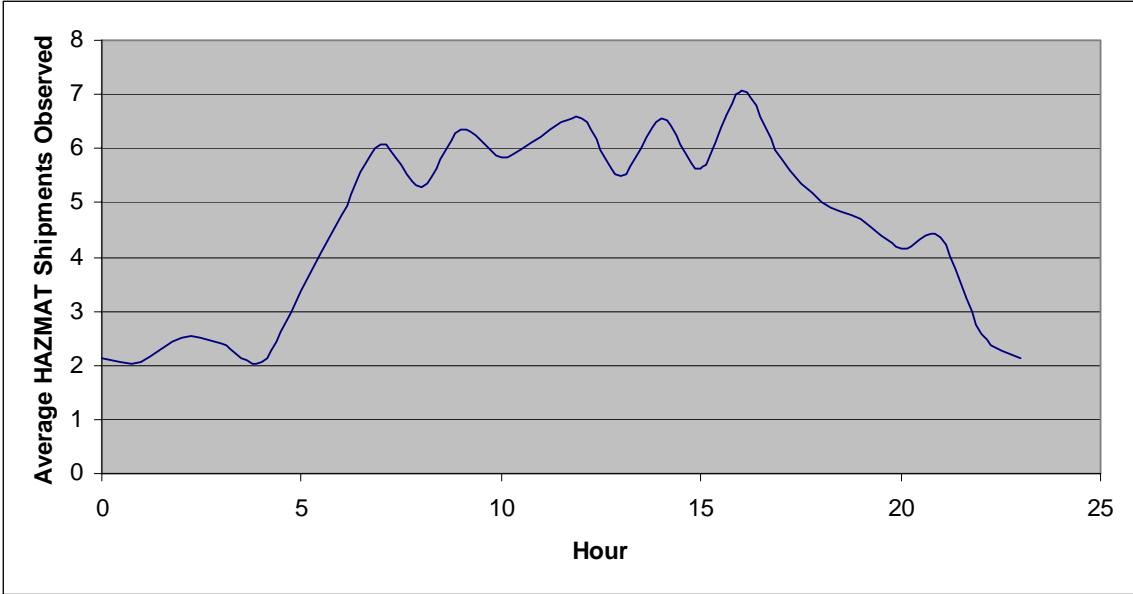


Figure A8. Yearly Average Number of Shipments per Hour I-26 Okolona Rd.

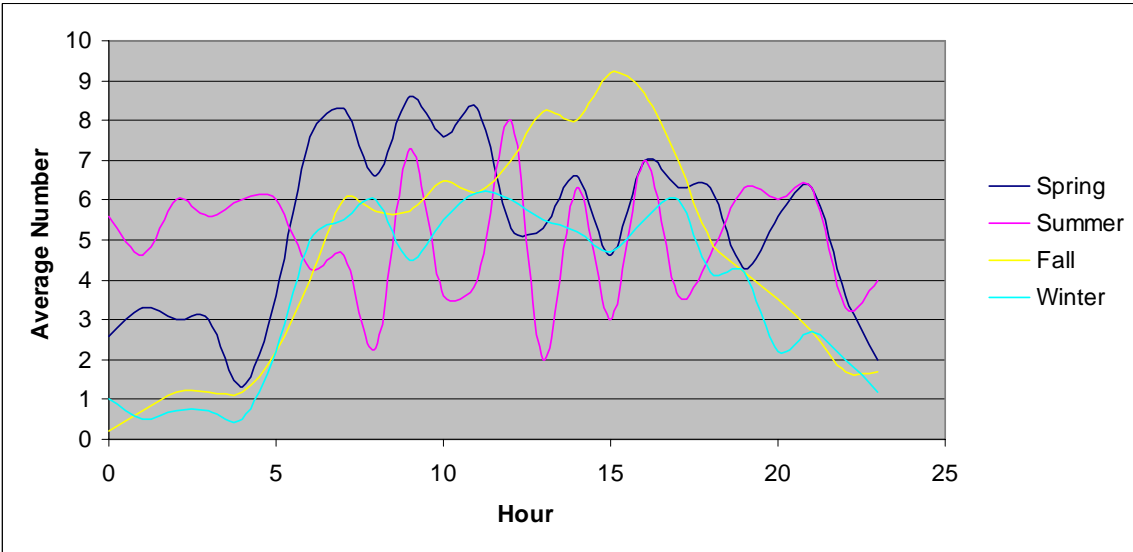


Figure A9. Seasonal Average Number of Shipments per Hour I-26 Okolona Rd.



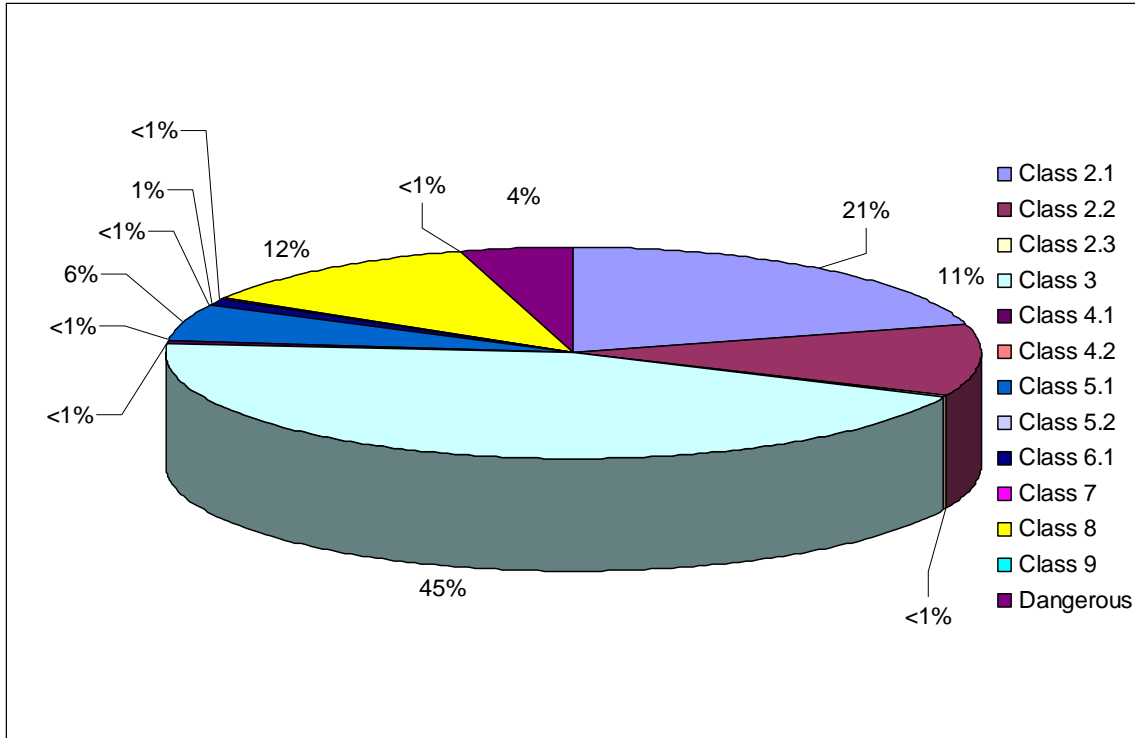


Figure A10. Hazard Class of Shipments by Percentage for 11E Sullivan County Line.

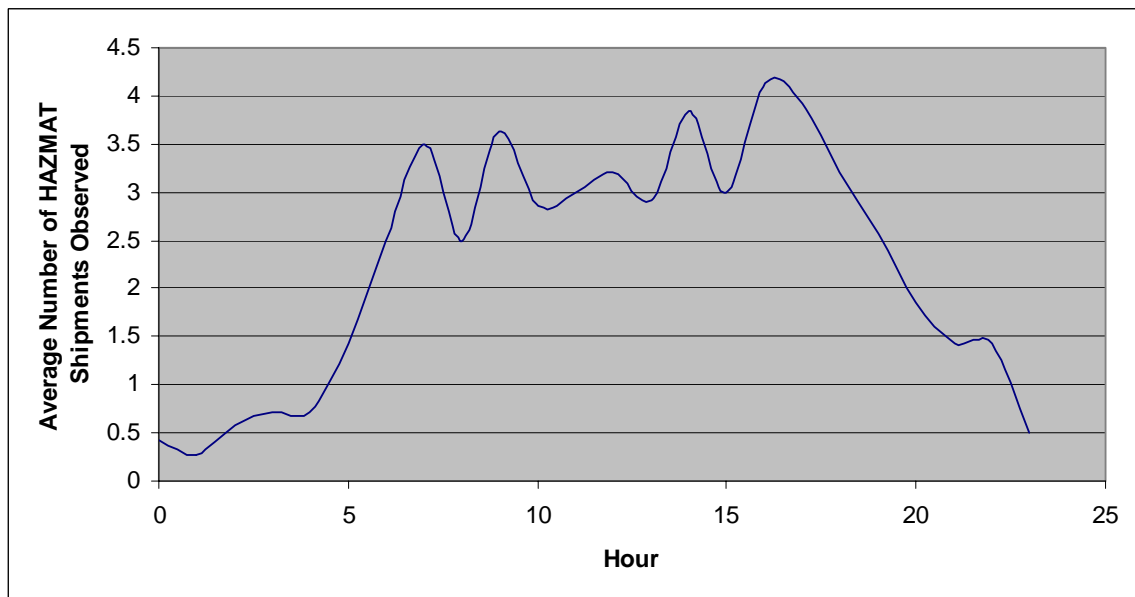


Figure A11. Yearly Avg. Number of Shipments per Hour 11E Sullivan County Line.

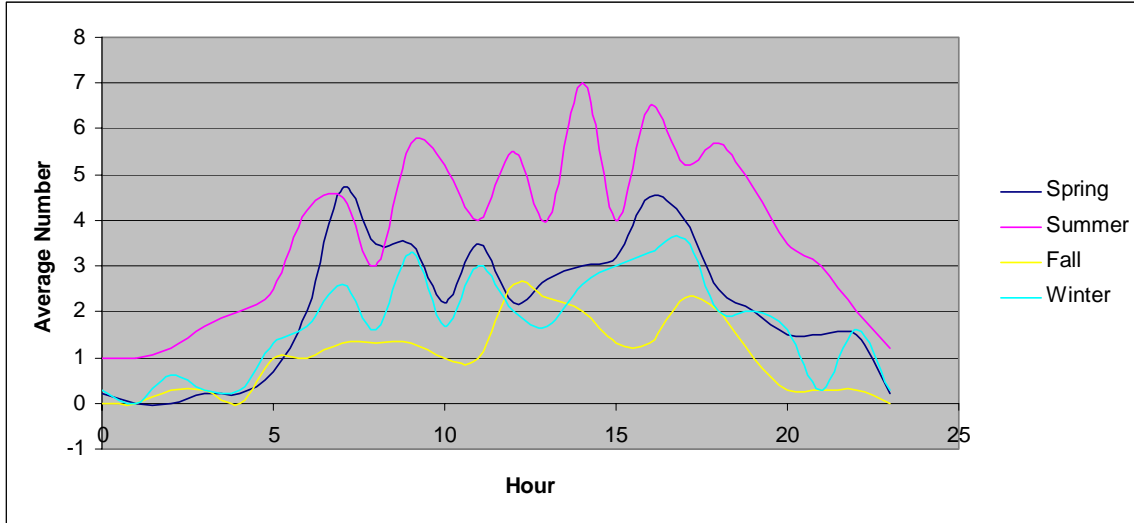


Figure A12. Seasonal Avg. Number of Shipments per Hour 11E Sullivan Co. Line.

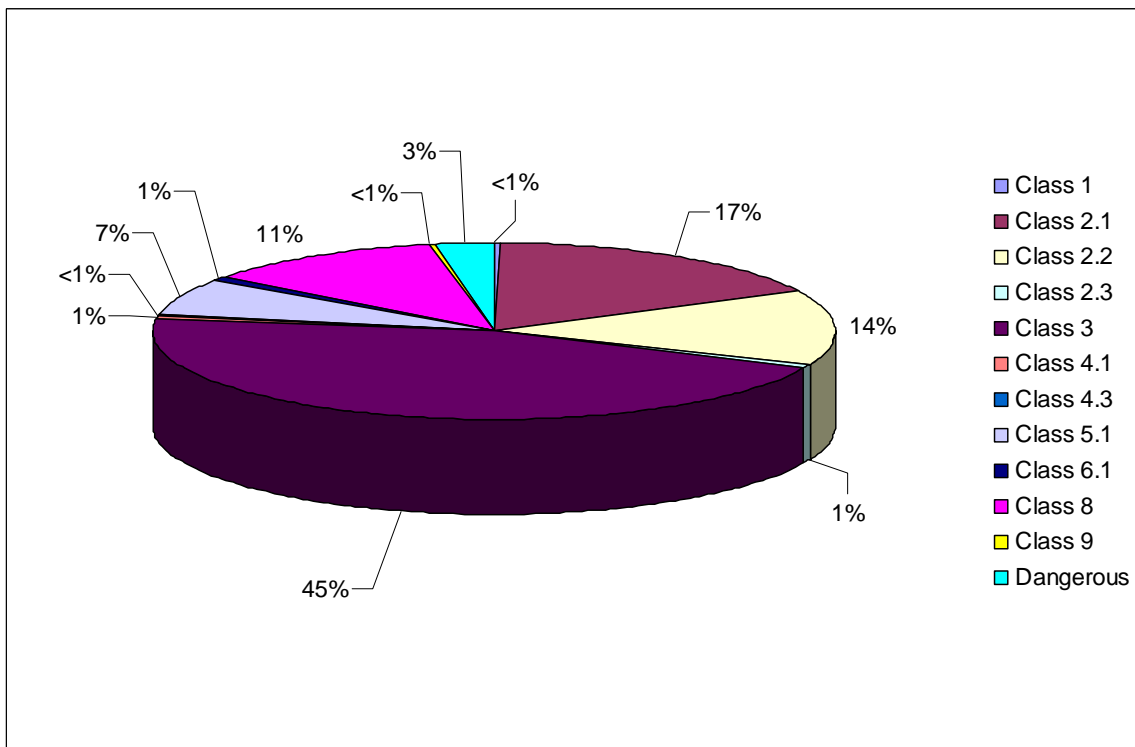


Figure A13. Hazard Class of Shipments by Percentage for 11E Jockey Creek.

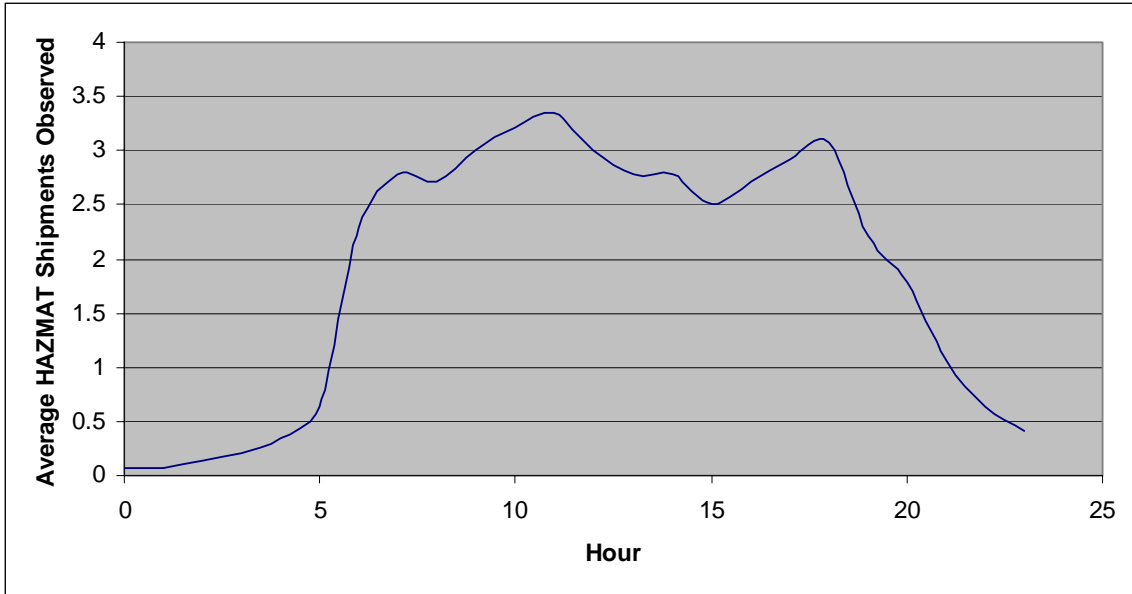


Figure A14. Yearly Average Number of Shipments per Hour 11E Jockey Creek.

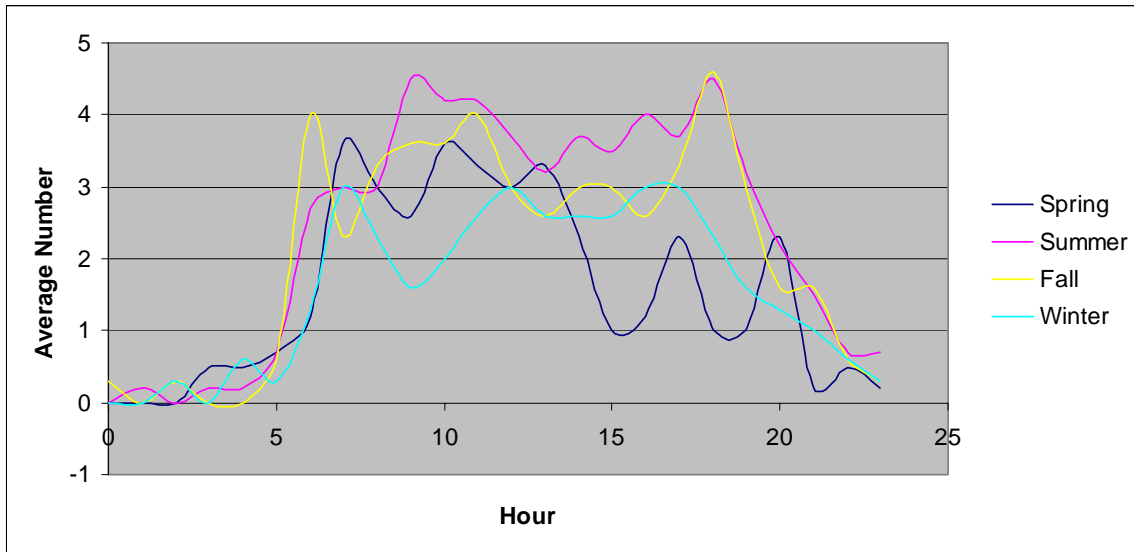


Figure A15. Seasonal Average Number of Shipments per Hour 11E Jockey Creek.

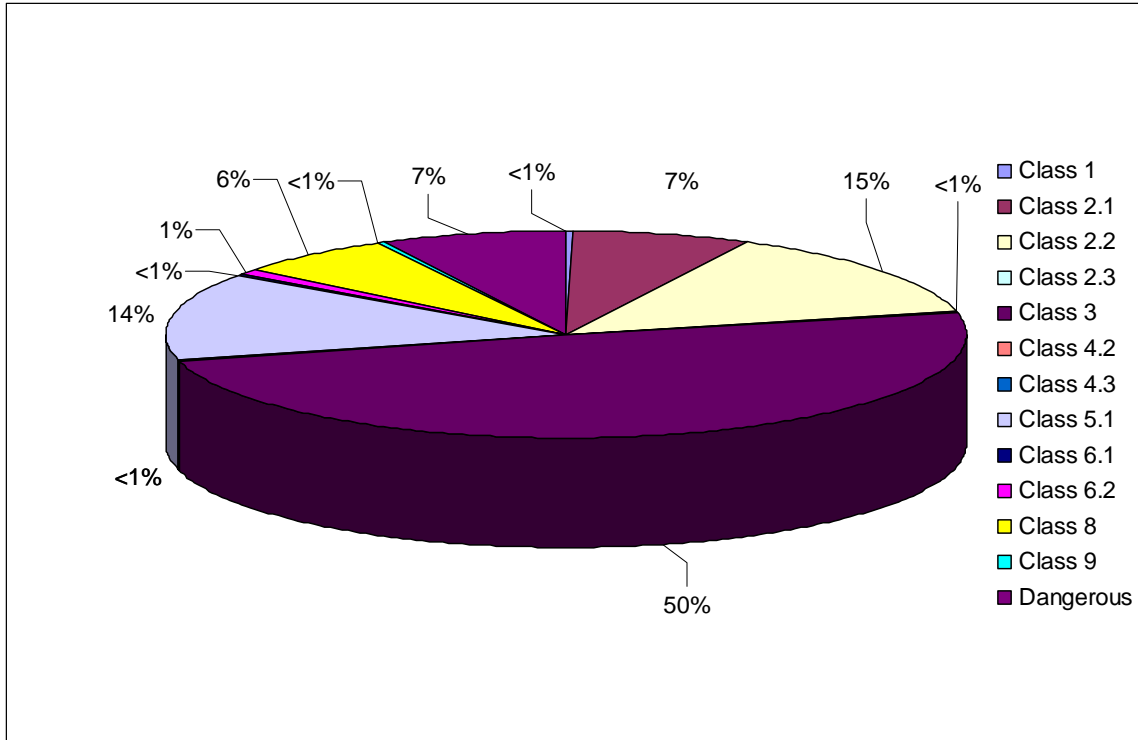


Figure A16. Hazard Class of Shipments by Percentage for HWY 321.

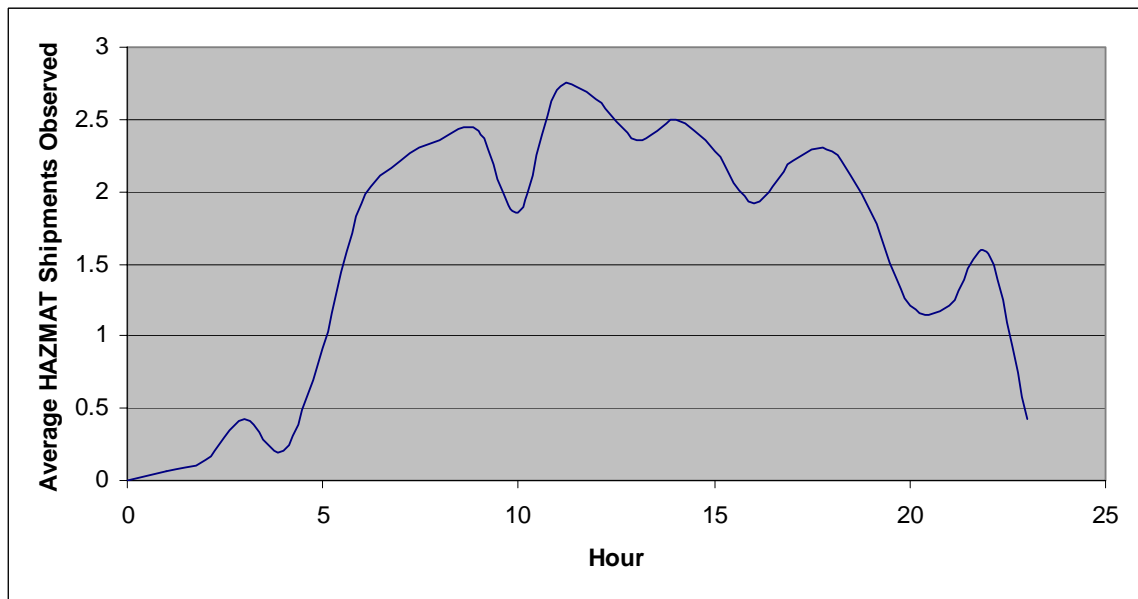


Figure A17. Yearly Average Number of Shipments per Hour HWY 321.

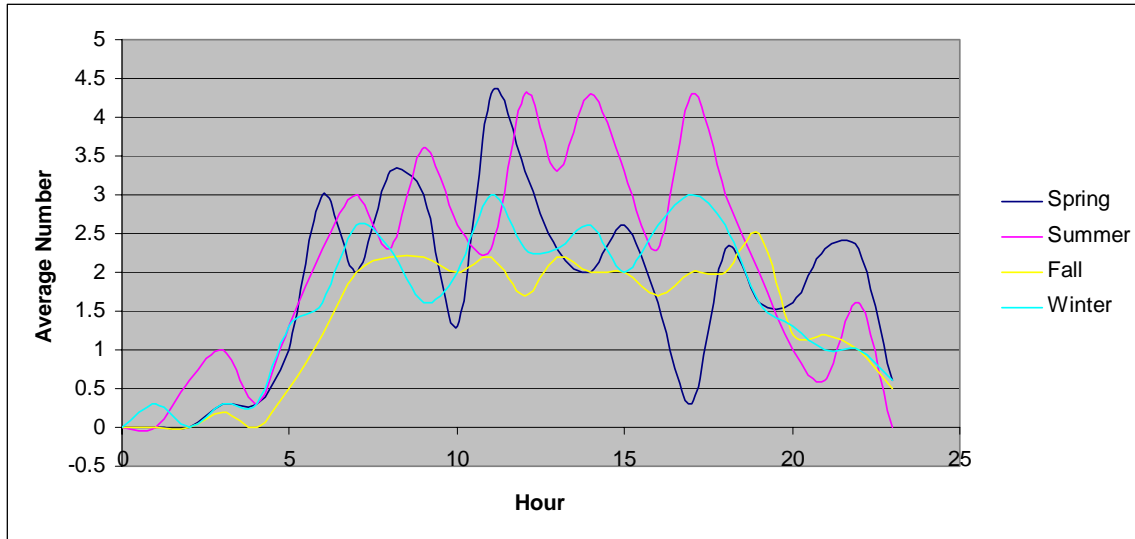


Figure A18. Yearly Average Number of Shipments per Hour HWY 321.

Appendix C: Rail Survey Results

**Minitab Output for Two Sample T-Test and Confidence Interval for NFS 1 Vs. NFS 2**

Two sample T for C2 vs. C4

	N	Mean	StDev	SE Mean
C2	22	94.8	11.8	2.5
C4	15	109.8	17.0	4.4

95% CI for mu C2 - mu C4: ( -25.5, -4.6)

T-Test mu C2 = mu C4 (vs not =): T = -2.97 P = 0.0069 DF = 23

**Minitab Output for Two Sample T-Test and Confidence Interval for NFS 1 Vs. CSX**

Two sample T for C2 vs C6

	N	Mean	StDev	SE Mean
C2	22	94.8	11.8	2.5
C6	18	101.9	19.5	4.6

95% CI for mu C2 - mu C6: ( -17.9, 3.6)

T-Test mu C2 = mu C6 (vs not =): T = -1.37 P = 0.18 DF = 26

**Minitab Output for Two Sample T-Test and Confidence Interval for NFS 2 Vs. CSX**

Two sample T for C4 vs C6

	N	Mean	StDev	SE Mean
C4	15	109.8	17.0	4.4
C6	18	101.9	19.5	4.6

95% CI for mu C4 - mu C6: ( -5.1, 20.8)

T-Test mu C4 = mu C6 (vs not =): T = 1.24 P = 0.23 DF = 30

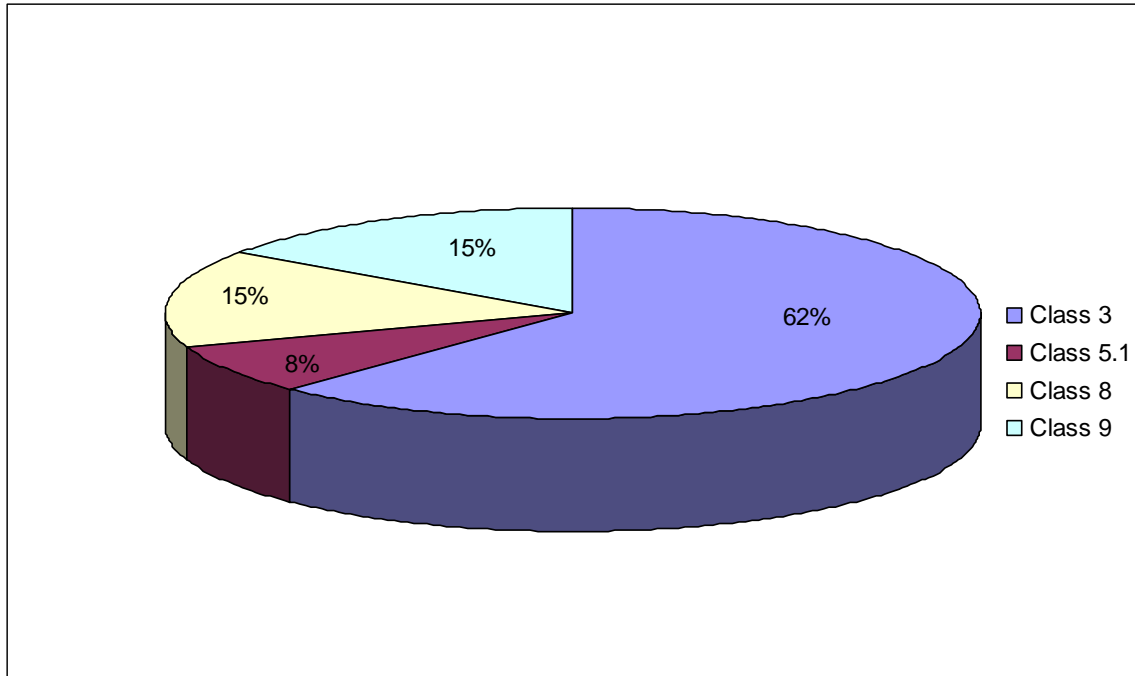


Figure A19. Norfolk-Southern Eastbound Shipment Hazard Class by Percentage.

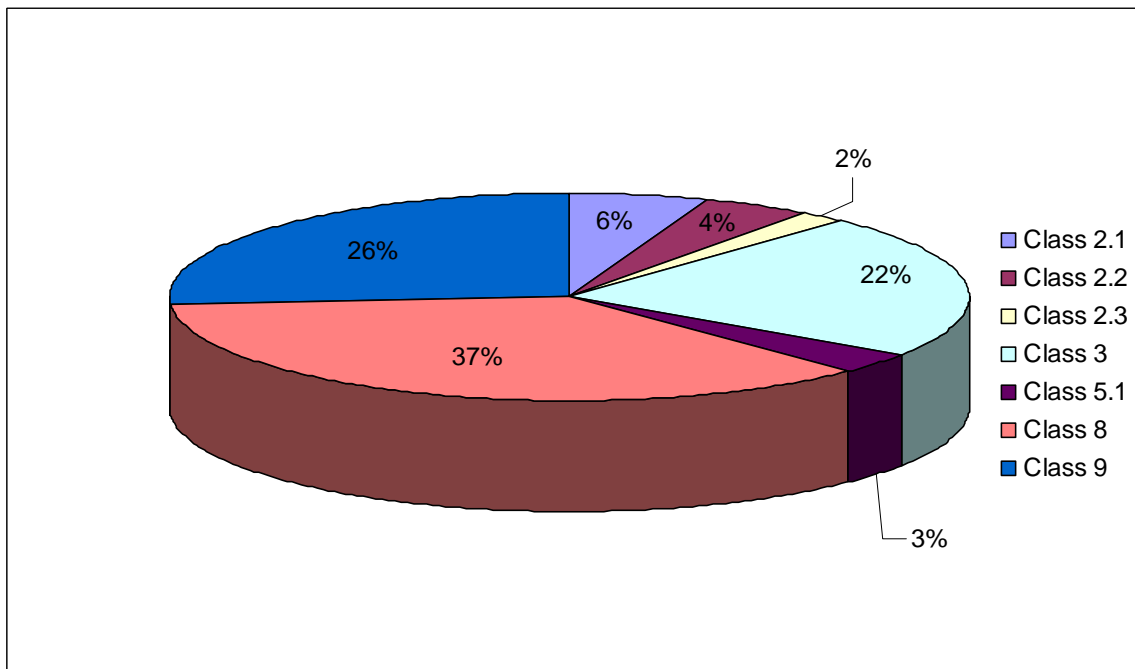


Figure A20. Norfolk-Southern Westbound Shipment Hazard Class by Percentage.

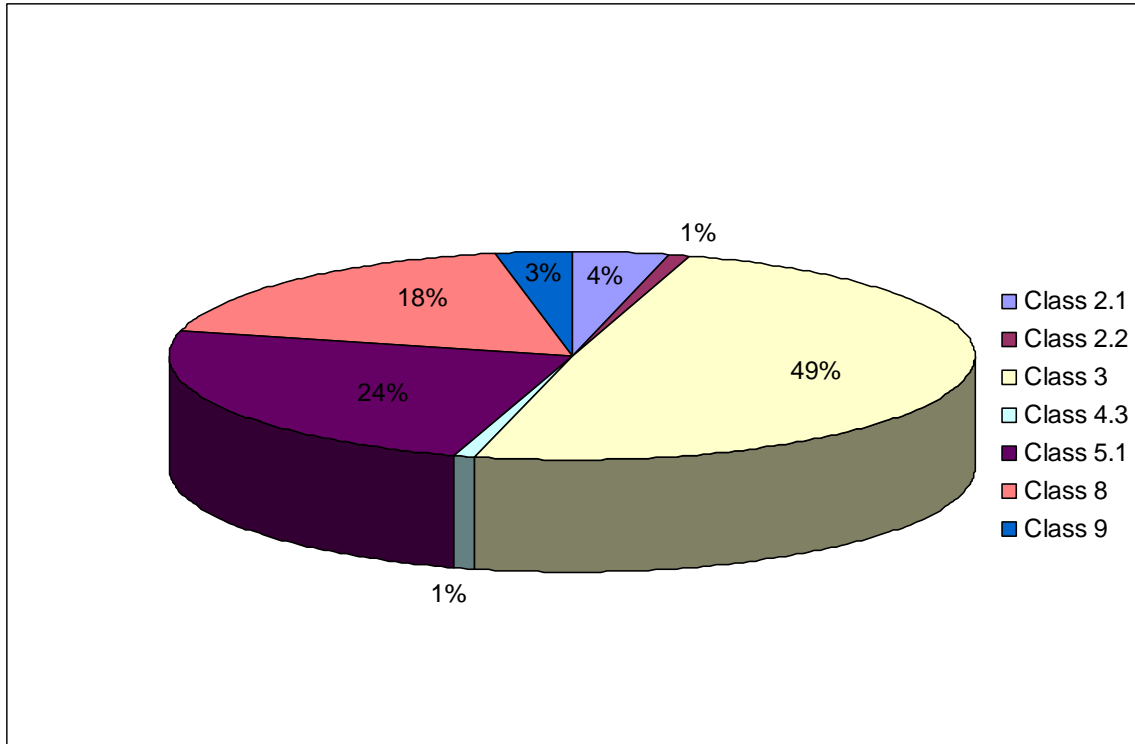


Figure A21. CSX Shipment Hazard Class by Percentage.



Appendix D: Storage Results

Table A3

*Facility Visit, Reported Daily Amounts (lbs), Observed Amounts (lbs)*

<b>Facility/Substance</b>	<b>Reported Daily Average (lbs)</b>	<b>Observed Amount (lbs)</b>
<b>Coca-Cola Bottling Company</b>		
Carbon Dioxide, Liquid	50,000	42,200
Sulphuric Acid	6,500	6,340
<b>Excel-Polymers, LLC</b>		
Thiram	25,000	10,000
Lead Compounds	400,000	401,250
Antimony	8,500	1,200
Carbonic Acid Calcium Salt	11,000	9,000
Di(2-Ethylhexyl) Phthalate	35,000	33,570
Di-2-benzothiazolyl Disulfate	6,800	6,000
Extracts, Petroleum, Heavy Paraffinic Distillate Solvent	75,000	15,000
Petroleum Distillates, Hydrotreated Heavy Naphthenic	600,000	200,000
Petroleum Distillates, Hydrotreated Light Naphthenic	3,900	3,750
Petroleum Distillates, Solvent Dewaxed Heavy Paraffinic	15,000	2,000
Petroleum Distillates, Solvent-Refined Heavy Paraffinic	35,000	9,000
Silica, Amorphous, Precipitated and Gel	45,000	40,322
Waxes: Paraffin	70,500	71,110
Zinc Oxide	275,000	75,000
<b>Waste Management</b>		
Diesel Fuel	7,500	7,825
Leachate	4,860,000	4,920,000
<b>Treatment Facility Brush Creek</b>		
Chlorine	800	1,020
Sulfur Dioxide	800	755
<b>General Shale Products</b>		
Brick Oil	35,000	19,255
Manganese Dioxide	15,000	9,750
Soda Ash	75,000	72,000
Lime	90,000	10,000
Hydraulic Oil	20,000	8,200

Appendix E: Road Side Survey Field Logs

**Road Side Survey Field Log**

Location: US-11E Washington County/Sullivan County Line				Date: 9 NOV 05
Time	Hazard Class	UN ID	Description	Notes
0:14	3	1203	Gasoline	
2:10	8	3264	Corrosive liquid, acidic, inorganic, NOS	
5:25	3	1993	Flammable	
6:10	D	NA	Mixed hazardous materials	
6:13	8	NA	Corrosive	
6:17	3	1203	Gasoline	
6:22	3	1203	Gasoline	
6:28	3	NA	Flammable	
6:35	2.1	1075	Propane	
6:46	3	1203	Gasoline	
6:49	3	1203	Gasoline	
6:58	3	NA	Flammable and combustible liquid	
7:27	2.2	1073	Oxygen	
7:40	2.2	1013	Carbon dioxide	
8:18	3	1203	Gasoline	
8:28	3	1203	Gasoline	10-T
8:33	2.3	1017	Chlorine	
8:55	3	1267	Petroleum Crude Oil	
9:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:24	3, 8	NA	Flammable and combustible liquid, Corrosive	
9:38	3	1203	Gasoline	
10:13	3	1999	Asphalt	
10:14	3	1993	Flammable	
10:22	3	1203	Gasoline	
10:33	3	1203	Gasoline	
10:42	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:05	3, 2.1	1999, 1075	Asphalt, Propane	FLTB
11:08	3	1203	Gasoline	
11:26	2.1	1966	Hydrogen, refrigerated liquid	

11:32	3	1203	Gasoline	
11:38	3	1203	Gasoline	
11:40	D	NA	Mixed hazardous materials	
11:52	8, D	3264	Corrosive liquid, acidic, inorganic, n.o.s., Mixed	
11:59	3	1203	Gasoline	
12:03	8	2796	Sulfuric acid with < 51% acid	
12:11	3	1203	Gasoline	
12:35	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:49	2.2	1013	Carbon dioxide	
13:13	3	1203	Gasoline	
13:24	3	1203	Gasoline	
13:41	2.2	1073	Oxygen	FLTB
14:13	3	1203	Gasoline	
14:38	3	1203	Gasoline	
14:40	3	NA	Flammable and combustible liquid	
14:43	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:03	3	1203	Gasoline	
15:18	3	1203	Gasoline	
15:26	8	1791, 1830	Hypochlorite soln, Sulfuric acid	
15:31	2.1	1075	Propane	
16:28	3	1203	Gasoline	
16:38	3	1993	Flammable	
16:53	8	UN1760	Corrosive liquids, n.o.s.	
17:25	5.1, 2.2	1073	Oxygen	
17:33	3	1203	Gasoline	
17:48	3	1203	Gasoline	
17:50	8	2215	Maleic acid	
18:05	3	1203	Gasoline	
18:17	2.1	1075	Propane	
18:22	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
18:32	3	1203	Gasoline	
18:45	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
18:50	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
18:55	5.1, 2.2	1073	Oxygen	
18:55	3	1993	Flammable	
19:02	8	1719	Caustic alkali liquids, n.o.s.	
19:18	3	1203	Gasoline	
19:55	8	2031	Nitric acid, > 70 % nitric acid	

20:34	3	1203	Gasoline	
21:08	3	1993	Flammable	
22:13	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Okolona Road Date: 12NOV05

Time	Hazard Class	UN ID	Description	Notes
1:57	3	1203	Gasoline	
2:11	3	1203	Gasoline	
2:23	2.2	1073	Oxygen	
2:44	3	1993	Flammable liquid, n.o.s.	
3:39	7	2982	Radioactive material, n.o.s.	
3:29	2.3	1050	Hydrogen chloride, anhydrous	
4:47	3	1123	Butyl acetates	
5:26	3	1203	Gasoline	
5:24	2.1	1075	Petroleum gases, liquefied	
5:47	2.2	1977	Nitrogen, refrigerated liquid	
6:14	8	2209	Formaldehyde, solutions (Formalin)	
6:18	3	1189	Ethylene glycol monoethyl ether acetate	
6:25	8	1719	Caustic alkali liquids, n.o.s.	
6:49	3	1203	Gasoline	
7:00	D	NA	Mixed Hazardous Shipment	
7:06	2.2	1073	Oxygen	
7:11	3	1170	Ethanol	
7:24	2.1	1075	Propane	
7:28	2.2	1073	Oxygen	
7:37	2.2	2187	Carbon dioxide, refrigerated liquid	
7:47	3	1993	Flammable liquid, n.o.s.	
7:55	3	1203	Gasoline	
8:22	8	NA	Corrosive	
8:27	2.1	1075	Propane	
8:33	9	3257	Elevated temperature liquid, n.o.s.	
8:27	2.2	1073	Oxygen	
8:45	8, 3	2789	Acetic acid, glacial	
8:58	3	1203	Gasoline	
9:12	2.2	2187	Carbon dioxide, refrigerated liquid	
9:23	3	1993	Flammable liquid, n.o.s.	
9:36	3	1203	Gasoline	

9:54	8	NA	Corrosive	
10:02	2.1	1075	Propane	
10:11	3	1203	Gasoline	
10:26	3	1993	Flammable liquid, n.o.s.	
10:29	D	NA	Mixed hazardous materials	
10:38	3	1203	Gasoline	
10:45	3	1268	Petroleum distillates, n.o.s.	
10:47	5.1	2428	Sodium chlorate, aqueous solution	
11:04	2.2	2187	Carbon dioxide, refrigerated liquid	
11:05	3	1203	Gasoline	
11:18	D	NA		
11:22	2.1	1075	Propane	
11:35	D	NA	Mixed hazardous materials	
11:51	3	1203	Gasoline	
12:04	2.2	2187	Carbon dioxide, refrigerated liquid	
12:14	3	1203	Gasoline	
12:16	2.1	1075	Propane	
12:17	8	2789	Acetic acid, glacial	
12:23	2.2	1977	Nitrogen, refrigerated liquid	
12:26	2.1	1075	Propane	
12:46	3	3271	Ethers, n.o.s.	
12:50	3	1203	Gasoline	
13:07	2.1	1075	Propane	
13:08	8, 3	1715	Acetic anhydride	
13:13	5.1	2428	Sodium chlorate, aqueous solution	
13:17	3	1993	Flammable liquid, n.o.s.	
13:22	8	2789	Acetic acid, glacial	
13:28	3	1993	Flammable liquid, n.o.s.	
13:31	3	1203	Gasoline	
13:47	8	1824	Sodium hydroxide solution	
13:51	8	NA	Corrosive	
13:54	2.1	1075	Propane	
14:03	5.1	2428	Sodium chlorate, aqueous solution	
14:11	3	1274	n-Propanol	
14:19	D	NA	Mixed hazardous materials	
14:35	3	1993	Flammable liquid, n.o.s.	
14:43	3	1203	Gasoline	
14:47	2.2	2187	Carbon dioxide, refrigerated liquid	
15:02	3	1993	Flammable liquid, n.o.s.	

15:08	2.3	3300	Ethylene oxide	
15:26	2.1	1075	Propane	
15:28	D	NA	Mixed hazardous materials	
15:31	2.2	2187	Carbon dioxide, refrigerated liquid	
15:38	D	NA	Mixed hazardous materials	
15:48	2.2	1073	Oxygen	
15:51	3	1220	Isopropyl acetate	
15:59	8	2693	Ammonium bisulfite, solution	
16:01	3	1203	Gasoline	
16:10	3	1987	Denatured alcohol	
16:13	2.2	1073	Oxygen	
16:22	2.1	1075	Propane	
16:37	8	1830	Sulfuric acid, >51% acid	
16:45	8	2215	Maleic acid	
17:10	D	NA	Mixed hazardous materials	
17:11	3	1993	Flammable liquid, n.o.s.	
17:11	3	1210	Printing ink related materials	
17:13	3	1294	Toluene	
17:45	2.1	1075	Propane	
0:00	3	1268	Petroleum distillates, n.o.s.	
18:48	3	1203	Gasoline	
18:57	3	1203	Gasoline	
19:21	6.1	3073	Vinylpyridines, stabilized	
19:40	4.1	3089	Metal powders, flammable, n.o.s.	
19:42	2.2	1977	Nitrogen, refrigerated liquid	
20:02	2.2	2187	Carbon dioxide, refrigerated liquid	
20:33	8	NA	Corrosive	
20:44	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
21:04	3	1203	Gasoline	
21:35	3	1203	Gasoline	
22:41	3	1203	Gasoline	
23:43	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321 Washington County/Carter County Line			Date:20NOV05	
Time	Hazard Class	UN ID	Description	Notes
3:25	3	1203	Gasoline	
5:40	D	NA	Mixed hazardous materials	

6:01	3	1993	Flammable	
7:18	D	NA	Mixed hazardous materials	
7:48	3	1203	Gasoline	
8:40	3	1203	Gasoline	
8:46	3	1203	Gasoline	
9:04	D	NA	Mixed hazardous materials	
9:11	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:11	3	1203	Gasoline	
10:18	3	1999	Asphalt	
11:09	3	1993	Flammable	
11:25	3	1203	Gasoline	
12:03	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:18	2.2	1073	Oxygen	
13:06	3	1203	Gasoline	
13:52	2.2	1977	Nitrogen, refrigerated liquid	
14:05	3	1203	Gasoline	
15:55	D	NA	Mixed hazardous materials	
17:46	3	1203	Gasoline	
17:58	2.3, 8	1017	Chlorine	
18:46	3	1203	Gasoline	
19:08	3	1993	Flammable liquid, n.o.s.	
19:34	3	1265	Pentanes	
19:51	3	1993	Flammable	
21:40	D	NA	Mixed hazardous materials	
21:50	3	1203	Gasoline	
22:00	3	1993	Flammable	
23:10	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Eastern Star (Exit 45)			Date: 18NOV05	
Time	Hazard Class	UN ID	Description	Notes
1:01	3	1203	Gasoline	
2:26	3	1203	Gasoline	
2:50	3	1203	Gasoline	
3:14	2.2	1073	Oxygen	
3:31	3	1219	Isopropanol	
4:11	3	1203	Gasoline	
4:27	3	1203	Gasoline	

4:38	3	1203	Gasoline	
5:21	8, 3	NA	Corrosive, Flammable and combustible liquid	
5:35	3	1203	Gasoline	
5:56	5.1, 2.2	1073	Oxygen	
6:02	D		Dangerous	
6:18	2.2	1951	Argon, refrigerated liquid	
6:20	3	1268	Petroleum distillates, n.o.s.	
6:20	3	1993	Flammable liquid, n.o.s.	
6:21	5.1	1486	Potassium nitrate	
6:25	HOT	3257	Elevated temperature liquid, n.o.s.	
6:33	6.2	3291	(Bio) medical waste	
6:46	3	1267	Petroleum crude oil	
6:49	2.1	1075	Propane	
6:50	2.1	1075	Propane	
6:52	D		Dangerous	
6:57	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
7:06	2.2	2187	Carbon dioxide, refrigerated liquid	
7:09	2.1	1075	Propane	
7:12	2.2	1073	Oxygen	
7:18	2.2	1977	Nitrogen, refrigerated liquid	
7:19	2.1	1075	Propane	
7:25	8	1824	Sodium hydroxide, solution	
7:31	3	1203	Gasoline	
7:34	8	1715	Acetic anhydride	
7:36	4.3	3170	Aluminum processing by-products	
4:41	5.1, 2.2	1073	Oxygen	
7:43	3	1203	Gasoline	
4:47	2.1	1075	Propane	
7:51	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
7:53	2.1	1075	Propane	
8:12	8, 3	1715	Acetic anhydride	
8:42	5.1	2428	Sodium chlorate, aqueous solution	
8:43	3	1993	Flammable liquid, n.o.s.	
8:46	3	1203	Gasoline	
8:51	8	3259	Amines, solid, corrosive, n.o.s	
8:57	3	1203	Gasoline	
9:04	8	2209	Formaldehyde, solutions (Formalin)	
9:23	3	1146	Cyclopentane	
9:32	2.2	1006	Argon	



9:59	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
10:09	3	1203	Gasoline	
10:11	2.1	1075	Propane	
10:13	2.2	2187	Carbon dioxide, refrigerated liquid	
10:23	2.2	1977	Nitrogen, refrigerated liquid	
10:33	2.1	1075	Propane	
10:34	3	1203	Gasoline	
10:42	3	2055	Styrene	
11:12	3	1203	Gasoline	
11:17	3	1203	Gasoline	
11:24	D		Dangerous	
11:52	D		Dangerous	
12:10	2.2	2187	Carbon dioxide, refrigerated liquid	
12:14	2.1	1075	Propane	
12:28	3	1203	Gasoline	
12:33	D		Dangerous	
12:39	2.2	1073	Oxygen	
12:44	2.2	2187	Carbon dioxide, refrigerated liquid	
12:47	2.1	1075	Propane	
12:59	2.2	1073	Oxygen	
13:01	3	1203	Gasoline	
13:04	8	2214	Phthalic anhydride	
13:07	3	1203	Gasoline	
13:16	3	1203	Gasoline	
13:37	2.2	1073	Oxygen	
13:38	9	3257	Elevated temperature liquid, n.o.s.	
13:51	2.2	1073	Oxygen	
14:03	8, 3	2789	Acetic acid, glacial	
14:11	3	1203	Gasoline	
14:38	2.2	1073	Oxygen	
14:41	3	1203	Gasoline	
14:45	3	1203	Gasoline	
14:49	8	1760	Corrosive liquids, n.o.s.	
14:53	4.1	1338	Phosphorus	
15:08	3	1203	Gasoline	
15:20	6.1	1662	Nitrobenzene	
15:24	3	1993	Flammable liquid, n.o.s.	
15:34	3	1203	Gasoline	
15:58	9	3257	Elevated temperature liquid, n.o.s.	

15:59	D		Dangerous	
16:09	8	3259	Amines, solid, corrosive, n.o.s	
16:17	2.2	1073	Oxygen	
16:28	5.1	2428	Sodium chlorate, aqueous solution	
16:30	3, D	1866	Resin solution, Mixed hazardous materials	
16:32	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
16:32	3	1120	1-Butanol	
16:43	8	1830	Sulfuric acid with > 51% acid	
16:43	7	2982	Radioactive material, n.o.s.	
16:46	5.1, 2.2	1073	Oxygen	
16:49	D		Dangerous	
16:54	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
17:00	8	2491	Ethanolamine	
17:02	2.1	1075	Propane	
17:07	3	1993	Flammable liquid, n.o.s.	
17:14	8	1805	Phosphoric acid, liquid	
17:17	3	1203	Gasoline	
17:28	5.1	NA	Oxidizer	
17:29	3	1203	Gasoline	
17:32	1.4	NA	Explosives (no significant blast hazard)	
17:34	2.2	2187	Carbon dioxide, refrigerated liquid	
17:40	2.1	1075	Propane	
17:50	3	2056	Tetrahydrofuran	
17:54	3	1203	Gasoline	
17:57	3	1993	Flammable liquid, n.o.s.	
18:05	2.1	1075	Propane	
18:13	2.3	1076	Phosgene	
18:20	2.1	1075	Propane	
18:26	3	1203	Gasoline	
18:33	D		Dangerous	
18:37	3	1203	Gasoline	
18:37	2.3	1076	Phosgene	
19:04	6.1	2078	Toluene diisocyanate	
19:54	3	1203	Gasoline	
20:09	3	1203	Gasoline	
20:16	3	1203	Gasoline	
20:39	D		Dangerous	
21:54	D		Dangerous	
22:23	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Jockey Creek

Date: 24 NOV 05

Time	Hazard Class	UN ID	Description	Notes
2:38	3	1203	Gasoline	
3:29	3	1203	Gasoline	
5:40	2.2	1073	Oxygen	FLTB
6:36	3	1203	Gasoline	
10:45	3, 8	NA	Flammable and combustible liquid, Corrosive	
11:41	3	1203	Gasoline	
12:21	8	3093	Corrosive liquids, oxidizing, n.o.s.	
13:08	3	1993	Flammable	
14:42	D			
17:34	3	1203	Gasoline	
19:14	3	1203	Gasoline	
20:33	3	1993	Flammable	
22:07	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 near Fall Branch, TN (Exit 50)

Date: 27 NOV 05

Time	Hazard Class	UN ID	Description	Notes
0:03	3	1203	Gasoline	
0:28	3	1203	Gasoline	
0:55	3	1203	Gasoline	
1:11	3	1203	Gasoline	
1:13	3	1203	Gasoline	
1:48	2.2	1977	Nitrogen, refrigerated liquid	
1:52	3	1203	Gasoline	
2:23	8	3093	Corrosive liquids, oxidizing, n.o.s.	
2:33	3	1203	Gasoline	
2:37	2.2	1073	Oxygen	
2:40	2.2	1977	Nitrogen, refrigerated liquid	
2:47	3	1203	Gasoline	
3:06	3	1203	Gasoline	
3:20	D		Dangerous	
3:26	3	1203	Gasoline	
3:34	3	1203	Gasoline	
3:44	3	1203	Gasoline	

4:06	9	3257	Elevated temperature liquid, n.o.s.	
4:34	3	1203	Gasoline	
4:45	2.2	1073	Oxygen	
4:54	3	1203	Gasoline	
5:04	3	1203	Gasoline	
5:21	3	1993	Flammable liquid, n.o.s.	
5:40	3	1203	Gasoline	
5:45	3	1203	Gasoline	
6:01	HOT	3257	Elevated temperature liquid, n.o.s.	
6:05	9	9259	Elevated temperature liquid, n.o.s.	
6:15	3	1203	Gasoline	
6:29	D		Dangerous	
6:36	3	1203	Gasoline	
6:43	D		Dangerous	
6:51	4.3	3170	Aluminum processing by-products	
6:58	5.1, 2.2	1073	Oxygen	
7:08	3	2370	1-Hexene	
7:16	3	1203	Gasoline	
7:22	3	1203	Gasoline	
7:28	3	1993	Flammable liquid, n.o.s.	
7:29	8	1848	Propionic acid	
7:31	3	1203	Gasoline	
7:44	3	1203	Gasoline	
7:48	D		Dangerous	
7:49	2.2	1977	Nitrogen, refrigerated liquid	
7:59	5.1	2014	Hydrogen peroxide, aqueous solution 20-60%	
8:07	3	1203	Gasoline	
8:14	2.2	1073	Oxygen	
8:28	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
8:45	2.2	1977	Nitrogen, refrigerated liquid	
8:51	8	1715	Acetic anhydride	
8:52	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:03	D			
9:16	3	1993	Flammable liquids, n.o.s.	
9:20	8	3267	Corrosive liquid, basic, organic, n.o.s.	
9:36	2.2	1073	Oxygen	
9:45	3	1203	Gasoline	
9:51	3	1203	Gasoline	
10:01	3	1203	Gasoline	

10:20	8, 3	NA	Corrosive, Flammable and combustible liquid	
10:21	3	1203	Gasoline	
10:45	D			
10:52	3	2478	Isocyanates, flammable, toxic, n.o.s.	
11:04	3	1203	Gasoline	
11:10	3	1993	Flammable liquids, n.o.s.	
11:21	3	1993	Flammable liquid, n.o.s.	
11:27	3	1203	Gasoline	
11:32	D		Dangerous	
11:36	2.2	1073	Oxygen	
11:36	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
11:45	3	1203	Gasoline	
11:48	HOT	3257	Elevated temperature liquid, n.o.s.	
11:54	3	1203	Gasoline	
12:09	8	3267	Corrosive liquid, basic, organic, n.o.s.	
12:12	3	1268	Petroleum distillates, n.o.s.	
12:24	9	3257	Elevated temperature liquid, n.o.s.	
12:24	3	1203	Gasoline	
12:29	D		Dangerous	
12:41	3, D	1866	Resin solution, Mixed hazardous materials	
12:41	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
12:52	2.2	1073	Oxygen	
12:59	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:07	3	1203	Gasoline	
13:18	3	1203	Gasoline	
13:18	3	1203	Gasoline	
13:23	3	1203	Gasoline	
13:38	3	1203	Gasoline	
13:49	5.1, 2.2	1073	Oxygen	
13:52	D		Dangerous	
14:09	3	1193	Ethyl methyl ketone	
14:17	2.1	1075	Propane	
14:24	3	1203	Gasoline	
14:24	3	1993	Flammable	
14:27	3	1203	Gasoline	
14:38	D		Dangerous	
14:50	2.2	1073	Oxygen	
14:53	2.2	1977	Nitrogen, refrigerated liquid	

15:11	3	1866	Resin solution, flammable	
15:11	D		Dangerous	
15:17	8	3093	Corrosive liquids, oxidizing, n.o.s.	
15:22	3	1203	Gasoline	
15:32	8	1824	Sodium hydroxide solution	
15:34	9	3257	Elevated temperature liquid, n.o.s.	
16:09	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:17	3	1203	Gasoline	
16:17	D		Dangerous	
16:22	3	1203	Gasoline	
16:22	3	1203	Gasoline	
16:29	3	1203	Gasoline	
16:44	9	3257	Elevated temperature liquid, n.o.s.	
16:48	3	1863	Fuel, aviation, turbine engine	
16:48	D		Dangerous	
16:52	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:58	3	1203	Gasoline	
17:02	9	3082	Environmentaly hazs substances, liquid, n.o.s.	
17:12	3	1203	Gasoline	
17:12	3	1203	Gasoline	
17:19	NA	3077	Hazardous waste, solid, n.o.s.	
17:19	3	1203	Gasoline	
17:26	3	1203	Gasoline	
17:27	D		Dangerous	
17:31	3	1203	Gasoline	
17:37	2.2	1073	Oxygen	
17:48	2.2	1073	Oxygen	
17:53	2.2	1977	Nitrogen, refrigerated liquid	
17:57	D		Dangerous	
18:04	8	3267	Corrosive liquid, basic, organic, n.o.s.	
18:17	3	1203	Gasoline	
18:21	3	1203	Gasoline	
18:40	3	1203	Gasoline	
18:44	HOT	3257	Elevated temperature liquid, n.o.s.	
18:46	3	1203	Gasoline	
19:09	3	1203	Gasoline	
19:14	3	1170	Ethanol	
19:24	3	1203	Gasoline	
19:41	3	1203	Gasoline	

19:46	3	1993	Flammable liquids, n.o.s.	
19:52	3	1863	Fuel, aviation, turbine engine	
20:10	3	1203	Gasoline	
20:27	D			
20:33	3	1193	Ethyl methyl ketone	
20:41	3	1203	Gasoline	
20:54	3	1203	Gasoline	
21:06	3, 3, 8	1993, 1993, 3264	Flammable liquid, n.o.s./Flammable liquid, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	
21:16	3	1203	Gasoline	
21:56	3	1203	Gasoline	
22:29	3	1203	Gasoline	
22:59	4.3	1400	Barium	
23:31	3	1203	Gasoline	
23:46	9	3257	Elevated temperature liquid, n.o.s.	
23:47	3	1203	Gasoline	
23:59	D			

### Road Side Survey Field Log

Location: I-81 near Fall Branch, TN (Exit 50)				Date: 28NOV05
Time	Hazard Class	UN ID	Description	Note
0:23	3	1203	Gasoline	
0:53	3	1203	Gasoline	
1:11	3	1203	Gasoline	
1:35	3	1203	Gasoline	
1:52	3	1203	Gasoline	
2:08	D		Dangerous	
2:23	3	1203	Gasoline	
2:28	2.2	1073	Oxygen	
2:33	2.2	1977	Nitrogen, refrigerated liquid	
2:38	3	1203	Gasoline	
2:40	3	1863	Fuel, aviation, turbine engine	
2:55	8	3267	Corrosive liquid, basic, organic, n.o.s.	
3:06	3	1203	Gasoline	
3:25	3	1993	Flammable liquids, n.o.s.	
3:26	2.1	2203	Silane	
3:29	9	3082	Envir hazs substances, liquid, n.o.s.	
3:34	3	1203	Gasoline	
4:19	3	1203	Gasoline	

4:34	2.2	1073	Oxygen	
4:35	3	1203	Gasoline	
4:45	D		Dangerous	
4:57	3	1203	Gasoline	
5:04	2.2	1073	Oxygen	
5:07	3	1203	Gasoline	
5:21	3	1203	Gasoline	
5:40	4.3	1400	Barium	
5:40	2.2	1977	Nitrogen, refrigerated liquid	
5:53	D		Dangerous	
6:05	8	3267	Corrosive liquid, basic, organic, n.o.s.	
6:07	3	1203	Gasoline	
6:29	3	1993	Flammable liquids, n.o.s.	
6:34	3	1863	Fuel, aviation, turbine engine	
6:36	9	3082	Envir hazs substances, liquid, n.o.s.	
6:41	D		Dangerous	
6:43	2.2	1073	Oxygen	
6:57	2.2	1977	Nitrogen, refrigerated liquid	
7:08	3	1203	Gasoline	
7:17	HOT	3257	Elevated temperature liquid, n.o.s.	
7:22		9259	Elevated temperature liquid, n.o.s.	
7:24	3	1203	Gasoline	
7:28	3	1170	Ethanol	
7:30	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam.,oxidizer)	
7:31	3	1203	Gasoline	
7:34	HOT	3257	Elevated temperature liquid, n.o.s.	
7:44	4.3	3170	Aluminum processing by-products	
7:46	5.1, 2.2	1073	Oxygen	
7:48	3	1203	Gasoline	
7:56	NA	3077	Hazardous waste, solid, n.o.s.	
7:59	3	1203	Gasoline	
8:00	D		Dangerous	
8:07	D		Dangerous	
8:16	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
8:45	3	1203	Gasoline	
8:50	3	1203	Gasoline	
8:52	3	2057	Tripropylene	
8:57	3	1203	Gasoline	



9:03	3	1993	Flammable liquid, n.o.s.	
9:10	3	1203	Gasoline	
9:16	3	1203	Gasoline	
9:33	D		Dangerous	
9:36	5.1	2014	Hydrogen peroxide, aqueous solution 20-60%	
9:47	3	1203	Gasoline	
9:51	2.2	1073	Oxygen	
10:18	2.2	1977	Nitrogen, refrigerated liquid	
10:21	6.2	3291	(Bio) medical waste	
10:36	3	1203	Gasoline	
10:45	3	1993	Flammable	
10:55	3	1203	Gasoline	
11:04	D		Dangerous	
11:07	2.2	1073	Oxygen	
11:10	3	1203	Gasoline	
11:25	2.2	1073	Oxygen	
11:27	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:32	2.2	1977	Nitrogen, refrigerated liquid	
11:36	3	1203	Gasoline	
11:41	3	1863	Fuel, aviation, turbine engine	
11:45	8	3267	Corrosive liquid, basic, organic, n.o.s.	
11:54	D		Dangerous	
12:01	3	1993	Flammable liquids, n.o.s.	
12:12	2.2	1977	Nitrogen, refrigerated liquid	
12:21	3	1203	Gasoline	
12:24	3	1203	Gasoline	
12:38	3	1203	Gasoline	
12:41	5.1, 2.2	1073	Oxygen	
12:51	2.2	1073	Oxygen	
12:59	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:08	2.2	1977	Nitrogen, refrigerated liquid	
13:18	3	1203	Gasoline	
13:33	8, 3	NA	Corrosive, Flammable and combustible liquid	
13:49	3	1267	Petroleum crude oil	
14:01	D		Dangerous	
14:09	3	2478	Isocyanates, flammable, toxic, n.o.s.	
14:13	3	1203	Gasoline	
14:24	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:27	3	1993	Flammable liquids, n.o.s.	

14:27	8	1824	Sodium hydroxide, solution	
14:42	D		Dangerous	
14:50	2.2	1073	Oxygen	
15:08	2.2	1977	Nitrogen, refrigerated liquid	
15:11	3	1203	Gasoline	
15:13	3	1203	Gasoline	
15:22	8	3267	Corrosive liquid, basic, organic, n.o.s.	
15:33	3	1993	Flammable liquids, n.o.s.	
15:34	3	1993	Flammable liquid, n.o.s.	
15:47	3	1203	Gasoline	
16:17	5.1	2428	Sodium chlorate, aqueous solution	
16:22	3	1268	Petroleum distillates, n.o.s.	
16:23	3	1863	Fuel, aviation, turbine engine	
16:29	2.1	1075	Propane	
16:45	3	1203	Gasoline	
16:48	8	1715	Acetic anhydride	
16:51	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:52	3, D	1866	Resin solution, Mixed hazardous materials	
16:55	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
16:58	D		Dangerous	
17:11	3	1993	Flammable liquids, n.o.s.	
17:12	8	1848	Propionic acid	
17:14	3	1203	Gasoline	
17:19	3	1203	Gasoline	
17:25	3	1203	Gasoline	
17:27	3	1203	Gasoline	
17:30	8	2794	Batteries, wet, filled with acid	
17:31	3	1203	Gasoline	
17:34	D		Dangerous	
17:37	3	1193	Ethyl methyl ketone	
17:45	8	1715	Acetic anhydride	
17:48	2.1	1075	Propane	
17:50	3, 8	1993, 3264	Flammable liquid, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	
17:57	3	1203	Gasoline	
18:08	D		Dangerous	
18:21	2.2	1073	Oxygen	
18:36	3	1203	Gasoline	

18:39	2.2	1977	Nitrogen, refrigerated liquid	
18:40	3, 9	1110, 3082, 1993	Methyl amyl ketone, Haz. waste, liquid, Flam. liq.	
18:43	3	1993	Flammable liquid, n.o.s.	
18:44	3	1203	Gasoline	
19:04	3	1203	Gasoline	
19:09	2.2	1073	Oxygen	
19:14	2.2	1977	Nitrogen, refrigerated liquid	
19:24	3	1866	Resin solution, flammable	
19:38	D		Dangerous	
19:41	3	1203	Gasoline	
19:44	3	1203	Gasoline	
19:52	8	1824	Sodium hydroxide solution	
20:05	3	1203	Gasoline	
20:27	2.2	1073	Oxygen	
20:28	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:33	9	3257	Elevated temperature liquid, n.o.s.	
20:54	3	1203	Gasoline	
20:54	2.2	1977	Nitrogen, refrigerated liquid	
21:06	3	1203	Gasoline	
21:41	8	3093	Corrosive liquids, oxidizing, n.o.s.	
21:58	3	1203	Gasoline	
22:07	9	3257	Elevated temperature liquid, n.o.s.	
22:29	3	1203	Gasoline	
22:30	D		Dangerous	
22:46	3	1203	Gasoline	
22:55	3	1203	Gasoline	
22:59	3	1203	Gasoline	
23:12	3	1203	Gasoline	
23:15	3	1203	Gasoline	
23:49	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 Fall Branch, TN (Exit 50)			Date: 16DEC05	
Time	Hazard Class	UN ID	Description	Notes
0:14	3	1203	Gasoline	
2:38	D		Dangerous	
2:40	3	1203	Gasoline	

2:44	3	1203	Gasoline	
3:16	3	1203	Gasoline	
3:18	3	1203	Gasoline	
3:29	D		Dangerous	
4:32	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:47	3	1999	Asphalt	
6:12	6.1, 3	1259	Nickel carbonyl	
6:23	3	1203	Gasoline	
6:34	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:43	3	1203	Gasoline	
7:03	3	1203	Gasoline	
7:18	9	3257	Elevated temperature liquid, n.o.s	
7:33	8	2812	Sodium aluminate, solid	
7:52	2.1	1075	Propane	
7:53	8	1760	Corrosive liquids, n.o.s.	
8:18	2.2	1977	Nitrogen, refrigerated liquid (cryogenic)	
8:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:28	4.3	1400	Barium	
8:29	3	1203	Gasoline	
8:33	3	1993	Flammable	
8:40	HOT	9259	Elevated temperature material, liquid, n.o.s.	
8:46	D		Dangerous	
8:55	3	1203	Gasoline	
9:04	3	1203	Gasoline	
9:09	2.2	1977	Nitrogen, refrigerated liquid	
9:11	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:18	3	1203	Gasoline	
9:23	2.2	3158	Gas, refrigerated liquid, n.o.s. (cryogenic)	
9:29	3	1203	Gasoline	
9:38	3	1203	Gasoline	
9:41	8	1802	Perchloric acid, > 50% by mass	
10:13	5.1	2880	Calcium hypochlorite, hydrated	
10:14	3	1294	Toluene	
10:18	HOT	3257	Elevated temperature liquid, n.o.s.	
10:19	3	1203	Gasoline	
10:28	3	1203	Gasoline	
10:31	2.1	1075	Propane	
10:33	3	1267	Petroleum crude oil	
10:42	3	1203	Gasoline	

10:45	3	1268	Petroleum Distillates (naphtha)	
11:04	3	1203	Gasoline	
11:07	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:10	9	3257	Elevated temperature liquid, n.o.s.	
11:13	2.2	1073	Oxygen, refrigerated liquid	
11:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:34	3	1203	Gasoline	
11:36	3	1203	Gasoline	
11:41	8	3267	Corrosive liquid, basic, organic, n.o.s.	
11:41	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
11:54	2.2	1073	Oxygen	
12:01	3	1203	Gasoline	
12:03	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:18	2.2	1073	Oxygen	
12:21	3	1203	Gasoline	
12:24	8, 3	2789	Acetic acid, glacial	
12:29	D, 3	1866	Resin solution, Mixed hazardous materials	
12:38	3	1203	Gasoline	
12:38	2.2	1072	Oxygen, compressed	
12:49	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:51	1.1D	60	Charges, supplementary explosive	
12:59	D		Dangerous	
13:08	3	1203	Gasoline	
13:09	3	1203	Gasoline	
13:22	2.2	1073	Oxygen	
13:23	3	1203	Gasoline	
13:38	D		Dangerous	
13:48	3, 2	N/A	Flammable and Non-Flammable Gas	
14:01	8	2209	Formaldehyde, solutions	
14:05	6.1	1897	Tetrachloroethylene	
14:10	8	2218	Acrylic acid, inhibited	
14:13	3	1993	Flammable	
14:19	3	1203	Gasoline	
14:24	2.2	1073	Oxygen	
14:27	2.2	2187	Carbon dioxide, refrigerated liquid	
14:27	2.2	1072	Oxygen, compressed	
14:33	3	1203	Gasoline	
14:42	D		Dangerous	

14:50	3	1203	Gasoline	
15:08	HOT	3257	Elevated temperature liquid, n.o.s.	
15:11	3	1863	Fuel, aviation, turbine engine	
15:13	2.2	1073	Oxygen	
15:22	3	1203	Gasoline	
15:29	3	1203	Gasoline	
15:33	2.2	1977	Nitrogen, refrigerated liquid	
15:39	3	1203	Gasoline	
15:39	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:50	3	1203	Gasoline	
15:55	3	1993	Flammable liquid, n.o.s.	
16:04	3	1203	Gasoline	
16:18	3	N/A	Flammable and Combustible Liquid	
16:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:24	8	2214	Phthalic anhydride	
16:47	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:51	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:56	3	1231	Methyl Acetate	
17:08	2.2	1951	Argon, refrigerated liquid	
17:11	2.2	1073	Oxygen	
17:27	3	1203	Gasoline	
17:32	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:34	3	1203	Gasoline	
17:39	1.5	332	Blasting agent	
17:46	8	3264	Corrosive liquid, acidic, inorganic, NOS	
17:48	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
17:57	3	1993	Flammable	
17:58	3	1203	Gasoline	
18:11	3, 4.3	3207	Organometallic compound, solution	
18:21	2.1	1075	Propane	
18:23	3	1307	Xylene	
18:36	8	1760	Corrosive liquids, n.o.s.	
18:40	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:44	3	1863	Fuel, aviation, turbine engine	
18:46	HOT	3257	Elevated temperature liquid, n.o.s.	
19:04	6.1, 8	1752	Chloroacetyl Chloride	
19:08	3	1203	Gasoline	
19:14	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:24	3	1203	Gasoline	

19:38	3	N/A	Flammable and Combustible Liquid	
19:44	3	1203	Gasoline	
19:48	2.2	2187	Carbon dioxide, refrigerated liquid	
19:51	3	1203	Gasoline	
20:05	3	1203	Gasoline	
20:25	3, 8	1993/3264	Flammable liquids, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	
20:28	3	1203	Gasoline	
20:30	2.2	1072	Oxygen, compressed	
20:33	3	1993	Flammable liquid, n.o.s.	
20:54	3, 4.1, 6.1		Dangerous	
21:12	3	1203	Gasoline	
21:29	2.2	1072	Oxygen, compressed	
21:40	3	1203	Gasoline	
21:50	3	1203	Gasoline	
22:12	6.1	1578	Chloronitrobenzene	
22:38	3	1203	Gasoline	
22:41	2.2	1072	Oxygen, compressed	
22:59	3	1203	Gasoline	
23:10	3	1203	Gasoline	
23:42	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Eastern Star (Exit 45)

Date: 18DEC05

Time	Hazard Class	UN ID	Description	Notes
0:21	3	1203	Gasoline	
0:44	3	1203	Gasoline	
2:38	3	1203	Gasoline	
2:55	3	1203	Gasoline	
3:29	3	1133	Adhesives, n.o.s	
4:33	8	1760	Corrosive liquid, n.o.s.	
5:08	7	NA	Radioactive	
5:25	8	2794	Batteries, wet, filled w/ acid	
5:40	3	1203	Gasoline	
6:10	8	1760	Corrosive liquid, n.o.s.	
6:19	9	2211	Polystyrene beads, expandable	
6:22	7	NA	Radioactive	
6:23	3	1203	Gasoline	

6:36	D		Dangerous	
6:43	3	1203	Gasoline	
6:43	5.1	2880	Calcium hypochlorite, hydrated	
6:49	5.1	2880	Calcium hypochlorite, hydrated	
7:07	3	1866	Resin solution, flammable	
7:18	3	2302	5-methylhexan-2-one	
7:23	3	1267	Petroleum crude oil	
7:36	3	1203	Gasoline	
7:40	8	NA	Corrosive	
7:52	1.4G	336	Fireworks	
8:18	D		Dangerous	
8:31	5.1, 2.2	NA	Oxygen	
8:33	3	1267	Petroleum crude oil	
8:41	1.1D	NA	Explosive (mass explosion hazard)	
8:47	8		Corrosive and mixed hazard classes	
8:55	3	1203	Gasoline	
9:03	1.5	NA	Blasting agents	
9:23	8	NA	Corrosive	
9:25	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
9:38	5.1, 2.2	NA	Oxygen	
9:52			Dangerous	
10:13	5.1, 2.2	1073	Oxygen	
10:14	3	1203	Gasoline	
10:19	3	1203	Gasoline	
10:33	6.2	3291	(Bio) medical waste, n.o.s.	
10:35	2.1, 2.2, 2.3	NA	Comp. gases (flam., non-flam., poisonous)	
10:42	8	NA	Corrosive	
10:45	D		Dangerous	
10:57	8	NA	Corrosive	
11:08	5.1	2428	Sodium chlorate, aqueous solution	
11:10	3	1203	Gasoline	
11:20	3	1203	Gasoline	
11:26	D		Dangerous	
11:32	HOT	3257	Elevated temperature liquid, n.o.s.	
11:38	5.1, 2.2	1073	Oxygen	
11:40	5.1, 2.2	1073	Oxygen	
11:43	3	1133	Adhesives, n.o.s	
11:52	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	



11:54	3	1203	Gasoline	
11:59	2.2, 5.1	1073	Oxygen	
12:03	3	1203	Gasoline	
12:11	8		Corrosive and mixed hazard classes	
12:17	8	2794	Batteries, wet, filled w/ acid	
12:21	3	1203	Gasoline	
12:33	1.1D, 1.5	NA	Explosives and blasting agents	
12:35	3	1203	Gasoline	
12:36	1.5	NA	Blasting agents	
12:49	2.1	1075	Propane	
13:08	3	1203	Gasoline	
13:14	HOT	3257	Elevated temperature liquid, n.o.s.	
13:24	2.2, 5.1	1073	Oxygen	
13:32	HOT	3257	Elevated temperature liquid, n.o.s.	
13:41	3	1203	Gasoline	
13:50	5.1	NA	Oxidizer	
14:06	3	1993	Flammable liquid, n.o.s.	
14:13	7	NA	Radioactive	
14:15	5.1	2428	Sodium chlorate, aqueous solution	
14:35	2.1	1075	Propane	
14:38	2.1	1075	Propane cylinders	
14:40	D		Dangerous	
14:42	2.1	1075	Propane	
14:43	5.1	2428	Sodium chlorate, aqueous solution	
15:14	5.1, 2.2	1073	Oxygen	
15:21	8	2834	Phosphorous acid	
15:31	3	1203	Gasoline	
15:38	3	NA	Flammable and combustible liquid	
15:52	3	1203	Gasoline	
16:13	3	1203	Gasoline	
16:22	3	1203	Gasoline	
16:28	3	NA	Flammable and combustible liquid	
16:33	HOT	3257	Elevated temperature liquid, n.o.s.	
16:38	3	1203	Gasoline	
16:39	5.1, 2.2	1073	Oxygen	
16:53	3	1203	Gasoline	
17:02	5.1, 2.2	1075	Oxygen	
17:08	2.1	1075	Propane	
17:29	3	1203	Gasoline	

17:33	8	NA	Corrosive	
17:40	6.2	3291	(Bio) medical waste, n.o.s.	
17:48	3	1203	Gasoline	
18:18	8	NA	Corrosive	
18:24	6.1	1680	Potassium cyanide	
18:32	3	1203	Gasoline	
18:49	5.1	2428	Sodium chlorate, aqueous solution	
18:55	5.1	NA	Oxidizer	
19:10	3	1133	Adhesives, containing a flammable liquid	
19:14	8, 3	NA	Corrosive and flammable	
19:18	8	NA	Corrosive	
19:20	2.3	NA	Poison gas cylinders - inhalation hazard	
19:32	HOT	3257	Elevated temperature liquid, n.o.s.	
19:38	5.1, 2.2	1073	Oxygen	
19:41	3	1993, 1123	Flam. liquid, n.o.s. and Butyl acetates	
20:16	5.1, 2.2	1073	Oxygen	
20:33	3	1203	Gasoline	
20:34	8	NA	Corrosive	
20:57	3	1203	Gasoline	
21:08	3	1203	Gasoline	
22:07	3	1203	Gasoline	
22:38	3	1203	Gasoline	
22:44	3	NA	Flammable and combustible liquid	
22:59	3	1203	Gasoline	
23:38	8, 3	NA	Corrosive and flammable	

### Road Side Survey Field Log

Location: US-11E Jockey Creek

Date: 21DEC05

Time	Hazard Class	UN ID	Description	Notes
2:38	3	1203	Gasoline	
2:55	3	1203	Gasoline	
3:29	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:23	8	NA	Corrosive	
5:40	2.2	1073	Oxygen	
6:36	D			
6:43	3	1203	Gasoline	
6:52	3	1203	Gasoline	
10:45	2.1	1075	Petroleum Gases, Liquefied (Propane)	

11:41	3	1203	Gasoline	
11:54	3	1203	Gasoline	
12:21	3	1203	Gasoline	
13:08	3	1993	Flammable	
14:16	3	NA	Flammable	
14:42	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:06	2.1	1075	Propane	
15:39	3	1993	Flammable liquid, n.o.s.	
15:42	3	1203	Gasoline	
16:13	3	NA	Flammable and combustible liquid	
16:30	3, 8	NA	Flammable and combustible liquid, Corrosive	
16:42	3	1203	Gasoline	
17:03	3	1203	Gasoline	
17:20	3	1203	Gasoline	
17:34	3	1203	Gasoline	
17:41	3	1203	Gasoline	
17:43	3, 5.1, 8	NA	Flammable, Oxidizer, Corrosive	
19:14	3	1203	Gasoline	
19:41	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:33	3	1993	Flammable	
20:54	3	1203	Gasoline	
22:07	3	1203	Gasoline	
22:59	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Okolona Road (Exit 28)				Date: 26DEC05
Time	Hazard Class	UN ID	Description	Notes
1:57	3	1203	Gasoline	
2:44	3	1203	Gasoline	
3:39	3	1203	Gasoline	
3:29	3	1203	Gasoline	
5:26	2.1	1075	Propane	
5:24	3	1203	Gasoline	
5:47	3	1993	Flammable liquid, n.o.s.	
6:14	5.1	2428	Sodium chlorate, aqueous solution	
6:49	5.1	1942	Ammonium nitrate, NMT 0.2% comb. Mat	
7:00	2.2	2187	Carbon dioxide, refrigerated liquid	

7:11	9	1931	Zinc hydrosulfite	
7:24	8	NA	Corrosive	
7:28	3	1993	Flammable liquid, n.o.s.	
7:47	2.2	2187	Carbon dioxide, refrigerated liquid	
7:55	3	1993	Flammable liquid, n.o.s.	
8:22	3	1203	Gasoline	
8:27	8	NA	Corrosive	
8:33	2.1	1075	Propane	
8:27	HOT	9259	Elevated temperature material, liquid, n.o.s.	
8:45	3	1220	Isopropyl acetate	
8:58	3	1203	Gasoline	
9:12	2.1	1075	Propane	
9:23	3	3271	Ethers, n.o.s.	
9:36	7	NA	Radioactive	
9:54	8, 2.3	NA	Corrosive, Poison gas	
10:11	2.1	1075	Propane	
10:26	8	1715	Acetic anhydride	
10:29	8	NA	Corrosive	
10:38	8	2215	Maleic acid	
10:45	3	1171	Ethylene glycol monoethyl ether	
10:47	1.1D	NA	Explosive (mass explosion hazard)	
11:04	8	NA	Corrosive	
11:05	2.2	2187	Carbon dioxide, refrigerated liquid	
11:18	8	2209	Formaldehyde, solutions	
11:35	3	1203	Gasoline	
11:51	7	2982	Radioactive material, n.o.s.	
12:04	5.1	3098	Oxidizing liquid, corrosive, n.o.s.	
12:14	5.1	1486	Potassium nitrate	
12:16	8	NA	Corrosive	
12:17	3	1203	Gasoline	
12:50	8	2209	Formaldehyde, solutions	
13:07	3	1203	Gasoline	
13:08	5.1	2428	Sodium chlorate, aqueous solution	
13:13	3	1218	Isoprene, stabilized	
13:28	1.1D	NA	Explosive (mass explosion hazard)	
13:31	8	NA	Corrosive	
13:51	2.2	2187	Carbon dioxide, refrigerated liquid	
14:03	8	2209	Formaldehyde, solutions	
14:19	3	1203	Gasoline	

14:35	7	2982	Radioactive material, n.o.s.	
14:43	8, 2.3	NA	Corrosive, Poison gas	
15:26	5.1	1486	Potassium nitrate	
15:28	2.3, 8	1050	Hydrogen chloride, anhydrous	
15:31	HOT	3257	Elevated temperature liquid, n.o.s.	
15:48	5.1	1942	Ammonium nitrate, NMT 0.2% comb. Mat	
15:59	3	1993	Flammable liquid, n.o.s.	
16:01	HOT	3257	Elevated temperature liquid, n.o.s.	
16:10	5.1	2428	Sodium chlorate, aqueous solution	
16:13	3	1993	Flammable liquid, n.o.s.	
16:26	3	2048	Dicyclopentadiene	
16:45	3	1203	Gasoline	
17:10	3	1993	Flammable liquid, n.o.s.	
17:11	5.1	1486	Potassium nitrate	
17:11	D		Dangerous	
17:13	3	1203	Gasoline	
17:45	3	1993	Flammable liquid, n.o.s.	
18:19	3	1993	Flammable liquid, n.o.s.	
18:48	5.1	1486	Potassium nitrate	
18:57	2.3, 8	1050	Hydrogen chloride, anhydrous	
19:03	8	1719	Caustic alkali liquids, n.o.s.	
19:37	1.4S	405	Cartridges, signal	
20:02	HOT	3257	Elevated temperature liquid, n.o.s.	
20:44	3	1203	Gasoline	
21:04	3	1203	Gasoline	
21:35	3	1203	Gasoline	
22:41	D		Dangerous	
23:43	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Okolona Road (Exit 28)			Date: 27DEC05	
Time	Hazard Class	UN ID	Description	Notes
0:55	3	1203	Gasoline	
2:10	3	1203	Gasoline	
3:25	3	1203	Gasoline	
5:25	3	1203	Gasoline	
5:40	D	NA	Mixed hazardous materials	
6:01	8	NA	Corrosive	

6:10	HOT	3257	Elevated temperature liquid, n.o.s.	
6:22	5.1	3139	Oxidizing liquid, n.o.s.	
6:49	D	NA	Mixed hazardous materials	
7:18	7	2982	Radioactive material, n.o.s.	
7:27	3	1210	Printing ink related material	
7:48	2.2	1977	Nitrogen, refrigerated liquid	
8:18	5.1	2428	Sodium chlorate, aqueous solution	
8:28	2.2	2187	Carbon dioxide, refrigerated liquid	
8:33	HOT	3257	Elevated temperature liquid, n.o.s.	
8:40	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
8:45	2.2	2187	Carbon dioxide, refrigerated liquid	
8:46	8	1760	Corrosive liquids, n.o.s.	
8:55	7	NA	Radioactive	
9:04	8	NA	Corrosive	
9:11	6.1	NA	Poisonous material	
9:23	3	1203	Gasoline	
9:38	3	1203	Gasoline	
10:11	1.5D	NA	Blasting agents	
10:13	3	1224	Ketones, liquid, n.o.s.	
10:14	3	1987, 1220, 1993	Denatured alcohol, Isopropyl acetate, Flam liq, n.o.s.	
10:18	2.2	1977	Nitrogen, refrigerated liquid	
10:33	2.2	2187	Carbon dioxide, refrigerated liquid	
10:42	3	1203	Gasoline	
11:05	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
11:08	8	1715	Acetic anhydride	
11:09	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:25	4.1	1869	Magnesium	
11:26	2.2	2187	Carbon dioxide, refrigerated liquid	
11:32	HOT	3257	Elevated temperature liquid, n.o.s.	
11:38	8	NA	Corrosive	
11:40	3	1993	Flammable liquid, n.o.s.	
11:52	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
11:59	2.2	2187	Carbon dioxide, refrigerated liquid	
12:03	3	1993	Flammable liquid, n.o.s.	
12:03	3	1268	Petroleum distillates, n.o.s.	
12:03	3	1203	Gasoline	
12:11	3	1203	Gasoline	

12:16	8	NA	Corrosive	
12:18	8	NA	Corrosive	
12:35	3	1993, 1123	Flammable liq., n.o.s., Butyl acetates	
12:49	2.1	1075	Propane	
13:06	5.1	3139	Oxidizing liquid, n.o.s.	
13:24	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
13:41	8, 2.3	NA	Corrosive, Poison gas	
13:52	5.1	2428	Sodium chlorate, aqueous solution	
14:05	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
14:13	2.2	2187	Carbon dioxide, refrigerated liquid	
14:38	8	NA	Corrosive	
14:40	5.1	2428	Sodium chlorate, aqueous solution	
14:43	3	1294	Toluene	
15:31	3	1203	Gasoline	
15:55	2.1	1075	Propane	
16:28	3	1220	Isopropyl acetate	
16:38	7	NA	Radioactive	
16:53	8	UN1760	Corrosive liquids, n.o.s.	Venting
17:33	2.1	1075	Propane	
17:46	3	1203	Gasoline	
17:48	3	1203	Gasoline	
17:58	1.1D	NA	Explosive (mass explosion hazard)	
18:32	8	2209	Formaldehyde, solutions	
18:46	5.1	1942	Ammonium nitrate w/ NMT 0.2%comb. material	
18:48	3	1203	Gasoline	
18:55	5.1, 2.2	1073	Oxygen	
19:08	3	1203	Gasoline	
19:18	3	1203	Gasoline	
19:20	5.1	1473	Magnesium bromate	
19:48	8	1824	Sodium hydroxide solution	
19:51	3	1993	Flammable liquid, n.o.s.	
20:34	8	NA	Corrosive	
21:08	3, 6.1, 9	NA	Flam., Poison, Misc. hazardous material	
21:40	3	1203	Gasoline	
21:50	2.1	1075	Propane	
22:00	3	1203	Gasoline	
22:13	3	1203	Gasoline	
23:10	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Washington County/Sullivan County Line				Date: 29DEC05
Time	Hazard Class	UN ID	Description	Notes
2:26	3	1203	Gasoline	
4:11	2.1	1075	Propane	
6:52	8	NA	Corrosive	
7:09	3	1203	Gasoline	
7:18	3	NA	Flammable	
7:43	2.1	1075	Propane	
8:12	3	1203	Gasoline	
8:51	3	NA	Flammable and combustible liquid	
9:04	3, 8	NA	Flammable and combustible liquid, Corrosive	
10:09	3	1203	Gasoline	
10:13	3	1203	Gasoline	
10:42	3	1203	Gasoline	
11:17	5.1, 2.2	1073	Oxygen	
11:30	8	2031	Nitrating acid, > 50% by mass	
11:52	8	1791, 1830	Hypochlorite soln, Sulfuric acid	
12:14	3	NA	Flammable and combustible liquid	
12:33	2.1	1075	Propane	
12:44	6.1	NA	Poisonous	
12:59	5.1, 2.2	1073	Oxygen	
13:16	3	1203	Gasoline	
13:38	2.1	1075	Propane	
14:03	3	1203	Gasoline	
14:38	3	1230	Methanol	
14:53	3	1203	Gasoline	
15:20	3	1203	Gasoline	
15:34	8	2031	Nitric acid, other than red fuming	
15:59	5.1, 2.2	1073	Oxygen	
16:17	8	2215	Maleic acid	
16:32	3	1203	Gasoline	
17:07	2.1	1075	Propane	
17:34	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
18:13	3	1203	Gasoline	
18:33	5.1, 2.2	1073	Oxygen	



20:09	3	1203	Gasoline	
22:23	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321 Washington County/Carter County Line				Date: 31DEC05
Time	Hazard Class	UN ID	Description	Notes
3:14	3	1203	Gasoline	
5:25	3	1203	Gasoline	
6:22	3	1993	Flammable liquids, n.o.s	
7:00	2.2	1006	Argon, compressed	
7:27	3	1203	Gasoline	
8:28	3	1267	Petroleum crude oil	
8:55	3	1203	Gasoline	
9:38	5.1, 2.2	1073	Oxygen	
10:14	3	1203	Gasoline	
10:42	3	1203	Gasoline	
11:08	2.2	3318	Ammonia solution, with > 50% ammonia	
11:32	3	1203	Gasoline	
11:40	3	1203	Gasoline	
11:59	8, D.	NA	Corrosive, Mixed hazardous material	
12:11	5.1	NA	Oxidizer	
12:49	3	1203	Gasoline	
13:41	5.1, 2.2	1073	Oxygen	
14:38	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
14:43	3	1203	Gasoline	
16:28	5.1	NA	Oxidizer	
16:53	8	1824	Sodium hydroxide, solution	
17:48	3	1203	Gasoline	
18:55	2.1	1075	Propane	
22:13	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 Fall Branch, TN (Exit 50)				Date: 5JAN06
Time	Hazard Class	UN ID	Description	Notes
0:46	3	1203	Gasoline	
0:51	3	1203	Gasoline	
1:58	3	1203	Gasoline	

2:45	3	1203	Gasoline	
3:52	3	1203	Gasoline	
4:02	2.1	1075	Petroleum Gases, Liquefied (Propane)	
4:16	3	1203	Gasoline	
5:07	3	1203	Gasoline	
5:27	8	1814	Potassium hydroxide, solution	
5:40	2.2	1072	Oxygen, compressed	
5:50	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
6:04	2.2	1072	Oxygen, compressed	
6:09	D		Dangerous	
6:11	3	1203	Gasoline	
6:15	8	1760	Corrosive liquids, n.o.s.	
6:17	3	1203	Gasoline	
6:27	3	1203	Gasoline	
6:31	3	1993	Flammable liquids, n.o.s.	
6:58	2.2	1073	Oxygen, refrigerated liquid	
7:04	3	1203	Gasoline	
7:06	1.5	332	Blasting agent	
7:08	3	1203	Gasoline	
7:25	3	1203	Gasoline	
7:28	3	1203	Gasoline	
7:32	3	1203	Gasoline	
7:35	8	1760	Corrosive liquids, n.o.s.	
7:35	3	1203	Gasoline	
7:47	2	1072	Oxygen	
7:48	3, 4.1, 6.1		Dangerous	
7:51	8	1760	Corrosive liquids, n.o.s.	
7:54	3	1203	Gasoline	
7:59	3	1203	Gasoline	
8:02	3	1203	Gasoline	
8:26	3	1203	Gasoline	
8:29	1.5	332	Blasting agent	
8:33	D		Dangerous	
8:35	4.1	1330	Manganese resinate	
8:38	3	1203	Gasoline	
8:43	3	1203	Gasoline	
8:44	6	2078	Toluene diisocyanate	
8:45	2.1	1075	Propane	
8:52	3	1203	Gasoline	

9:07	3	1276	n-Propyl acetate
9:04	5.1	1942	Ammonium nitrate, <0.2% combustible mat.
9:31	3	1203	Gasoline
9:32	3	1203	Gasoline
9:34	8	1760	Corrosive liquids, n.o.s.
9:37	3	1203	Gasoline
9:43	3	1203	Gasoline
9:53	3	1203	Gasoline
9:54	3, 2	N/A	Flammable and Non-Flammable Gas
10:02	2.1	1075	Petroleum Gases, Liquefied (Propane)
10:08	3	1268	Petroleum distillates, n.o.s.
10:14	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.
10:14	3	2302	5-Methylhexan-2-one
10:28	3	1231	Methyl Acetate
10:29	3	1993	Flammable liquids, n.o.s.
10:33	2.1	1075	Liquefied petroleum gas
10:33	3	1203	Gasoline
10:34	2.2	1072	Oxygen, compressed
10:35	3	1203	Gasoline
11:01	3	1993	Flammable liquids, n.o.s.
11:18	2.1	1075	Petroleum Gases, Liquefied (Propane)
11:26	3	1203	Gasoline
11:31	3	1203	Gasoline
11:32	3	1203	Gasoline
11:32	3	1203	Gasoline
11:50	3	1203	Gasoline
11:52	3/6.1	1986	Alcohols, flammable, toxic, n.o.s.
11:56	3	1203	Gasoline
11:58	8	1760	Corrosive liquids, n.o.s.
12:06	1.5	332	Blasting agent
12:15	3	1203	Gasoline
12:16	2.2	1072	Oxygen, compressed
12:23	1D	81	Explosive, blasting, type A
12:25	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.
12:28	3	1203	Gasoline
12:33	D	N/A	Mixed Shipment
12:34	3	1203	Gasoline
12:36	5.1	1942	Ammonium nitrate, <0.2% combustible mat.
12:48	6	2078	Toluene diisocyanate

12:53	8	2582	Ferric chloride, solution
12:56	3	1203	Gasoline
13:01	2.2	1073	Oxygen
13:07	D, 3	1866	Resin solution, Mixed hazardous materials
13:09	3	1203	Gasoline
13:20	3	1245	Methyl isobutyl ketone
13:20	3	1993	Flammable liquid, n.o.s.
13:36	3	1203	Gasoline
13:37	7	2908	Radioactive material, excepted packaging
13:40	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.
13:42	3	1203	Gasoline
13:43	3	1203	Gasoline
13:49	3	1203	Gasoline
14:06	3	1203	Gasoline
14:16	3	1203	Gasoline
14:16	3	1203	Gasoline
14:33	5.1, 2.2	1073	Oxygen
14:35	7	2909	Radioactive material
14:36	3	2348	Butyl acrylates, stabilized
14:44	3	1203	Gasoline
14:49	2.1	1075	Petroleum Gases, Liquefied (Propane)
14:52	3	1203	Gasoline
14:54	4.1	2989	Lead phosphite, dibasic
14:57	8	1760	Corrosive liquids, n.o.s.
14:59	2.1	1075	Petroleum Gases, Liquefied (Propane)
15:05	6.1	1549	Antimony compounds, inorganic, solid, n.o.s.
15:06	2.1	1075	Petroleum Gases, Liquefied (Propane)
15:08	2.2	1073	Oxygen
15:12	2, 2.2	N/A	Compressed Gas (Flammable Non- Flammable)
15:25	3	1203	Gasoline
15:29	8	3264	Corrosive liquid, acidic, inorganic, NOS
15:32	9	3082	Hazardous waste, liquid, n.o.s.
15:34	3	1863	Fuel, aviation, turbine engine
15:38	3	1203	Gasoline
15:39	3	1307	Xylenes
15:41	2.2	1072	Oxygen, compressed
15:42	2.1	1075	Propane
15:52	6.1	1062	Methyl amyl ketone

16:05	3	1203	Gasoline	
16:09	9	3257	Elevated temperature liquid, n.o.s	
16:15	3	1203	Gasoline	
16:16	1.5	332	Blasting agent	
16:20	3	1203	Gasoline	
16:25	9	3082	Environmentally hazardous substance, Liq., nos	
16:30	3	1203	Gasoline	
16:34	3	1993	Flammable	
16:35	D		Dangerous	
16:39	6.1, 8	1752	Chloroacetyl Chloride	
16:50	3	1993	Flammable liquid, n.o.s.	
16:58	3	1203	Gasoline	
16:58	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:59	3	1203	Gasoline	
17:01	7	3327	Radioactive material, Type A package, fissile	
17:07	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
17:12	3	1203	Gasoline	
17:14	8	1832	Sulfuric acid, Spent	
17:21	3	1203	Gasoline	
17:22	3	1203	Gasoline	
17:29	2.1	1075	Propane	
17:32	2	1072	Oxygen	
17:33	3	1203	Gasoline	
17:35	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
17:51	2.2	1046	Helium, compressed	
17:51	3	1203	Gasoline	
17:54	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:57	3	1090	Acetone	
17:59	3	1203	Gasoline	
18:00	3	1203	Gasoline	
18:04	3	1203	Gasoline	
18:05	3	1203	Gasoline	
18:15	2.2	1073	Oxygen, refrigerated liquid	
18:21	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:38	3	1120/1220/1120	Butanols, Isopropyl acetate, Butanols	
18:39	6.1	1602	Dyes, liquid, toxic, n.o.s.	

18:44	6.1	2312	Phenol, molten	
18:44	3	1993	Flammable liquids, n.o.s.	
18:48	3	1203	Gasoline	
18:54	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:54	3	1203	Gasoline	
18:57	2	N/A	Non-Flammable Gas	
19:00	8	2491	Ethanolamine	
19:02	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
19:05	2.2	1073	Oxygen, refrigerated liquid	
19:12	3	1993	Flammable liquids, n.o.s.	
19:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:38	3	1203	Gasoline	
19:47	3	1993	Flammable liquid, n.o.s.	
19:56	3	1294	Toluene	
19:56	3	1203	Gasoline	
20:01	3	1203	Gasoline	
20:14	3	1203	Gasoline	
20:34	3	1203	Gasoline	
20:39	2.2	1073	Oxygen, refrigerated liquid	
20:47	3	1203	Gasoline	
20:48	5.1, 2.2	NA	Oxygen	
20:54	3	1203	Gasoline	
21:09	3	1203	Gasoline	
21:14	8	1760	Corrosive liquids, n.o.s.	
21:32	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
21:45	3	1203	Gasoline	
21:51	3	1203	Gasoline	
21:57	3	1993	Flammable liquids, n.o.s.	
22:10	3	2302	5-Methylhexan-2-one	
22:27	3	1203	Gasoline	
22:43	3	1203	Gasoline	
22:56	2.1	1075	Petroleum Gases, Liquefied (Propane)	
22:57	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
23:01	HOT	3257	Elevated temperature liquid, n.o.s.	
23:21	3	1203	Gasoline	
23:46	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Eastern Star (Exit 45)

Date: 9JAN06

Time	Hazard Class	UN ID	Description	Notes
0:27	3	1203	Gasoline	
1:50	3	1203	Gasoline	
4:31	3	1203	Gasoline	
5:00	8	2209	Formaldehyde, solution, >25% formaldehyde	
5:19	3	1272	Pine oil	
5:21	3	1203	Gasoline	
5:45	HOT	3257	Elevated temperature liquid, n.o.s.	
6:03	5.1, 2.2	1075	Oxygen	
6:18	2.1	1075	Propane	
6:27	5.1, 2.2	1073	Oxygen	
6:34	3	1203	Gasoline	
6:38	9	2211	Polystyrene beads, expandable	
7:21	3	1203	Gasoline	
7:21	5.1	2880	Calcium hypochlorite, hydrated	
7:27	3	1203	Gasoline	
7:32	8	NA	Corrosive	
7:43	5.1, 2.2	NA	Oxygen	
7:47	1.1D	NA	Explosive (mass explosion hazard)	
8:02	1.5	NA	Blasting agents	
8:05	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
8:13	8, D		Corrosive and mixed hazard classes	
8:21	3	1203	Gasoline	
8:21	5.1	NA	Oxidizer	
8:47	8, 3	NA	Corrosive and flammable	
8:51	8	NA	Corrosive	
9:09	3	1993, 1123	Flam. liquid, n.o.s. and Butyl acetates	
9:14	8		Corrosive and mixed hazard classes	
9:16	3	1203	Gasoline	
9:40	5.1, 2.2	1073	Oxygen	
9:44	3	1203	Gasoline	
9:58	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
10:01	3, D	1866	Resin solution, Mixed hazardous materials	
10:13	8		Corrosive and mixed hazard classes	
10:31	3	1203	Gasoline	

10:31	2.1	1075	Propane	
10:40	8	1715	Acetic anhydride	
10:55	3, 9	1110, 3082, 1993	Methyl amyl ketone, Haz. waste, liquid. n.o.s., Flam. liq., n.o.s.	
11:02	D	NA	Mixed hazardous materials	
11:12	2.2	1073	Oxygen	
11:25	8, 3	2789	Acetic acid, glacial	
11:30	8, 3	NA	Corrosive, Flammable and combustible liquid	
11:31	2.1	1075	Propane	
12:11	3	1203	Gasoline	
12:29	3	1203	Gasoline	
12:38	HOT	3257	Elevated temperature liquid, n.o.s.	
12:42	4.3	3170	Aluminum processing by-products	
12:46	5.1, 2.2	1073	Oxygen	
13:16	NA	3077	Hazardous waste, solid, n.o.s.	
13:23	3	1203	Gasoline	
13:34	3	1866	Resin solution	
13:36	7	2982	Radioactive material, n.o.s.	
13:49	5.1, 2.2	1073	Oxygen	
13:59	8	2491	Ethanolamine	
14:08	1.4	NA	Explosives (no significant blast hazard)	
14:12	3	1203	Gasoline	
14:32	3	1203	Gasoline	
14:34	HOT	3257	Elevated temperature liquid, n.o.s.	
14:39	3	1203	Gasoline	
14:52	3	1203	Gasoline	
14:59	3	1133	Adhesives, n.o.s	
15:04	8	2794	Batteries, wet, filled w/ acid	
15:05	1.1D, 1.5	NA	Explosives and blasting agents	
15:06	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:25	3	NA	Flammable and combustible liquid	
15:45	3	1267	Petroleum crude oil	
15:46	6.1	1017	Chlorine	
15:46	3	1203	Gasoline	
15:49	8	1791	Hypochlorite solution	
16:04	5.1	NA	Oxidizer	
16:15	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:15	3	1993	Flammable liquid, n.o.s.	
16:19	3	NA	Flammable and combustible liquid	



16:27	3	1203	Gasoline	
16:36	3	1268	Petroleum distillates, n.o.s.	
16:47	4.3	3170	Aluminum processing by-products	
16:51	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
17:10	5.1	NA	Oxidizer	
17:19	2.1	1075	Propane	
17:22	3	1203	Gasoline	
17:23	2.1	1075	Propane	
17:24	2.2	2187	Carbon dioxide, refrigerated liquid	
17:37	2.2	1977	Nitrogen, refrigerated liquid	
17:38	2.1	1075	Propane	
17:40	3	1203	Gasoline	
17:44	3	1203	Gasoline	
18:07	3	1203	Gasoline	
18:14	3	1203	Gasoline	
18:20	D		Dangerous	
18:20	3	1993	Flammable liquid, n.o.s.	
18:37	3	NA	Flammable and combustible liquid	
18:39	3	1203	Gasoline	
18:50	3	1268	Petroleum distillates, n.o.s.	
19:04	5.1	2428	Sodium chlorate, aqueous solution	
19:13	3	2372	1,2-Di-(dimethylamino)ethane	
19:22	2.1	1075	Propane	
19:37	2.1	1075	Propane cylinders	
19:41	5.1, 2.2	1073	Oxygen	
19:52	8	2834	Phosphorous acid	
20:02	3	NA	Flammable and combustible liquid	
20:23	3	1203	Gasoline	
20:28	3	1203	Gasoline	
20:37	3	1203	Gasoline	
21:08	D		Dangerous	
21:10	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
21:10	D			
21:13	8		Corrosive and mixed hazard classes	
22:02	3	1203	Gasoline	
22:07	3	1203	Gasoline	
22:39	3	1203	Gasoline	
23:35	8	NA	Corrosive	
23:49	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Eastern Star (Exit 45)			Date: 10JAN06	
Time	Hazard Class	UN ID	Description	Notes
0:20	3	1203	Gasoline	
1:16	3	1203	Gasoline	
4:53	3	1203	Gasoline	
5:03	HOT	3257	Elevated temperature liquid, n.o.s.	
5:44	5.1	3085	Oxidizing solid, corrosive, n.o.s.	
6:05	3	1203	Gasoline	
6:07	2.2	2187	Carbon dioxide, refrigerated liquid	
6:29	2.3	1045	Fluorine, compressed	
6:54	2.1	1075	Propane	
6:55	3	1203	Gasoline	
7:01	3	NA	Flammable and combustible liquid	
7:06	3	1993	Flammable liquid, n.o.s.	
7:23	3	1203	Gasoline	
7:28	8	1715	Acetic anhydride	
7:41	3	1203	Gasoline	
7:52	5.1, 2.2	1073	Oxygen	
8:00	5.1	2428	Sodium chlorate, aqueous solution	
8:15	HOT	3257	Elevated temperature liquid, n.o.s.	
8:17	3	1203	Gasoline	
8:48	HOT	3257	Elevated temperature liquid, n.o.s.	
8:57	3	1267	Petroleum crude oil	
9:17	3	1203	Gasoline	
9:20	3	1203	Gasoline	
9:31	2.1	1075	Propane	
9:34	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
9:52	5.1, 2.2	1073	Oxygen	
10:05	2.2	1951	Argon, refrigerated liquid	
10:21	3	1203	Gasoline	
10:21	3	1267	Petroleum crude oil	
10:23	8	1824	Sodium hydroxide, solution	
10:23	5.1	2428	Sodium chlorate, aqueous solution	
11:09	3	2302	5-Methylhexan-2-one	
11:21	3	1268	Petroleum distillates, n.o.s.	
11:36	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
11:38	8	1715	Acetic anhydride	

11:51	3	1203	Gasoline	
12:11	3	1203	Gasoline	
12:13	6.2	3291	(Bio) medical waste	
12:24	2.1	1075	Propane	
12:49	3	1203	Gasoline	
12:53	3	1203	Gasoline	
13:09	6.2	3291	(Bio) medical waste	
13:32	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
13:32	3	2302	5-methylhexan-2-one	
13:35	3	1203	Gasoline	
13:53	2.2	1977	Nitrogen, refrigerated liquid	
14:06	8	NA	Corrosive	
14:09	5.1, 2.2	NA	Oxygen	
14:11	2.1	1075	Propane	
14:19	2.2	1951	Argon, refrigerated liquid	
14:30	3	NA	Flammable and combustible liquid	
14:37	2.1	1075	Propane	
15:17	3	1267	Petroleum crude oil	
15:20	3	1203	Gasoline	
15:33	8, 3	NA	Corrosive, Flammable and combustible liquid	
15:36	7	NA	Radioactive	
15:36	3	NA	Flammable and combustible liquid	
15:40	3	1993	Flammable liquid, n.o.s.	
16:06	3	1203	Gasoline	
16:07	3	1203	Gasoline	
16:13	3	1203	Gasoline	
16:20	3	NA	Flammable and combustible liquid	
16:22	5.1, 2.2	1073	Oxygen	
16:37	2.1	1075	Propane	
16:58	8, 3	NA	Corrosive, Flammable and combustible liquid	
16:58	3	1203	Gasoline	
17:01	1.4	NA	Explosives (no significant blast hazard)	
17:04	8	NA	Corrosive	
17:28	5.1	2428	Sodium chlorate, aqueous solution	
17:29	7	NA	Radioactive	
17:37	8	NA	Corrosive	
17:43	5.1	NA	Oxidizer	
17:53	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
18:04	3	1203	Gasoline	

18:13	3	1268	Petroleum distillates, n.o.s.	
18:30	3	NA	Flammable and combustible liquid	
18:37	3	1267	Petroleum crude oil	
18:38	6.1	1017	Chlorine	
19:03	3	NA	Flammable and combustible liquid	
19:11	8	1824	Sodium hydroxide, solution	
19:17	2.1	1075	Propane	
19:29	8	1761	Cupriethylenediamine solution	
19:44	5.1	1491	Potassium peroxide	
19:59	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
20:06	3	1203	Gasoline	
20:41	2.1	1075	Propane	
20:44	3	1203	Gasoline	
21:21	5.1, 2.2	1073	Oxygen	
21:24	3	1267	Petroleum crude oil	
21:58	3	1993	Flammable liquid, n.o.s.	
22:01	3	1203	Gasoline	
22:48	3	1203	Gasoline	
23:10	3	1203	Gasoline	
23:44	2.1	1075	Propane	

### Road Side Survey Field Log

Location: I-26 Okolona Road (Exit 28)				Date: 13JAN06
Time	Hazard Class	UN ID	Description	Notes
0:01	3	1203	Gasoline	
1:02	3	1203	Gasoline	
2:31	D			
4:49	3	1203	Gasoline	
5:15	3	2389	Furan	
5:27	D		Dangerous	
5:51	2.2	1977	Nitrogen, refrigerated liquid	
6:00	8	1715	Acetic anhydride	
6:34	2.2	2187	Carbon dioxide, refrigerated liquid	
6:39	5.1	2428	Sodium chlorate, aqueous solution	
6:41	3	1203	Gasoline	
6:54	8	2215	Maleic acid	
7:04	HOT	9259	Elevated temperature material, liquid, n.o.s.	
7:08	2.2	1977	Nitrogen, refrigerated liquid	

7:16	3	1203	Gasoline	
7:17	8	NA	Corrosive	
7:27	2.1	1075	Propane	
7:33	3	1203	Gasoline	
7:36	8, 2.3	NA	Corrosive, Poison gas	
7:51	2.1	1075	Propane	
7:54	8	1715	Acetic anhydride	
8:03	8	NA	Corrosive	
8:03	1.5D	NA	Blasting agents	
8:09	3	1987	Denatured alcohol	
8:12	2.2	2187	Carbon dioxide, refrigerated liquid	
8:22	HOT	3257	Elevated temperature liquid, n.o.s.	
8:39	3	1203	Gasoline	
8:45	3	1203	Gasoline	
9:21	3	1203	Gasoline	
9:22	2.1	1075	Propane	
9:23	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
9:27	2.2	2187	Carbon dioxide, refrigerated liquid	
9:39	5.1	2428	Sodium chlorate, aqueous solution	
9:40	6.1	NA	Poisonous material	
9:59	HOT	3257	Elevated temperature liquid, n.o.s.	
10:04	5.1, 2.2	1073	Oxygen	
10:06	3	1993	Flammable liquid, n.o.s.	
10:07	3	1268, 1220, 1993	Petroleum distillates, n.o.s., Isopropyl acetate, Flam liq, n.o.s.	
10:30	3	1203	Gasoline	
10:33	8	1790	Hydrofluoric acid, >60% strength.	
10:40	3	1203	Gasoline	
10:47	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
11:01	8	3259	Amines, solid, corrosive, n.o.s.	
11:16	7	2982	Radioactive material, n.o.s.	
11:24	3	1268	Petroleum distillates, n.o.s.	
11:40	3	1203	Gasoline	
11:45	3	1203	Gasoline	
11:55	2.2	1977	Nitrogen, refrigerated liquid	
11:56	2.2	2187	Carbon dioxide, refrigerated liquid	
12:04	8	NA	Corrosive	
12:05	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	

12:09	D		Dangerous	
12:36	5.1, 2.2	1073	Oxygen	
12:46	2.1	1075	Propane	
12:56	5.1	1486	Potassium nitrate	
12:59	2.2	2187	Carbon dioxide, refrigerated liquid	
13:07	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
13:14	3	1993, 1123	Flammable liq., n.o.s., Butyl acetates	
13:14	3	1203	Gasoline	
13:15	3	NA	Flammable and combustible liquid	
13:18	3, 6.1, 9	NA	Flam., Poison, Misc. hazardous material	
13:33	D		Dangerous	
13:44	HOT	3257	Elevated temperature liquid, n.o.s.	
14:00	8	1715	Acetic anhydride	
14:01	3	1203	Gasoline	
14:04	2.3	????	Poison gas	
14:07	8	NA	Corrosive	
14:26	5.1	1486	Potassium nitrate	
14:31	3	1224	Ketones, liquid, n.o.s.	
14:44	3	1203	Gasoline	
14:54	3	1203	Gasoline	
15:02	8	2209	Formaldehyde, solutions	
15:09	3	1203	Gasoline	
15:23	3	1203	Gasoline	
15:29	8	NA	Corrosive	
15:46	D		Dangerous	
15:48	3	1203	Gasoline	
15:51	3	1203	Gasoline	
15:58	8	NA	Corrosive	
16:02	3	1993	Flammable liquid, n.o.s.	
16:06	2.2	2187	Carbon dioxide, refrigerated liquid	
16:22	3	1203	Gasoline	
16:33	2.1	1075	Propane	
16:34	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
16:41	2.2	2187	Carbon dioxide, refrigerated liquid	
16:48	3	1993	Flammable liquid, n.o.s.	
16:51	3	1203	Gasoline	
16:54	2.2	2187	Carbon dioxide, refrigerated liquid	
17:01	3	1203	Gasoline	

17:07	1.1D	NA	Explosive (mass explosion hazard)	
17:08	7	NA	Radioactive	
17:15	3	1993	Flammable liquid, n.o.s.	
17:18	2.2	2187	Carbon dioxide, refrigerated liquid	
17:24	3	1203	Gasoline	
17:35	5.1	2428	Sodium chlorate, aqueous solution	
17:36	HOT	3257	Elevated temperature liquid, n.o.s.	
17:44	8	2693	Bisulfites, aqueous solution, n.o.s.	
17:46	3	1294	Toluene	
18:01	3	1203	Gasoline	
18:25	D	NA	Mixed hazardous materials	
18:31	3	1993	Flammable liquid, n.o.s.	
18:32	8, 3	2789	Acetic acid, glacial	
18:43	HOT	3257	Elevated temperature liquid, n.o.s.	
18:45	HOT	9259	Elevated temperature material, liquid, n.o.s.	
18:54	3	1220	Isopropyl acetate	
19:07	3	1210	Printing ink related material	
19:19	8	1833	Sulfurous acid	
19:20	3	1203	Gasoline	
19:32	5.1, 2.2	1073	Oxygen	
19:48	2.2	2187	Carbon dioxide, refrigerated liquid	
19:50	3	1203	Gasoline	
19:56	D	NA	Mixed hazardous materials	
20:03	8	NA	Corrosive	
20:16	3	1203	Gasoline	
20:34	2.3, 8	1050	Hydrogen chloride, anhydrous	
20:41	3	1203	Gasoline	
21:01	8	NA	Corrosive	
21:08	3	1203	Gasoline	
21:25	3	1203	Gasoline	
21:48	8	NA	Corrosive	
22:00	3	1993	Flammable liquid, n.o.s.	
22:07	3	1203	Gasoline	
22:22	2.1	1075	Propane	
23:30	3	1203	Gasoline	
23:46	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Washington County/Sullivan County Line

Date: 21JAN06

Time	Hazard Class	UN ID	Description	Notes
5:53	3	1203	Gasoline	
6:34	3	1202	Diesel fuel	
6:38	3	1203	Gasoline	
7:03	3	NA	Flammable	
7:10	3	NA	Flammable and combustible liquid	
7:20	8	1791	Hypochlorite soln	
7:56	3	1203	Gasoline	
8:05	2.1	1075	Propane	
8:06	3	1203	Gasoline	
8:51	8	3264	Corrosive liquid, acidic, inorganic, n.o.s., Mixed	
9:10	3	1203	Gasoline	
9:29	2.1	1075	Propane	
10:22	2.1	1075	Propane	
10:58	3	1993	Flammable liquids, n.o.s	
11:30	2.1	1075	Propane	
11:51	3	NA	Flammable and combustible liquid	
11:54	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:02	2.1	1075	Propane	
12:15	8	1830	Sulfuric acid	
12:46	5.1, 2.2	1073	Oxygen	
13:16	2.1	1075	Propane	
13:25	3	1223	Kerosene	
13:38	3	1203	Gasoline	
13:57	8	1760	Corrosive liquids, n.o.s.	
14:13	5.1	NA	Oxidizer	
14:25	8	NA	Corrosive	
14:40	3	NA	Flammable	
15:02	5.1, 2.2	1073	Oxygen	
15:11	3	1203	Gasoline	
15:44	3	1203	Gasoline	
16:01	3	2370	1-Hexene	
16:29	2.1	1075	Propane	
16:31	3	1203	Gasoline	
16:56	2.1	1075	Propane	
17:07	8	2796	Sulfuric acid with < 51% acid	



17:14	2.1	1075	Propane	
17:23	3	1203	Gasoline	
17:48	3	1203	Gasoline	
17:58	5.1, 2.2	1073	Oxygen	
18:13	2.1, 2.2	NA	Compressed gases (flam.and nonflam.)	
18:29	5.1, 2.2	1073	Oxygen	
18:58	2.1	1075	Propane	
19:01	5.1, 2.2	1073	Oxygen	
19:25	3	1203	Gasoline	
19:45	3	1203	Gasoline	
20:37	2.1	1075	Propane	
20:59	3	1203	Gasoline	
21:00	3	1203	Gasoline	
21:49	3	1203	Gasoline	
23:42	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321 Washington County/Carter County Line				Date: 25JAN06
Time	Hazard Class	UN ID	Description	Notes
5:02	3	1203	Gasoline	
5:21	3	1223	Kerosene	
6:12	3	1203	Gasoline	
6:55	3	1267	Petroleum crude oil	
7:03	3	1203	Gasoline	
7:18	3	1203	Gasoline	
7:41	3	1203	Gasoline	
8:25	3	1203	Gasoline	
8:35	3	1203	Gasoline	
8:56	3	1203	Gasoline	
9:23	3	1203	Gasoline	
9:53	3	1203	Gasoline	
10:06	5.1	NA	Oxidizer	
10:10	3	1267	Petroleum crude oil	
11:10	3	1203	Gasoline	
11:42	5.1, 2.2	1073	Oxygen	
11:53	3	1203	Gasoline	
12:03	2.2	NA	Compressed gas (non-flammable)	
12:11	3	1203	Gasoline	

12:20	5.1, 2.2	1073	Oxygen	
13:00	3	1203	Gasoline	
13:01	3	1203	Gasoline	
13:25	5.1	2427	Potassium chlorate, solution	
14:08	3	1203	Gasoline	
14:34	3	1203	Gasoline	
14:48	3	1203	Gasoline	
15:05	2.1	1075	Propane	
15:14	3	1993	Flammable liquid, n.o.s.	
15:18	3	1203	Gasoline	
16:32	2.1	1075	Propane	
16:40	3	1993	Flammable liquid, n.o.s.	
16:46	3	1203	Gasoline	
17:23	3	1203	Gasoline	
17:25	2.1	1075	Propane	
17:46	5.1, 2.2	1073	Oxygen, refrigerated liquid	
17:53	3	1203	Gasoline	
18:02	2.1	1075	Propane	
18:18	3	1203	Gasoline	
18:23	3	1203	Gasoline	
18:31	6.1	3071	Mercaptans, liquid, toxic, flammable, n.o.s.	
19:23	3	1203	Gasoline	
19:52	3	1203	Gasoline	
20:14	5.1, 2.2	1073	Oxygen	
20:47	3	1203	Gasoline	
21:49	3	1203	Gasoline	
21:52	3	1203	Gasoline	
22:00	3	1203	Gasoline	
23:57	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Jockey Creek			Date: 29JAN06	
Time	Hazard Class	UN ID	Description	Notes
5:34	3	1203	Gasoline	
6:10	3	1203	Gasoline	
7:15	3	1203	Gasoline	
7:34	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:48	3	1203	Gasoline	
8:13	2.1	1966	Hydrogen, refrigerated liquid	

8:26	3	1203	Gasoline	
9:46	3	1203	Gasoline	
10:55	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:10	2.2	1073	Oxygen	
11:34	2.2	1073	Oxygen	
12:04	3	1203	Gasoline	
12:43	D			
13:13	3	1203	Gasoline	
13:20	3	1999	Asphalt	
13:39	3	1203	Gasoline	
14:41	3	1993	Flammable	
14:47	2.2	1073	Oxygen	
15:57	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:36	3	1993	Flammable	
16:55	3	1203	Gasoline	
17:02	3	1203	Gasoline	
17:20	3	1203	Gasoline	
18:00	3	1203	Gasoline	
18:31	3	1203	Gasoline	
19:21	3	1223	Kerosene	
19:24	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:17	3	1993	Flammable	
22:40	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Eastern Star (Exit 45)			Date: 2FEB06	
Time	Hazard Class	UN ID	Description	Notes
0:04	3	1203	Gasoline	
0:14	3	2302	5-Methylhexan-2-one	
0:16	3	1268	Petroleum distillates, n.o.s.	
0:19	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
0:37	8	1715	Acetic anhydride	
0:43	3	1203	Gasoline	
0:50	3	1203	Gasoline	
1:02	7	N/A	Radio Active Material	
1:06	3, 8, 5.1	1193 /2834/ 1504	Ethyl methyl ketone/ Phosphorous acid/ Sodium peroxide	
1:17	8	2491	Ethanolamine	

1:19	3	1203	Gasoline	
1:20	3	1203	Gasoline	
1:39	3	1993	Flammable liquids, n.o.s.	
1:46	3	1203	Gasoline	
1:54	2.1	1075	Propane	
1:58	3	1203	Gasoline	
2:35	8	1791	Hypochlorite solutions	
2:40	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
3:13	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
3:32	D	N/A	Mixed Shipment	
3:49	3	1203	Gasoline	
4:30	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
4:30	3	1203	Gasoline	
4:31	D	N/A	Mixed Shipment	
4:45	2.1	1075	Propane	
4:46	3, 8, 6.1	1193 /2834/ 1593	Ethyl methyl ketone /Phosphorous acid/ Dichloromethane	
4:51	4.3	2013	Strontium Phosphide	
4:53	8	NA	Corrosive	
5:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:01	3	1203	Gasoline	
5:03	5.1, 2.2	1073	Oxygen	
5:15	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
5:20	D, 3	1866	Resin solution, Mixed hazardous materials	
5:36	3	1203	Gasoline	
6:08	9	3082	Hazardous Waste, Liquid	
6:14	3	1203	Gasoline	
6:20	3	2152	Dipentene	
6:33	3	1131	Carbon disulfide	
6:46	3	1203	Gasoline	
6:57	HOT	9259	Elevated temperature material, liquid, n.o.s.	
7:08	2.2	1977	Nitrogen, refrigerated liquid	

7:11	3	1203	Gasoline	
7:13	3	1203	Gasoline	
7:20	3	1203	Gasoline	
7:44	3	1203	Gasoline	
7:49	2.1	1075	Propane	
7:55	3	1203	Gasoline	
7:57	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:09	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
8:19	3	1203	Gasoline	
8:37	8	2794	Batteries, Wet, Acid	
8:49	2.2	1951	Argon, refrigerated liquid	
9:00	2.2, 2.1	1072 /1001/ 1046	Helium, compressed /Oxygen, compressed/ Acetylene, dissolved	
9:07	2.2	1046	Helium, compressed	
9:10	2.2	1073	Oxygen, refrigerated liquid	
9:15	3	1203	Gasoline	
9:21	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:32	3	1999	Asphalt	
9:43	3	1203	Gasoline	
9:50	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
9:54	3	1203	Gasoline	
10:04	9	3257	Elevated temperature liquid, n.o.s	
10:21	3	1993	Flammable liquids, n.o.s.	
10:22	3	2302	5-Methylhexan-2-one	
10:24	6.1	1092	Acrolein, stabilized	
10:26	2.2	1072	Oxygen, compressed	
10:29	3, 8	1993/ 3264	Flammable liquids, n.o.s./ Corrosive liquid, acidic, inorganic, n.o.s.	
10:35	6.1	2312	Phenol, molten	
10:35	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:38	3	1203	Gasoline	
10:40	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:40	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:41	8	1784	Hexyltrichlorosilane	
10:42	6.1	1092	Acrolein, stabilized	
10:44	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:45	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:46	3	1203	Gasoline	
10:51	3	1203	Gasoline	

10:55	3	1203	Gasoline	
10:58	2.1	1037	Ethyl chloride	
11:01	3	2348	Butyl acrylates, stabilized	
11:07	2	N/A	Non-Flammable Gas	
11:12	3	1203	Gasoline	
11:13	3, 4.3	3207	Organometallic compound, solution	
11:21	2.2	1072	Oxygen, compressed	
11:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:29	3	1203	Gasoline	
11:48	3	1203	Gasoline	
12:06	3, 2	N/A	Flammable and Non-Flammable Gas	
12:08	8	2218	Acrylic acid, inhibited	
12:09	3	1203	Gasoline	
12:10	2.2	1072	Oxygen, compressed	
12:16	3	1203	Gasoline	
12:17	3	1203	Gasoline	
12:18	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:20	3	1203	Gasoline	
12:21	3	1203	Gasoline	
12:25	3	1203	Gasoline	
12:29	3	N/A	Flammable and Combustible Liquid	
12:31	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:34	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
12:43	3	1203	Gasoline	
12:45	2.2	1072	Oxygen, compressed	
13:08	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:11	3	1203	Gasoline	
13:13	3	2348	Butyl acrylates, stabilized	
13:14	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:20	3	1280	Propylene oxide	
13:25	2.2	1073	Oxygen, refrigerated liquid	
13:27	8	1760	Corrosive liquids, n.o.s.	
13:32	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
13:35	3	1203	Gasoline	
13:39	2.2	1073	Oxygen, refrigerated liquid	
13:44	3	1993	Flammable liquids, n.o.s.	
13:49	3	2302	5-Methylhexan-2-one	
13:57	6.1	1843	Ammonium dinitro-o-cresolate	
13:58	3	1203	Gasoline	

14:05	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
14:14	3	1203	Gasoline	
14:19	3	1993 /1993/ 1993	Flammable liquids, n.o.s.	
14:21	1D	81	Explosive, blasting, type A	
14:23	9	3082	Hazardous waste, liquid, n.o.s.	
14:27	3	1993	Flammable liquids, n.o.s.	
14:31	3	1203	Gasoline	
14:32	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
15:03	2.2	1073	Oxygen, refrigerated liquid	
15:06	2.2	1983	Refrigerant gas R 133a	
15:08	8	1760	Corrosive liquids, n.o.s.	
15:09	3	1203	Gasoline	
15:17	3	1203	Gasoline	
15:19	3	1993	Flammable liquids, n.o.s.	
15:33	3	1203	Gasoline	
15:37	3	1203	Gasoline	
15:39	3	1178	2-Ethylbutyraldehyde	
15:48	3	NA	Flammable and combustible liquid	
15:58	3	1203	Gasoline	
16:05	3	1203	Gasoline	
16:12	7	3327	Radioactive material, Type A package, fissile	
16:22	3	1203	Gasoline	
16:24	8	1833	Sulfurous acid	
16:26	5.1	2880	Calcium hypochlorite, hydrated	
16:34	8	2198	Phosphorus	
16:44	3	1203	Gasoline	
16:48	7	2908	Radioactive material, excepted packaging	
16:49	2.2	2187	Carbon dioxide, refrigerated liquid	
16:55	3	1203	Gasoline	
17:02	3	1203	Gasoline	
17:04	2.1	1075	Propane	
17:04	8	1760	Corrosive liquids, n.o.s.	
17:07	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:24	3	1203	Gasoline	
17:26	3	1203	Gasoline	
17:36	8	2794	Batteries, wet, filled with acid,	
17:50	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	

17:55	2.2	1073	Oxygen, refrigerated liquid	
18:02	2.2	N/A	Non-Flammable Gas	
18:05	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:12	8	1760	Corrosive liquids, n.o.s.	
18:18	3	1203	Gasoline	
18:31	2.2	N/A	Non-Flammable Gas	
18:34	3	1203	Gasoline	
18:40	3	1203	Gasoline	
18:41	2.2	1073	Oxygen, refrigerated liquid	
18:43	2.2	1072	Oxygen, compressed	
18:50	3	1203	Gasoline	
18:52	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
18:55	3	1090	Acetone	
19:02	3	1203	Gasoline	
19:03	5.1, 2.2	NA	Oxygen	
19:12	8	1719	Caustic alkali liquids, n.o.s.	
19:26	3	1203	Gasoline	
19:33	3	1993	Flammable liquids, n.o.s.	
19:41	2.2	1072	Oxygen, compressed	
19:52	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
20:23	3	1307	Xylenes	
20:25	3	1203	Gasoline	
20:27	3	1203	Gasoline	
20:41	2.2	1072	Oxygen, compressed	
20:42	2.1, 2.2	N/A	Compressed gas (flam., and non-flam.)	
20:48	3	1203	Gasoline	
20:56	3	1203	Gasoline	
21:05	2.2	1951	Argon, refrigerated liquid	
21:15	2.2	1073	Oxygen, refrigerated liquid	
21:18	3	1203	Gasoline	
21:23	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
21:28	3	1203	Gasoline	
21:39	2.2	1073	Oxygen, refrigerated liquid	
21:39	3	1203	Gasoline	
21:49	3	1203	Gasoline	
21:55	3	1203	Gasoline	
22:17	8	1760	Corrosive liquids, n.o.s.	
22:27	3	1203	Gasoline	
22:30	3	1203	Gasoline	



22:34	2.2	1072	Oxygen, compressed	
23:10	3	1203	Gasoline	
23:13	2.1	1075	Petroleum Gases, Liquefied (Propane)	

### Road Side Survey Field Log

Location: I-81 Fall Branch, TN (Exit 50)

Date: 7FEB06

Time	Hazard Class	UN ID	Description	Notes
0:06	3	1203	Gasoline	
0:15	3	1203	Gasoline	
0:18	3	1203	Gasoline	
0:24	3	1203	Gasoline	
0:25	3	1203	Gasoline	
0:29	3	1203	Gasoline	
0:35	8	3093	Corrosive liquids, oxidizing, n.o.s.	
0:39	3	1203	Gasoline	
0:44	2	1072	Oxygen	
0:45	3	1203	Gasoline	
0:47	3	1203	Gasoline	
0:48	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
0:48	3	1203	Gasoline	
0:59	3	1203	Gasoline	
1:04	3	1203	Gasoline	
1:05	3	1267	Crude oil	
1:13	3	1267	Crude oil	
1:21	3	1203	Gasoline	
1:22	3	1203	Gasoline	
1:25	6	2078	Toluene diisocyanate	
1:26	3	1203	Gasoline	
1:28	3	1993	Flammable liquid, n.o.s.	
1:30	3	1203	Gasoline	
1:31	3	1203	Gasoline	
1:32	6	2078	Toluene diisocyanate	
1:33	D		Dangerous	
1:33	3	1203	Gasoline	
1:34	3	1203	Gasoline	
1:34	3	1203	Gasoline	
1:35	1.5	332	Blasting agent	
1:37	D		Dangerous	

1:39	3	1203	Gasoline	
1:39	3	1276	n-Propyl acetate	
1:41	3	1203	Gasoline	
1:42	3	1203	Gasoline	
1:43	3	1120 1220 1278	Butanols, Isopropyl acetate, 1-Chloropropane	
1:44	3	1203	Gasoline	
1:45	3	1203	Gasoline	
1:48	2	1072	Oxygen	
1:49	3/6.1	1986	Alcohols, flammable, toxic, n.o.s.	
1:50	3	1203	Gasoline	
1:51	3	1203	Gasoline	
1:53	3	1203	Gasoline	
1:54	3	1203	Gasoline	
1:55	D		Dangerous	
1:57	3	1203	Gasoline	
1:58	3	1993	Flammable liquids, n.o.s.	
1:58	2	2202	Hydrogen selenide, anhydrous	
2:01	3	1993	Flammable liquids, n.o.s.	
2:01	3	1203	Gasoline	
2:03	3	1993	Flammable liquids, n.o.s.	
2:06	2.1	1075	Liquefied petroleum gas	
2:06	5.1	1748	Calcium hypochlorite, dry	
2:12	3	2302	5-Methylhexan-2-one	
2:13	3	1268	Petroleum distillates, n.o.s.	
2:17	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
2:17	8	1715	Acetic anhydride	
2:19	3	1203	Gasoline	
2:23	3	1203	Gasoline	
2:26	3	1203	Gasoline	
2:26	3	1203	Gasoline	
2:33	3	1203	Gasoline	
2:44	3	1203	Gasoline	
2:46	3	1203	Gasoline	
2:52	3	1203	Gasoline	
2:54	D	N/A	Mixed Shipment	
2:55	2.1	1075	Propane	
2:56	3	1203	Gasoline	

2:58	3	1203	Gasoline	
4:01	3	1203	Gasoline	
4:04	2.2	1073	Oxygen	
4:05	D		Dangerous	
4:06	1.5	332	Blasting agent	
4:07	3	1178	2-Ethylbutyraldehyde	
4:09	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
4:11	3	1203	Gasoline	
4:11	D	N/A	Mixed Shipment	
4:12	6.1	1092	Acrolein, stabilized	
4:14	3	1173	Ethyl Acetate	
4:14	3	1203	Gasoline	
4:15	2.2	1072	Oxygen, compressed	
4:15	3	1203	Gasoline	
4:22	3	1203	Gasoline	
4:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
4:23	5.1	2880	Calcium hypochlorite, hydrated	
4:26	8	2198	Phosphorus	
4:26	3	1203	Gasoline	
4:28	7	2908	Radioactive material, excepted packaging	
4:29	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
4:30	3	1203	Gasoline	
4:32	3	1203	Gasoline	
4:33	3	1203	Gasoline	
4:34	3	1203	Gasoline	
4:37	3	1203	Gasoline	
4:37	3	1203	Gasoline	
4:40	5.1, 2.2	1073	Oxygen	
4:41	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
4:44	D, 3	1866	Resin solution, Mixed hazardous materials	
4:44	3	1203	Gasoline	
4:44	8	2794	Batteries, Wet, Acid	
4:52	2.1	1075	Propane	
4:53	8	1760	Corrosive liquids, n.o.s.	
4:56	2.1	1075	Petroleum Gases, Liquefied (Propane)	
4:58	3	1203	Gasoline	
4:58	3	1993	Flammable liquid, n.o.s.	
4:59	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:11	8	2031	Nitric acid, >60% acid	

5:27	6.1	1710	Trichloroethylene	
5:52	8	1761	Cupriethylenediamine solution	
6:00	2.1	1075	Petroleum Gases, Liquefied (Propane)	
6:01	2.2	1073	Oxygen	
6:02	3	1203	Gasoline	
6:16	8	3264	Corrosive liquid, acidic, inorganic, NOS	
6:18	3	1993	Flammable	
6:26	3	1203	Gasoline	
6:26	3	1863	Fuel, aviation, turbine engine	
6:31	8	2031	Nitric acid, >60% acid	
6:39	3	1133	Adhesives	
6:41	3	1203	Gasoline	
6:44	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
6:45	1D	81	Explosive, blasting, type A	
6:52	6.1	1062	Methyl amyl ketone,	
6:57	3	1203	Gasoline	
6:58	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:59	2.2, 2.1	1072 1001 1046	Helium, compressed/Oxygen, compressed/Acetylene, dissolved	
6:59	1.5	332	Blasting agent	
7:01	3	1203	Gasoline	
7:03	2.2	1977	Nitrogen, refrigerated liquid (cryogenic)	
7:16	2.1	1075	Petroleum Gases, Liquefied (Propane)	
7:17	3	1993	Flammable	
7:23		D		
7:26	3	1203	Gasoline	
7:37	3	1203	Gasoline	
7:39	2.1	1075	Petroleum Gases, Liquefied (Propane)	
7:45	3	1231	Methyl Acetate	
7:53	5.1, 2.2	1073	Oxygen	
7:56	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
7:59	3	1203	Gasoline	
8:02	3	1203	Gasoline	
8:06	3	1993	Flammable liquids, n.o.s.	
8:06	3	1203	Gasoline	
8:07	2.1	1075	Propane	
8:07	3	1203	Gasoline	
8:08	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	

8:09	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
8:11	2.2	1046	Helium, compressed	
8:13	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:14	3	1203	Gasoline	
8:15	3	1203	Gasoline	
8:16	7	3327	Radioactive material, Type A package, fissile	
8:17	3	1203	Gasoline	
8:21	3	1308	Vinyl acetate	
8:22	3	1203	Gasoline	
8:23	9	3082	Hazardous Waste, Liquid	
8:25	2.1	1075	Propane	
8:26	2.2	N/A	Non-Flammable Gas	
8:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:27	3	1231	Methyl Acetate	
8:28	8	1760	Corrosive liquids, n.o.s.	
8:30	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:30	3	1203	Gasoline	
8:31	3	1203	Gasoline	
8:36	8	2794	Batteries, wet, filled with acid,	
8:44	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
8:45	2.2	1073	Oxygen, refrigerated liquid	
8:45	3	1203	Gasoline	
8:46	3	1203	Gasoline	
8:48	3	1203	Gasoline	
8:52	3	1993	Flammable liquid, n.o.s.	
8:53	3, 4.1, 6.1	D	Dangerous	
8:53	3	1203	Gasoline	
8:55	3	1203	Gasoline	
8:57	3	1203	Gasoline	
8:59	3	1203	Gasoline	
8:59	3	1090	Acetone	
9:05	3	1203	Gasoline	
9:06	5.1, 2.2	NA	Oxygen	
9:06	3	1203	Gasoline	
9:06	2.2	1073	Oxygen, refrigerated liquid	
9:07	8	1760	Corrosive liquids, n.o.s.	
9:08	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
9:10	3	1203	Gasoline	
9:12	2.2	1073	Oxygen, refrigerated liquid	

9:15	3	1993	Flammable liquids, n.o.s.	
9:15	3	2302	5-Methylhexan-2-one	
9:18	6.1	1843	Ammonium dinitro-o-cresolate	
9:20	2.2	1072	Oxygen, compressed	
9:22	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:24	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
9:27	6.1	2312	Phenol, molten	
9:28	3	1993	Flammable liquids, n.o.s.	
9:33	3	2302	5-Methylhexan-2-one	
9:34	2.2	1951	Argon, refrigerated liquid	
9:35	3	1203	Gasoline	
9:38	2.1	1075	Propane	
9:47	8	1760	Corrosive liquids, n.o.s.	
9:48	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:50	3	1203	Gasoline	
9:50	3, 8	1193 2834	Ethyl methyl ketone/Phosphorous acid	
9:52	7	N/A	Radio Active Material	Followed
9:55	3	1203	Gasoline	
9:57	3	1203	Gasoline	
10:00	8	1744	Bromine	
10:01	3	1203	Gasoline	
10:16	3	1203	Gasoline	
10:22	3	1203	Gasoline	
10:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:26	3	1999	Asphalt	
10:30	3	1203	Gasoline	
10:34	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
10:51	3	1203	Gasoline	
10:59	9	3257	Elevated temperature liquid, n.o.s	
11:00	2.1	1075	Propane	
11:00	8	1760	Corrosive liquids, n.o.s.	
11:03	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:06	3	1203	Gasoline	
11:14	HOT	9259	Elevated temperature material, liquid, n.o.s.	
11:16	2.2	1977	Nitrogen, refrigerated liquid	
11:25	3	1203	Gasoline	
11:25	3	1203	Gasoline	
11:27	3	1203	Gasoline	

11:32	3	1203	Gasoline	
11:35	2.1	1075	Propane	
11:38	2.2	1073	Oxygen, refrigerated liquid	
11:42	3	1203	Gasoline	
11:53	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
11:57	3	1866	Resin solution	
12:03	2.2	1072	Oxygen, compressed	
12:05	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:06	3	1203	Gasoline	
12:08	3	1203	Gasoline	
12:09	3, 2	N/A	Flammable and Non-Flammable Gas	
12:14	8	2218	Acrylic acid, inhibited	
12:15	3	1203	Gasoline	
12:25	2.2	1072	Oxygen, compressed	
12:28	3	1203	Gasoline	
12:30	3	1203	Gasoline	
12:31	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:34	3	1203	Gasoline	
12:35	3	1203	Gasoline	
12:46	3	1203	Gasoline	
12:47	3	N/A	Flammable and Combustible Liquid	
12:55	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:58	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
13:05	3	1231	Methyl Acetate	
13:08	2.2	1951	Argon, refrigerated liquid	
13:15	3	1203	Gasoline	
13:18	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:29	1.5	332	Blasting agent	
13:33	2.2	2187	Carbon dioxide, refrigerated liquid	
13:35	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
13:41	3, 4.3	3207	Organometallic compound, solution	
13:42	2.1	1075	Propane	
13:47	8	1760	Corrosive liquids, n.o.s.	
13:49	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:52	3	1203	Gasoline	
13:57	3	N/A	Flammable and Combustible Liquid	
13:58	2.2	1072	Oxygen, compressed	
14:00	3, 8	1993 3264	Flammable liquids, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	

14:01	3	1203	Gasoline	
14:03	2.2	1072	Oxygen, compressed	
14:13	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:15	3	1203	Gasoline	
14:20	3	1203	Gasoline	
14:25	8	1824	Sodium hydroxide solution	
14:27	3	1203	Gasoline	
14:28	3	1307	Xylenes	
14:31	3	1203	Gasoline	
14:40	3	1203	Gasoline	
14:48	3	1203	Gasoline	
14:49	2.2	1073	Oxygen, refrigerated liquid	
14:57	2.2	1072	Oxygen, compressed	
15:05	3	1203	Gasoline	
15:06	9	3082	Hazardous waste, liquid, n.o.s.	
15:08	3	1993	Flammable liquids, n.o.s.	
15:09	3	1203	Gasoline	
15:16	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
15:20	2.2	1073	Oxygen, refrigerated liquid	
15:21	3	1993 1993 1993	Flammable liquids, n.o.s.	
15:34	2.2	1073	Oxygen	
15:43	3	1203	Gasoline	
15:46	2.2	1977	Nitrogen, refrigerated liquid	
15:55	3	1993	Flammable liquid, n.o.s.	
15:57	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:59	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:00	2.2	1073	Oxygen	
16:00	3	1203	Gasoline	
16:08	8	3264	Corrosive liquid, acidic, inorganic, NOS	
16:09	3	1993	Flammable	
16:10	3	1203	Gasoline	
16:15	3	1863	Fuel, aviation, turbine engine	
16:15	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
16:18	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:20	3	1231	Methyl Acetate	
16:20	3, 2	N/A	Flammable and Non-Flammable Gas	
16:23	8	2218	Acrylic acid, inhibited	



16:23	3	1203	Gasoline	
16:25	3	1203	Gasoline	
16:37	8	1744	Bromine	
16:39	3	1203	Gasoline	
16:39	3	1203	Gasoline	
16:41	3	1203	Gasoline	
16:47	2.1	1075	Propane	
16:47	8	1760	Corrosive liquids, n.o.s.	
16:47	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:53	3	1203	Gasoline	
16:55	3	1203	Gasoline	
16:55	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:56	HOT	3257	Elevated temperature liquid, n.o.s.	
16:56	6.1, 8	1752	Chloroacetyl Chloride	
17:01	3	1203	Gasoline	
17:05	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:08	9	3314	Plastic molding compound	
17:10	3	1203	Gasoline	
17:11	3	1203	Gasoline	
17:11	3	1203	Gasoline	
17:13	3	1203	Gasoline	
17:14	3	2348	Butyl acrylates, stabilized	
17:15	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:18	1.5	332	Blasting agent	
17:20	6.1	1092	Acrolein, stabilized	
17:21	3	1203	Gasoline	
17:21	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
17:22	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:23	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
17:24	2.1	1075	Propane	
17:39	8	1760	Corrosive liquids, n.o.s.	
17:41	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:42	3	1203	Gasoline	
17:49	8	NA	Corrosive	
17:50	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
17:55	8	1760	Corrosive liquids, n.o.s.	
18:06	3	1203	Gasoline	
18:08	8	1760	Corrosive liquids, n.o.s.	
18:09	3	1203	Gasoline	

18:12	3	1131	Carbon disulfide	
18:23	8	1805	Phosphoric acid, liquid	
18:23	3	1303	Vinyl chloride	
18:29	3	1203	Gasoline	
18:41	3	1203	Gasoline	
18:45	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:46	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
18:47	3	1203	Gasoline	
18:51	3	1203	Gasoline	
18:56	3	1203	Gasoline	
19:09	2.1	1037	Ethyl chloride	
19:11	3	2348	Butyl acrylates, stabilized	
19:12	2	N/A	Non-Flammable Gas	
19:13	8	2491	Ethanolamine	
19:21	3	1993	Flammable liquids, n.o.s.	
19:22	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:32	2.2	3158	Gas, refrigerated liquid, n.o.s. (cryogenic)	
19:33	3	1203	Gasoline	
19:39	5.1	2880	Calcium hypochlorite, hydrated	
19:40	3	1294	Toluene	
19:40	3	1203	Gasoline	
19:51	3	2733	Amines, flammable, corrosive, n.o.s.	
19:54	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
20:00	2.2	1073	Oxygen, refrigerated liquid	
20:03	3	1203	Gasoline	
20:05	3	1203	Gasoline	
20:12	3	1203	Gasoline	
20:23	8	1760	Corrosive liquids, n.o.s.	
20:34	2.2	1073	Oxygen, refrigerated liquid	
20:48	3	1203	Gasoline	
20:49	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
20:49	3	1203	Gasoline	
20:59	3	1203	Gasoline	
21:03	3	1203	Gasoline	
21:09	3	1203	Gasoline	
21:11	3	1203	Gasoline	
21:35	4.1	1350	Sulfur	
21:37	3	1203	Gasoline	
21:49	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	

21:53	3	1993	Flammable liquids, n.o.s.	
21:55	2.2	1073	Oxygen, refrigerated liquid	
22:00	3	1203	Gasoline	
22:11	3	1203	Gasoline	
22:11	3	1203	Gasoline	
22:34	8	1760	Corrosive liquids, n.o.s.	
22:34	3	1203	Gasoline	
22:44	3	1203	Gasoline	
23:00	2.2	1072	Oxygen, compressed	
23:01	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
23:03	HOT	3257	Elevated temperature liquid, n.o.s.	
23:03	6.1, 8	1752	Chloroacetyl Chloride	
23:13	3	1203	Gasoline	
23:29	2.1	1075	Petroleum Gases, Liquefied (Propane)	
23:40	3	1203	Gasoline	
23:57	3	1203	Gasoline	
23:57	3	1203	Gasoline	
23:58	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321 Washington County/Carter County Line				Date: 10FEB06
Time	Hazard Class	UN ID	Description	Notes
1:16	3	1203	Gasoline	
4:08	3	1203	Gasoline	
5:05	3	1203	Gasoline	
6:08	2.1	1075	Propane	
6:56	3	1203	Gasoline	
7:13	8	1824	Sodium hydroxide, solution	
7:26	2.1	1075	Propane	
7:41	5.1, 2.2	1073	Oxygen, refrigerated liquid	
8:05	3	1203	Gasoline	
8:29	3	1203	Gasoline	
9:09	3	1203	Gasoline	
9:18	5.1, 2.2	1073	Oxygen, refrigerated liquid	
10:24	3	1203	Gasoline	
10:30	3	1203	Gasoline	
11:01	3	1203	Gasoline	
11:30	5.1, 2.2	1073	Oxygen	

12:22	3	1203	Gasoline	
12:36	6.2	3291	(Bio) medical wastes, n.o.s.	
13:41	3	1993	Flammable liquid, n.o.s.	
13:51	2.1	1075	Propane	
13:54	2.1, 2.2	NA	Compressed gas	
14:00	3	1993	Flammable liquid, n.o.s.	
14:49	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
14:58	3	1993	Flammable liquid, n.o.s.	
15:11	3	1203	Gasoline	
15:45	5.1, 2.2	1073	Oxygen	
15:46	5.1, 2.2	1073	Oxygen	
16:03	3	1203	Gasoline	
16:05	3	1203	Gasoline	
16:45	5.1	NA	Oxidizer	
17:08	3	1203	Gasoline	
17:39	2.2	NA	Compressed gas (non-flammable)	
17:54	8, D	NA	Corrosive, Mixed hazardous material	
17:57	8	NA	Corrosive	
18:39	5.1, 2.2	1073	Oxygen	
18:40	3	1203	Gasoline	
18:54	3	1203	Gasoline	
19:01	2.1	1075	Propane	
19:26	3	1203	Gasoline	
19:36	3	1223	Kerosene	
20:00	5.1	NA	Oxidizer	
20:54	3	1203	Gasoline	
21:18	5.1, 2.2	1073	Oxygen	
22:18	5.1, 2.2	1073	Oxygen	
23:51	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 Okolona Road (Exit 28)			Date: 15FEB06	
Time	Hazard Class	UN ID	Description	Notes
0:29	3	1203	Gasoline	
4:45	8	2031	Nitric acid, >60% acid	
5:54	3	1203	Gasoline	
6:15	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
6:22	3	1294	Toluene	

6:36	8	1824	Sodium hydroxide solution	
6:58	3	1993	Flammable liquid, n.o.s.	
7:16	3	1220	Isopropyl acetate	
7:27	8, 2.3	NA	Corrosive, Poison gas	
7:53	8	1715	Acetic anhydride	
7:57	8	2215	Maleic acid	
8:10	HOT	9259	Elevated temperature material, liquid, n.o.s.	
8:26	5.1, 2.2	1073	Oxygen	
8:39	7	2982	Radioactive material, n.o.s.	
8:55	2.2	1977	Nitrogen, refrigerated liquid	
9:10	8	NA	Corrosive	
9:10	8	1715	Acetic anhydride	
9:56	3	1993	Flammable liq., n.o.s.	
10:43	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
10:44	2.1	1075	Propane	
10:49	2.2	2187	Carbon dioxide, refrigerated liquid	
11:03	3	1203	Gasoline	
11:23	2.1	1075	Propane	
11:38	2.1	1075	Propane	
12:00	8	NA	Corrosive	
12:09	3	1993	Flammable liquid, n.o.s.	
12:35	3	1268	Petroleum distillates, n.o.s.	
12:55	2.2	2187	Carbon dioxide, refrigerated liquid	
13:00	3	1230	Methanol	
13:06	3	1993	Flammable liquid, n.o.s.	
13:19	8	3093	Corrosive liquids, oxidizing, n.o.s.	
13:26	5.1, 2.2	1073	Oxygen	
13:52	8	NA	Corrosive	
14:05	2.1	1075	Propane	
14:29	3	1993	Flammable liquid, n.o.s.	
14:45	3	1203	Gasoline	
14:48	8	NA	Corrosive	
15:10	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
15:36	3	1224	Ketones, liquid, n.o.s.	
15:47	2.2	2187	Carbon dioxide, refrigerated liquid	
15:54	D		Mixed hazardous materials	
16:00	2.1	1075	Propane	
16:00	1.1D	NA	Explosive (mass explosion hazard)	
16:35	2.2	2187	Carbon dioxide, refrigerated liquid	

16:49	8, 2.3	NA	Corrosive, Poison gas	
16:55	2.3, 8	1050	Hydrogen chloride, anhydrous	
17:06	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
17:15	3	NA	Flammable and combustible liquid	
17:34	6.1	3294	Hydrogen cyanide, solution in alcohol	
17:50	5.1, 2.2	1073	Oxygen	
17:56	8	2693	Bisulfites, aqueous solution, n.o.s.	
18:00	HOT	3257	Elevated temperature liquid, n.o.s.	
18:18	8	NA	Corrosive	
18:29	3	1210	Printing ink related material	
18:34	8	NA	Corrosive	
19:16	3	1203	Gasoline	
19:35	D		Mixed hazardous materials	
19:53	4.1	3178	Flammable solid, inorganic, n.o.s.	
20:32	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
20:56	6.1	NA	Poisonous material	
21:34	2.2	2187	Carbon dioxide, refrigerated liquid	
21:43	8	NA	Corrosive	
22:02	3	1993	Flammable liquid, n.o.s.	
22:47	3	1203	Gasoline	
23:13	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Washington County/Sullivan County Line				Date: 21FEB06
Time	Hazard Class	UN ID	Description	Notes
4:25	3	1223	Kerosene	
6:22	3	1203	Gasoline	
7:19	8	1830	Sulfuric acid, >51% acid.	
7:23	2.1	1075	Propane	
8:05	2.1	1075	Propane	
8:10	3	1203	Gasoline	
9:00	3	1223	Kerosene	
9:21	2.1	1075	Propane	
10:29	2.1	1075	Propane	
11:04	2.1	1075	Propane	
11:55	3	1203	Gasoline	
12:14	3	1203	Gasoline	
12:17	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	

13:42	3	1203	Gasoline	
13:45	3	1203	Gasoline	
14:03	2.1	1075	Propane	
14:58	3	1203	Gasoline	
15:20	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:57	3	1203	Gasoline	
16:03	3	1223	Kerosene	
16:27	3	1203	Gasoline	
16:39	8	NA	Corrosive	
17:01	3	1203	Gasoline	
17:52	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
18:32	5.1, 2.2	1073	Oxygen	
18:51	3	1203	Gasoline	
19:09	8	1719	Caustic alkali liquids, n.o.s.	
19:27	3	NA	Flammable and combustible liquid	
20:41	2.1	1075	Propane	
21:30		D	Mixed hazardous materials	
22:13	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Jockey Creek				Date: 25FEB06
Time	Hazard Class	UN ID	Description	Notes
0:23	3	1203	Gasoline	
4:18	3	1203	Gasoline	
5:31	3	1203	Gasoline	
6:09	3	1203	Gasoline	
6:54	2.1	1075	Propane	
6:57	2.1	1075	Propane	
7:05	3	1203	Gasoline	
7:25	D		Dangerous	
7:38	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
7:43	3	1203	Gasoline	
7:57	2.1	1075	Propane	
8:09	2.1	1075	Propane	
8:56	2.1	1075	Propane	
8:58	3	NA	Flammable and combustible liquid	
9:00	3	1203	Gasoline	
9:10	3	1993	Flammable liquids, n.o.s	

9:11	3	1999	Asphalt	
9:20	3	1212	Isobutylene	
9:23	8	1832	Sodium hydroxide, solid	
9:35	3	1203	Gasoline	
9:46	2.1	1075	Propane	
9:53	2.1	1075	Propane	
9:58	3	1203	Gasoline	
10:00	3	1203	Gasoline	
10:05	5.1, 2.2	1073	Oxygen	
10:25	2.1	1075	Propane	
10:38	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
10:51	2.1	1075	Propane	
11:00	3	1223	Kerosene	
11:17	5.2, 2	3102	Organic peroxide type B, solid	16-box
11:31	3	3286	Flammable liquid, toxic, corrosive, n.o.s..	
11:33	2.1	1075	Propane	
11:44	5.1	N/A	Oxidizer	
12:20	3	1203	Gasoline	
12:27	3	1203	Gasoline	
12:37	3	1203	Gasoline	
13:21	2.1	1075	Propane	
13:23	3	1203	Gasoline	
13:31	2.1	1075	Propane	
14:12	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
14:18	D		Mixed hazardous materials	
14:21	2.1	1966	Hydrogen, refrigerated liquid	
14:37	3	1993	Flammable liquids, n.o.s.	
15:09	8, D	3264	Corrosive liquid, acidic, inorganic, n.o.s., Mixed	
15:11	3	1203	Gasoline	
15:25	8	1830	Sulfuric acid	
15:40	8	NA	Corrosive	
15:52	2.1	1075	Propane	
16:00	2.1	1075	Propane	
16:07	5.1, 2.2	1073	Oxygen	
16:10	3	1203	Gasoline	
16:15	2.1	1075	Propane	
16:23	6.1	NA	Poisonous	
17:17	3	1203	Gasoline	
17:18	3, 5.1, 8	NA	Flammable, Oxidizer, Corrosive	



17:30	D		Dangerous	
17:58	3	1203	Gasoline	
18:10	2.1, 2.2	NA	Compressed gases (flam.and nonflam.)	
18:13	3	NA	Flammable and combustible liquid	
18:33	3	1993	Flammable liquids, n.o.s.	
18:51	8	1719	Caustic alkali liquids, n.o.s.	
19:40	3	1203	Gasoline	
19:54	3	1203	Gasoline	
20:06	3	1203	Gasoline	
20:15	3	1203	Gasoline	
21:26	3	1993	Flammable liquids, n.o.s.	
22:41	5.1, 2.2	1073	Oxygen	
22:38	3	1203	Gasoline	
23:09	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321			Date: 7MAR06	
Time	Hazard Class	UN ID	Description	Notes
4:20	3	1203	Gasoline	
6:00	HOT	3257	Elevated temperature liquid, n.o.s.	
6:17	3	1203	Gasoline	
7:34	3	1203	Gasoline	
7:49	3	1203	Gasoline	
8:29	3	1203	Gasoline	
8:55	3	1203	Gasoline	
9:03	3	1203	Gasoline	
9:11	3	1203	Gasoline	
9:20	3	1203	Gasoline	
9:22	5.1, 2.2	1073	Oxygen	
9:27	3	1203	Gasoline	
10:05	5.1, 2.2	1073	Oxygen, refrigerated liquid	
10:56	5.1, 2.2	1073	Oxygen	
11:02	5.1, 2.2	1073	Oxygen	
11:12	2.1	1075	Propane	
11:34	5.1	NA	Oxidizer	
11:37	3	1203	Gasoline	
11:40	8	NA	Corrosive	
11:45	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	

11:53	3	1203	Gasoline	
12:10	8	1824	Sodium hydroxide, solution	
12:24	3	1993	Flammable liquid, n.o.s.	
12:24	3	1203	Gasoline	
12:34	5.1	NA	Oxidizer	
13:17	8	NA	Corrosive	
13:22	3	1203	Gasoline	
14:10	3	1203	Gasoline	
14:22	3	1203	Gasoline	
14:45	8	NA	Corrosive	
15:04	5.1, 2.2	1073	Oxygen	
15:36	2.1	1075	Propane	
15:29	3	1203	Gasoline	
16:38	5.1, 2.2	1073	Oxygen	
16:23	5.1, 2.2	1073	Oxygen	
18:29	8	NA	Corrosive	
19:08	5.1, 2.2	1073	Oxygen	
20:26	2.1	1075	Propane	
20:30	3	1203	Gasoline	
21:18	8	NA	Corrosive	
21:21	5.1, 2.2	1073	Oxygen	
21:22	2.1	1075	Propane	
21:40	3	1203	Gasoline	
22:01	3	1203	Gasoline	
22:25	3	1203	Gasoline	
23:27	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Washington County/Sullivan County Line				Date: 12MAR06
Time	Hazard Class	UN ID	Description	Notes
3:08	3	1203	Gasoline	
4:53	3	1203	Gasoline	
5:51	5.1, 2.2	1073	Oxygen	
6:15	3	1203	Gasoline	
7:36	2.1	1075	Propane	
7:53	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:23	3	1203	Gasoline	
10:26	3	1203	Gasoline	

11:20	2.1	1075	Propane	
12:00	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
12:21	5.1, 2.2	1073	Oxygen	
12:26	3	NA	Flammable and combustible liquid	
12:28	2.1	1075	Propane	
13:00	6.1	NA	Poisonous	
13:19	3	1203	Gasoline	
13:33	2.1	1075	Propane	
13:46	3	1203	Gasoline	
13:46	3	NA	Flammable and combustible liquid	
13:58	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
14:28	2.1	1075	Propane	
14:33	D	NA	Mixed hazardous materials	
17:46	3	1203	Gasoline	
17:58	2.1	1075	Propane	
18:51	2.1	1075	Propane	
20:32	3	1203	Gasoline	
20:44	3	1203	Gasoline	
20:51	3	1203	Gasoline	
22:23	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Washington County/Sullivan County Line				Date: 13MAR06
Time	Hazard Class	UN ID	Description	Notes
6:01	3	1203	Gasoline	
7:10	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
7:19	2.1	1075	Propane	
7:22	3	1203	Gasoline	
7:47	8	NA	Corrosive	
8:17	3	1203	Gasoline	
8:21	8	1830	Sulfuric acid with > 51% acid.	
8:29	2.1	1075	Propane	
9:08	3, 8	2055 1940	Styrene monomer, stabilized Thioglycolic acid	
9:15	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
9:30	5.1, 2.2	1073	Oxygen	
10:03	2.1	1075	Propane	
10:54	3	1203	Gasoline	

11:00	8	NA	Corrosive	
12:39	3	NA	Flammable and combustible liquid	
13:20	3	1203	Gasoline	
14:09	3	1203	Gasoline	
15:50	8	NA	Corrosive	
16:06	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:35	3	1203	Gasoline	
16:49	5.1, 2.2	1073	Oxygen	
17:20	3	1203	Gasoline	
17:45	8	NA	Corrosive	
19:02	4.3	3208	Metallic substance, water-reactive, n.o.s	
20:13		D	Mixed hazardous materials	

### Road Side Survey Field Log

Location: I-26 Okolona Road (Exit 28)

Date: 16MAR06

Time	Hazard Class	UN ID	Description	Notes
0:20	3	1203	Gasoline	
1:16	3	1203	Gasoline	
2:54	3	1203	Gasoline	
3:06	3	1203	Gasoline	
3:23	3	1203	Gasoline	
4:53	8	NA	Corrosive	
5:03	5.1, 2.2	NA	Oxygen	
5:28	8	NA	Corrosive	
5:47	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
6:03	5.1	2428	Sodium chlorate, aqueous solution	
6:30	3	1203	Gasoline	
6:33	3	1203	Gasoline	
6:33	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
6:42	3	1203	Gasoline	
6:50	3	1203	Gasoline	
6:51	3	1987 1220 1993	Denatured alcohol, Isopropyl acetate, Flam liq, n.o.s.	
7:05	8	NA	Corrosive	
7:17	2.2	2187	Carbon dioxide, refrigerated liquid	
7:20	2.3, 8	1050	Hydrogen chloride, anhydrous	
7:22	HOT	3257	Elevated temperature liquid, n.o.s.	
7:27	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	

7:29	3	1203	Gasoline	
7:31	3	1203	Gasoline	
7:34	3	NA	Flammable and combustible liquid	
7:50	5.1	1942	Ammonium nitrate w/ NMT 0.2% CM	
8:05	8	NA	Corrosive	
8:09	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
8:21	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
8:34	8	NA	Corrosive	
8:39	8	NA	Corrosive	
8:42	3	1203	Gasoline	
8:49	8	NA	Corrosive	
8:59	8	NA	Corrosive	
9:12	2.2	2187	Carbon dioxide, refrigerated liquid	
9:23	3	1224	Ketones, liquid, n.o.s.	
9:23	2.1	1075	Propane	
9:23	8	NA	Corrosive	
9:28	D	NA	Mixed hazardous materials	
9:29	8	1715	Acetic anhydride	
9:29	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
9:32	2.2	2187	Carbon dioxide, refrigerated liquid	
9:44	HOT	3257	Elevated temperature liquid, n.o.s.	
9:45	3	1203	Gasoline	
9:57	8	2209	Formaldehyde, solutions	
10:11	5.1	2428	Sodium chlorate, aqueous solution	
10:19	8	2209	Formaldehyde, solutions	
10:30	3	1203	Gasoline	
10:32	8	NA	Corrosive	
10:49	3	1993	Flammable liquid, n.o.s.	
11:03	1.5D	NA	Blasting agents	
11:05	3	1203	Gasoline	
11:07	8	NA	Corrosive	
11:23	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
11:32	5.1	1942	Ammonium nitrate w/ NMT 0.2%comb. material	
11:32	3, 6.1, 9	NA	Flam., Poison, Misc. hazardous material	
11:32	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
11:41	2.2	2187	Carbon dioxide, refrigerated liquid	
12:07	2.2	2187	Carbon dioxide, refrigerated liquid	
12:09	8	1719	Caustic alkali liquids, n.o.s.	
12:22	5.1, 2.2	1073	Oxygen	

12:37	3	1993	Flammable liquid, n.o.s.	
12:41	5.1	1486	Potassium nitrate	
12:48	2.1	1075	Propane	
13:10	8	3266	Corrosive liquid, basic, inorganic, n.o.s	
13:27	HOT	9259	Elevated temperature material, liquid, n.o.s.	
13:39	3	1210	Printing ink related material	
13:51	2.1	1075	Propane	
14:03	3	1203	Gasoline	
14:07	3	1220	Isopropyl acetate	
14:22	6.1	NA	Poisonous material	
14:41	8, 2.3	NA	Corrosive, Poison gas	
15:06	7	2982	Radioactive material, n.o.s.	
15:27	3	1268	Petroleum distillates, n.o.s.	
15:40	HOT	3257	Elevated temperature liquid, n.o.s.	
16:14		D	Mixed hazardous materials	
16:38	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:39	8, 3	2789	Acetic acid, glacial	
16:49	3	1993	Flammable liquid, n.o.s.	
16:51	5.1, 2.2	1073	Oxygen	
17:06	8	1715	Acetic anhydride	
17:25	2.1	1075	Propane	
17:37	8	2693	Bisulfites, aqueous solution, n.o.s.	
17:42	3	1294	Toluene	
17:57	5.1	2428	Sodium chlorate, aqueous solution	
17:58	2.2	1977	Nitrogen, refrigerated liquid	
18:04	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
18:13	1.1D	NA	Explosive (mass explosion hazard)	
18:30	5.1	2428	Sodium chlorate, aqueous solution	
18:37	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
18:38	2.2	2187	Carbon dioxide, refrigerated liquid	
19:03	5.1	2428	Sodium chlorate, aqueous solution	
19:11	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
19:17	3	1993	Flammable liquid, n.o.s.	
19:43	5.1	1481	Perchlorates, inorganic, n.o.s.	
19:59	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
20:06	HOT	3257	Elevated temperature liquid, n.o.s.	
20:07	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
20:23	3	1993, 1123	Flammable liq., n.o.s., Butyl acetates	

20:41	3	1203	Gasoline	
20:44	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
20:52	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
21:21	2.1	1075	Propane	
21:24	3	1203	Gasoline	
21:28	5.1	2428	Sodium chlorate, aqueous solution	
21:58	3	1203	Gasoline	
22:01	2.2	2187	Carbon dioxide, refrigerated liquid	
22:15	HOT	3257	Elevated temperature liquid, n.o.s.	
22:48	3	1203	Gasoline	
22:48	3	1203	Gasoline	
23:10	3	1203	Gasoline	
23:44	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 Fall Branch, TN (Exit 50)

Date: 18MAR06

Time	Hazard Class	UN ID	Description	Notes
1:58	3	1203	Gasoline	
4:02	3	1203	Gasoline	
5:18	8	2031	Nitric acid, >70% Acid	
5:40	3	1203	Gasoline	
6:09	3	1203	Gasoline	
6:17	3	1203	Gasoline	
6:22	2	1072	Oxygen	
6:58	3	1203	Gasoline	
7:08	3	1203	Gasoline	
7:19	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
7:22	3	1203	Gasoline	
7:32	3	1203	Gasoline	
7:47	3	1203	Gasoline	
7:54	3	1203	Gasoline	
8:08	3	1203	Gasoline	
8:14	8	1824	Sodium hydroxide solution	
8:26	3	1203	Gasoline	
8:35	3	1267	Crude oil	
8:44	3	1267	Crude oil	
9:07	3	1203	Gasoline	
9:32	3	1203	Gasoline	

9:32	6	2078	Toluene diisocyanate	
9:43	3	1203	Gasoline	
10:02	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
10:14	2.1	1075	Liquefied petroleum gas	
10:33	5.1	1748	Calcium hypochlorite, dry	
10:35	3	2302	5-Methylhexan-2-one	
10:47	3	1268	Petroleum distillates, n.o.s.	
10:52	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
11:09	3	1133	Adhesives	
11:26	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
11:32	D, 3	1866	Resin solution, Mixed hazardous materials	
11:56	2.2	1072	Oxygen, compressed	
12:15	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:25	2.2	1073	Oxygen	
12:34	3	1203	Gasoline	Obscured plate
12:56	8	3264	Corrosive liquid, acidic, inorganic, NOS	
13:09	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
13:15	2.1	1075	Propane	
13:27	8	1760	Corrosive liquids, n.o.s.	
13:36	D	N/A	Mixed Shipment	
13:42	2	1072	Oxygen	
14:06	3/6.1	1986	Alcohols, flammable, toxic, n.o.s.	
14:21	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
14:33	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:44	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
14:54	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:05	3	1203	Gasoline	
15:09	3	1146	Cyclopentane	
15:12	3	1993	Flammable liquid, n.o.s.	
15:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:32	2.1	1075	Propane	
15:39	8	1760	Corrosive liquids, n.o.s.	
15:52	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:15	5.1	2067	Ammonium nitrate based fertilizer	
16:16	D		Dangerous	
16:25	3	1203	Gasoline	
16:35	3	1203	Gasoline	
16:38	8	1773	Ferric chloride, anhydrous	
16:40	3	1203	Gasoline	



16:58	1.5	332	Blasting agent	
17:01	D		Dangerous	
17:04	3	1294	Toluene	
17:11	3	1133	Adhesives, containing a flammable liquid	
17:14	3	1203	Gasoline	
17:24	3	1203	Gasoline	
17:29	3, 2	N/A	Flammable and Non-Flammable Gas	
17:34	8	2218	Acrylic acid, inhibited	
17:35	3	1203	Gasoline	
17:48	2.2	1072	Oxygen, compressed	
17:48	3	1203	Gasoline	
17:52	3	1203	Gasoline	
17:54	9	3257	Elevated temperature liquid, n.o.s	
18:00	2.1	1075	Propane	
18:03	8	1760	Corrosive liquids, n.o.s.	
18:15	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:21	8	3264	Corrosive liquid, acidic, inorganic, NOS	
18:37	8	2734	Amines, liquid, corrosive, flammable, n.o.s.	
18:44	3	1203	Gasoline	
18:54	3	1203	Gasoline	
18:57	3	1203	Gasoline	
19:05	D		Dangerous	
19:19	3	1203	Gasoline	
19:23	3	1993	Flammable liquids, n.o.s.	
19:47	3	1203	Gasoline	
19:56	D		Dangerous	
20:14	3	1203	Gasoline	
20:39	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:48	6.1	1558	Arsenic	
21:09	D		Dangerous	
21:32	3	1203	Gasoline	
21:51	2.1	1075	Petroleum Gases, Liquefied (Propane)	
22:10	3	1203	Gasoline	
22:43	3	1203	Gasoline	
22:57	3	1203	Gasoline	
23:21	3	1203	Gasoline	
23:46	3,8	N/A	Corrosive, Flammable and Combustible Liquid	

### Road Side Survey Field Log

Location: I-26 Eastern Star (Exit 45)			Date: 22MAR06	
Time	Hazard Class	UN ID	Description	Notes
3:02	3	1203	Gasoline	
4:02	3	1203	Gasoline	
4:16	3	1203	Gasoline	
4:49	2	1072	Oxygen	
4:57	3	1203	Gasoline	
5:47	2.2	2187	Carbon dioxide, refrigerated liquid	
5:59	5.1	2428	Sodium chlorate, aqueous solution	
6:18	2.2	1951	Argon, refrigerated liquid	
6:33	6.1	2903	Pesticides, liquid, toxic, flammable, flash point >23°C	
6:40	3	1993	Flammable liquid, n.o.s.	
7:00	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:21	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
7:27	3	1203	Gasoline	
7:33	2.1	1075	Propane	
7:41	8, 3	NA	Corrosive, Flammable and combustible liquid	
7:47	3	1203	Gasoline	
8:04	2.2	1977	Nitrogen, refrigerated liquid	
8:05	3	1993	Flammable liquid, n.o.s.	
8:08	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
8:12	5.1, 2.2	1073	Oxygen	
8:21	2.1	1075	Propane	
8:26	3	1203	Gasoline	
8:32	3	1203	Gasoline	
8:35	2.1	1075	Propane	
8:36	3	NA	Flammable and combustible liquid	
8:41	5.1, 2.2	1073	Oxygen	
8:55	3	1203	Gasoline	
9:04	8	NA	Corrosive	
9:10	3	1267	Petroleum crude oil	
9:15	3	NA	Flammable and combustible liquid	
9:20	8	1824	Sodium hydroxide, solution	
9:21	2.1	1075	Propane	
9:39	5.1	NA	Oxidizer	
9:41	3	1267	Petroleum crude oil	

9:50	6.1	1017	Chlorine	
9:55	8	2491	Ethanolamine	
10:00	5.1	NA	Oxidizer	
10:09	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
10:22	HOT	3257	Elevated temperature liquid, n.o.s.	
10:27	3	1203	Gasoline	
10:29	3	1268	Petroleum distillates, n.o.s.	
10:33	3	NA	Flammable and combustible liquid	
10:42	3, 9	1110, 3082, 1993	Methyl amyl ketone, Haz. waste, liquid. n.o.s., Flam. liq., n.o.s.	
10:56	D	NA	Mixed hazardous materials	
11:00	3	1203	Gasoline	
11:03	3	1203	Gasoline	
11:08	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:24	2.2	1951	Argon, refrigerated liquid	
11:24	3	1203	Gasoline	
11:35	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
11:38	3	1203	Gasoline	
11:53	5.1, 2.2	1073	Oxygen	
12:14	NA	3077	Hazardous waste, solid, n.o.s.	
12:21	7	NA	Radioactive	
13:39	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
12:47	5.1, 2.2	1073	Oxygen	
12:58	1.4	NA	Explosives (no significant blast hazard)	
13:10	3	1203	Gasoline	
13:39	2.1	1075	Propane	
13:50	8, 3	NA	Corrosive, Flammable and combustible liquid	
14:07	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
14:28	5.1	NA	Oxidizer	
14:30	5.1, 2.2	1073	Oxygen	
14:34	8	2031	Nitric acid, >70% Acid	
14:44	8	2491	Ethanolamine	
15:12	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:21	3	1203	Gasoline	
15:32	HOT	3257	Elevated temperature liquid, n.o.s.	
15:52	3	1203	Gasoline	
15:55	5.1	1942	Ammonium nitrate w/ NMT 0.2% CM	

15:59	2.1	1075	Propane	
16:11	3	1993	Flammable liquid, n.o.s.	
16:45	8	1848	Propionic acid	
16:52	3	1203	Gasoline	
17:00	8	3266	Corrosive liquid, basic, inorganic, n.o.s.	
17:15	2.1	1075	Propane	
17:20	3	1203	Gasoline	
17:34	3	1193	Ethyl methyl ketone	
17:41	8	1824	Sodium hydroxide solution	
18:00	5.1	NA	Oxidizer	
18:23	3, 8	1993, 3264	Flam. liq., n.o.s., Corrosive liquid, acidic, inorganic, n.o.s.	
18:34	3	1203	Gasoline	
18:37	3	NA	Flammable and combustible liquid	
18:37	5.1, 2.2	1073	Oxygen	
18:44	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
18:48	HOT	3257	Elevated temperature liquid, n.o.s.	
18:58	8	NA	Corrosive	
19:08	3, D	1866	Resin solution, Mixed hazardous materials	
19:29	5.1	2428	Sodium chlorate, aqueous solution	
19:40	5.1, 2.2	1073	Oxygen	
19:54	7	NA	Radioactive	
20:23	8, 3	NA	Corrosive, Flammable and combustible liquid	
20:46	2.1	1075	Propane	
20:48	3	1203	Gasoline	
20:57	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
21:03	3	1203	Gasoline	
22:07	3	1203	Gasoline	
22:14	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
22:48	3	1203	Gasoline	
22:55	3	1203	Gasoline	
23:41	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Jockey Creek

Date: 24MAR06

Time	Hazard Class	UN ID	Description	Notes
3:19	3	1203	Gasoline	
5:53	3	1203	Gasoline	
6:09	3	1203	Gasoline	

6:35	3	1203	Gasoline	
7:04	3	1203	Gasoline	
7:06	3	NA	Flammable	
7:14	2.1	1075	Propane	
7:35	3	1203	Gasoline	
7:42	2.1	1075	Propane	
7:46	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
7:53	3	1999	Tars, liquid	
7:56	3	1999	Tars, liquid	
8:17	3	1203	Gasoline	
8:23	3	NA	Flammable	
8:33	2.1	1075	Propane	
8:52	3	1203	Gasoline	
8:52	3	NA	Flammable and combustible liquid	
9:03	3, 8	NA	Flammable and combustible liquid, Corrosive	
9:08	3	1203	Gasoline	
9:12	3	1203	Gasoline	
9:32	3	1203	Gasoline	
9:36	3	1203	Gasoline	
9:57	8	1791, 1830	Hypochlorite soln, Sulfuric acid	
10:33	5.1, 2.2	1073	Oxygen	
11:13	8	2215	Maleic acid	
11:32	3	1203	Gasoline	
11:32	2.1	1075	Propane	
11:44	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
11:48	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
11:59	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
12:05	5.1, 2.2	1073	Oxygen	
13:11	8	1791, 1830	Hypochlorite soln, Sulfuric acid	
13:19	3	NA	Flammable and combustible liquid	
13:27	2.1	1075	Propane	
13:50	6.1	NA	Poisonous	
14:15	5.1, 2.2	1073	Oxygen	
14:20	3	1203	Gasoline	
14:40	2.1	1075	Propane	
15:33	3	1203	Gasoline	
15:52	3	1203	Gasoline	
15:55	3	1203	Gasoline	
16:03	3	1203	Gasoline	

16:17	5.1, 2.2	1073	Oxygen	
16:20	3	1203	Gasoline	
16:29	3	1203	Gasoline	
16:44	3, 5.1, 8	NA	Flammable, Oxidizer, Corrosive	
16:46	2.1, 2.2	NA	Compressed gases (flam.and nonflam.)	
16:47	5.1, 2.2	1073	Oxygen	
16:53	3	NA	Flammable and combustible liquid	
17:01	3	1999	Tars, liquid	
17:12	2.1	1075	Propane	
17:33	6.1	NA	Poisonous	
17:43	5.1, 2.2	1073	Oxygen	
17:43	3	1203	Gasoline	
17:45	2.1	1075	Propane	
18:19	3	1203	Gasoline	
18:52	3	1203	Gasoline	
19:38	3, 5.1, 8	NA	Flammable, Oxidizer, Corrosive	
19:42	3	1203	Gasoline	
20:50	3	1203	Gasoline	
21:44	3	1203	Gasoline	
22:30	2.1	1075	Propane	
22:49	8	NA	Corrosive	

### Road Side Survey Field Log

Location: US-11E Jockey Creek			Date: 3APR06	
Time	Hazard Class	UN ID	Description	Notes
0:14	3	1203	Gasoline	
5:25	3	1203	Gasoline	
6:00	2.1	1075	Petroleum gases, liquefied	
6:21	3	1203	Gasoline	
6:36	3	1999	Tars, liquid	
6:41	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
7:00	3	1999	Tars, liquid	
7:06	3	1993	Flammable liquids, n.o.s	
7:19	2.1	1075	Propane	
7:43	3	1203	Gasoline	
7:53	3	1203	Gasoline	
8:18	2.1	1075	Petroleum gases, liquefied	
8:28	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	

8:33	3	1999	Tars, liquid	
8:46	D	NA	Mixed hazardous materials	
8:50	2.1	1075	Propane	
9:23	2.1	1075	Petroleum gases, liquefied	
9:36	2.1	1075	Propane	
9:51	3	1999	Tars, liquid	
9:54	5.1, 2.2	1073	Oxygen	
10:11	5.1	1942	Ammonium nitrate, w/ $\geq 0.2\%$ combustible material	
10:13	8	NA	Corrosive	
10:23	3	NA	Flammable and combustible liquid	
10:47	8	1719	Caustic alkali liquids, n.o.s.	
11:12	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:17	8	NA	Corrosive	
11:24	2.1	1075	Petroleum gases, liquefied	
11:52	3	1203	Gasoline	
12:03	2.2	1006	Argon, compressed	
12:04	3	1203	Gasoline	
12:39	3	1999	Tars, liquid	
12:44	3	1203	Gasoline	
13:08	8	NA	Corrosive	
13:37	5.1, 2.2	1073	Oxygen	
13:38	3	1999	Tars, liquid	
13:51	2.1	1075	Propane	
14:05	8	1719	Caustic alkali liquids, n.o.s.	
14:13	3, 2.1	1999, 1075	Asphalt, Propane	
14:19	2.1	1966	Hydrogen, refrigerated liquid	
14:23	8	NA	Corrosive	
14:35	3	1203	Gasoline	
14:50	2.1	1075	Petroleum gases, liquefied	
15:02	D	NA	Mixed hazardous materials	
15:11	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
15:34	3	1203	Gasoline	
15:48	2.2	1006	Argon, compressed	
15:51	7	NA	Radioactive	
16:01	8	NA	Corrosive	
16:13	D	NA	Mixed hazardous materials	
16:24	3	1203	Gasoline	

16:27	2.1	1075	Petroleum gases, liquefied	
16:42	3	NA	Flammable and combustible liquid	
7:06	8	NA	Corrosive	
17:14	8	NA	Corrosive	
17:29	2.1	1075	Propane	
17:33	3	1993	Flammable liquids, n.o.s	
17:45	D	NA	Mixed hazardous materials	
17:46	8	NA	Corrosive	
18:13	2.1	1075	Petroleum gases, liquefied	
18:20	3	1203	Gasoline	
18:36	3	1999	Tars, liquid	
18:44	D	NA	Mixed hazardous materials	
18:55	3	1993	Flammable liquids, n.o.s	
19:14	3	1203	Gasoline	
19:14	3	1203	Gasoline	
19:29	2.1	1075	Petroleum gases, liquefied	
19:41	D	NA	Mixed hazardous materials	
20:02	8	NA	Corrosive	
20:28	2.2	1006	Argon, compressed	
20:39	3	1203	Gasoline	
21:04	3	1999	Tars, liquid	
21:54	3	1203	Gasoline	
22:07	8	NA	Corrosive	
22:23	3	1203	Gasoline	
23:10	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E Jockey Creek			Date: 4APR06	
Time	Hazard Class	UN ID	Description	Notes
6:36	5.1, 2.2	1073	Oxygen	
6:40	3	1203	Gasoline	
7:06	3	1202	Diesel fuel	
7:27	8	NA	Corrosive	
8:18	3	1203	Gasoline	
8:46	8	1824	Sodium hydroxide solution	
9:11	3	1203	Gasoline	
9:32	5.1, 2.2	1073	Oxygen	
10:33	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	



10:45	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
11:32	3	1203	Gasoline	
11:51	8	1719	Caustic alkali liquids, n.o.s.	
12:35	4.1	1993	Flammable liquids, n.o.s	
12:49	2.1	1075	Petroleum gases, liquefied	
12:51	5.1, 2.2	1073	Oxygen	
13:16	3	1999	Tars, liquid	
13:37	2.1	1075	Propane	
14:13	3	1202	Diesel fuel	
14:42	3	1999	Tars, liquid	
15:26	3	NA	Flammable and combustible liquid	
15:55	3	1203	Gasoline	
16:01	2.1	1075	Propane	
16:38	2.2	1006	Argon, compressed	
17:07	6.1	2902	Pesticides, liquid, toxic, n.o.s.	
17:46	3	1203	Gasoline	
18:32	2.1, 2.2	NA	Compressed gases (flam.and nonflam.)	
18:44	3	1203	Gasoline	
19:42	3, 8	NA	Flammable and combustible liquid, Corrosive	
20:33	3	1203	Gasoline	
21:40	3	NA	Flammable	
22:07	8	1719	Caustic alkali liquids, n.o.s.	

### Road Side Survey Field Log

Location: I-26 Okolona Road				Date: 9APR06
Time	Hazard Class	UN ID	Description	Notes
0:04	3	1203	Gasoline	
1:43	3	1203	Gasoline	
2:25	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
3:26	2	N/A	Non-Flammable Gas	
4:48	D	NA	Mixed hazardous materials	
5:21	3	1203	Gasoline	
5:41	2.2	1072	Oxygen, compressed	
5:52	3	1203	Gasoline	
6:01	9	3257	Elevated temperature liquid, n.o.s.	
6:08	2.2	1977	Nitrogen, refrigerated liquid	
6:43	3	1203	Gasoline	
6:44	3	1993	Flammable liquids, n.o.s	

6:46	3	1203	Gasoline	
7:03	3	1203	Gasoline	
7:13	8	NA	Corrosive	
7:25	3, 2	N/A	Flammable and Non-Flammable Gas	
7:26	3	1203	Gasoline	
7:45	8	1830	Sulfuric acid, >51% acid	
7:47	3	1203	Gasoline	
7:52	3	1210	Printing ink related material	
7:56	3	1203	Gasoline	
8:00	3	1146	Cyclopentane	
8:08	3	1203	Gasoline	
8:10	8	NA	Corrosive	
8:17	2.2	1072	Oxygen, compressed	
8:27	8	1719	Caustic alkali liquids, n.o.s.	
8:38	3	1203	Gasoline	
8:47	2.2	2187	Carbon dioxide, refrigerated liquid	
9:08	2.1	1075	Petroleum gases, liquefied	
9:16	D	NA	Mixed hazardous materials	
9:17	3	1146	Cyclopentane	
9:42	2.1	1075	Petroleum gases, liquefied	
9:42	3	1203	Gasoline	
9:54	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
10:02	2.2	1073	Oxygen, refrigerated liquid	
10:08	9	3257	Elevated temperature liquid, n.o.s.	
10:26	8	1823	Sodium hydroxide, solid	
10:37	2.2	2187	Carbon dioxide, refrigerated liquid	
10:44	6.1	NA	Poisonous material	
10:49	3	1203	Gasoline	
10:50	3	1202	Diesel fuel	
11:13	3	1268	Petroleum distillates, n.o.s.	
11:19	D	NA	Mixed hazardous materials	
11:21	2.2	1066	Nitrogen, compressed	
11:23	2.2	1977	Nitrogen, refrigerated liquid	
11:39	8	1760	Corrosive liquids, n.o.s.	
11:59	5.1	1942	Ammonium nitrate, w/ $\geq 0.2\%$ combustible material	
12:06	8	NA	Corrosive	
12:09	3	1203	Gasoline	
12:19	2.2	1977	Nitrogen, refrigerated liquid cryogenic liquid	
12:21	8	1715	Acetic anhydride	

12:28	3	1203	Gasoline	
12:47	9	3257	Elevated temperature liquid, n.o.s.	
13:16	3	1203	Gasoline	
13:20	3	1993	Flammable liquids, n.o.s	
13:31	3	1993	Flammable liquids, n.o.s	
13:36	3	1993	Flammable liquids, n.o.s	
13:48	3	1203	Gasoline	
13:59	2.1	1075	Petroleum gases, liquefied	
14:09	3	1987	Denatured alcohol	
14:29	2.1	1075	Propane	
14:31	3	1220	Isopropyl acetate	
14:36	8	2031	Nitric acid, >70% nitric acid	
14:46	D	NA	Mixed hazardous materials	
14:53	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
14:57	3	1993	Flammable liquids, n.o.s	
15:02	2.1	1978	Propane	
15:06	3	NA	Flammable and combustible liquid	
15:13	3	1203	Gasoline	
15:15	3	1203	Gasoline	
15:20	3	1203	Gasoline	
15:24	3	1993	Flammable liquids, n.o.s	
15:28	3	1203	Gasoline	
16:13	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:14	3	1203	Gasoline	
16:17	5.1	2880	Calcium hypochlorite, hydrated	
16:20	3	1294	Toluene	
16:23	3	1203	Gasoline	
16:33	3	1203	Gasoline	
16:54	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
17:01	2.2	2187	Carbon dioxide, refrigerated liquid	
17:07	2.1	1978	Propane	
17:10	3	1203	Gasoline	
17:20	3	1203	Gasoline	
17:32	8	1760	Corrosive liquids, n.o.s.	
17:41	3	1203	Gasoline	
17:55	8	1719	Caustic alkali liquids, n.o.s.	
18:04	8	2794	Batteries, wet, filled with acid,	
18:08	3	1203	Gasoline	
18:08	1.5D	NA	Blasting agents	

18:10	2.2	N/A	Non-Flammable Gas	
18:19	2.1	1075	Petroleum gases, liquefied	
18:25	8	1760	Corrosive liquids, n.o.s.	
18:27	3	1224	Ketones, liquid, n.o.s.	
19:09	3	1203	Gasoline	
19:11	3	1203	Gasoline	
19:24	2.2	1073	Oxygen, refrigerated liquid	
19:57	3	1993	Flammable liquids, n.o.s	
20:21	D	NA	Mixed hazardous materials	
20:26	2.2	2187	Carbon dioxide, refrigerated liquid	
20:34	3	1203	Gasoline	
20:36	3	1203	Gasoline	
21:06	3	1203	Gasoline	
21:07	2.2	2187	Carbon dioxide, refrigerated liquid	
21:52	3	1203	Gasoline	
22:09	3	1203	Gasoline	
22:21	D	NA	Mixed hazardous materials	
22:52	3	1203	Gasoline	
23:01	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 Fall Branch			Date: 12 APR06	
Time	Hazard Class	UN ID	Description	Notes
0:24	3	1203	Gasoline	
0:35	2.1	1978	Propane	
0:48	8	2031	Nitric acid, >70% Acid	
1:05	8	1719	Caustic alkali liquids, n.o.s.	
1:28	3	1203	Gasoline	
2:13	2	1072	Oxygen	
2:26	3	1203	Gasoline	
2:46	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
3:36	2.1	1978	Propane	
3:55	3	1203	Gasoline	
4:01	3	1265	Pentanes	
4:23	3	1203	Gasoline	
4:37	3	1203	Gasoline	
4:47	3	1203	Gasoline	
4:56	6	2078	Toluene diisocyanate	

5:03	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
5:22	5.1	1748	Calcium hypochlorite, dry	
5:30	3	1268	Petroleum distillates, n.o.s.	
5:47	3	1294	Toluene	
5:52	3	1133	Adhesives	
6:02	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
6:08	D, 3	1866	Resin solution, Mixed hazardous materials	
6:19	2.1	1075	Petroleum Gases, Liquefied (Propane)	
6:26	3	1203	Gasoline	
6:33	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:39	8	1760	Corrosive liquids, n.o.s.	
6:45	2	1072	Oxygen	
6:58	D	N/A	Mixed Shipment	
7:01	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:17	8	2031	Nitric acid, >70% nitric acid	
7:22	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:29	3	1203	Gasoline	
7:37	3	1993	Flammable liquid, n.o.s.	
7:48	D	N/A	Mixed Shipment	
7:53	2.1	1075	Propane	
8:02	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
8:07	D		Mixed hazardous materials	
8:09	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:14	3	1203	Gasoline	
8:17	3	1203	Gasoline	
8:23	8	1823	Sodium hydroxide, solid	
8:26	D	N/A	Mixed Shipment	
8:30	D	N/A	Mixed Shipment	
8:37	3	1294	Toluene	
8:36	3	1203	Gasoline	
8:45	8	1719	Caustic alkali liquids, n.o.s.	
8:47	3, 2	N/A	Flammable and Non-Flammable Gas	
8:52	3	1203	Gasoline	
8:55	3	1203	Gasoline	
8:59	2.1	1075	Petroleum gases, liquefied	
9:06	8	1760	Corrosive liquids, n.o.s.	
9:08	1.5	332	Blasting agent	
9:15	8	1773	Ferric chloride, anhydrous	
9:19	3	1133	Adhesives	

9:20	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.
9:27	3	1203	Gasoline
		1120	
		1220	
9:29	3	1278	Butanols, Isopropyl acetate, 1-Chloropropane
9:34	3	1203	Gasoline
9:47	3	1133	Adhesives, containing a flammable liquid
9:50	2.2	1006	Argon, compressed
9:57	3	1203	Gasoline
10:05	D	N/A	Mixed Shipment
10:16	3	1202	Diesel fuel
10:26	3	1203	Gasoline
10:33	8	2218	Acrylic acid, inhibited
10:51	2.1	1075	Petroleum Gases, Liquefied (Propane)
11:00	8	2794	Batteries, wet, filled with acid,
11:03	7	2909	Radioactive material, excepted package
11:09	2.2	1072	Oxygen, compressed
11:14	2.1	1075	Propane
11:25	3	1146	Cyclopentane
11:35	9	3257	Elevated temperature liquid, n.o.s
11:46	2.1	1978	Propane
11:53	8	1760	Corrosive liquids, n.o.s.
12:05	D	N/A	Mixed Shipment
12:09	8	3264	Corrosive liquid, acidic, inorganic, NOS
12:10	2.2	1066	Nitrogen, compressed
12:25	3	1203	Gasoline
12:31	3	1203	Gasoline
12:46	D	N/A	Mixed Shipment
12:58	3	1203	Gasoline
13:00	3	1866	Resin solution, flammable
13:15	3	1993	Flammable liquids, n.o.s.
13:25	D	N/A	Mixed Shipment
13:30	2.1	1075	Petroleum Gases, Liquefied (Propane)
13:33	D	N/A	Mixed Shipment
13:42	2.1	1075	Petroleum Gases, Liquefied (Propane)
13:52	3	1203	Gasoline
14:00	8	1719	Caustic alkali liquids, n.o.s.
14:13	2.1	1075	Liquefied petroleum gas
14:25	8	1824	Sodium hydroxide solution

14:31	2.1	1075	Petroleum gases, liquefied	
14:31	6.1	2649	1,3-Dichloroacetone	
14:40	2.1	1075	Liquefied petroleum gas	
14:49	3	1993	Flammable liquids, n.o.s	
15:06	3	1993	Flammable liquids, n.o.s	
15:16	4.1	3175	Solids containing flammable liquid, n.o.s.	
15:28	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
15:34	3	1993	Flammable liquids, n.o.s	
15:42	D	N/A	Mixed Shipment	
15:55	3	1203	Gasoline	
16:00	3	1203	Gasoline	
16:09	2.1	1075	Petroleum gases, liquefied	
16:15	6.1	2998	Triazine pesticides, liquid, toxic	
16:19	2.1	1075	Liquefied petroleum gas	
16:20	8	1760	Corrosive liquids, n.o.s.	
16:25	4.1	3089	Metal powders, flammable, n.o.s.	
16:39	8	3264	Corrosive liquid, acidic, inorganic, NOS	
16:40	9	3334	Aviation regulated liquid, n.o.s.	
16:47	3	1203	Gasoline	
16:55	3	1146	Cyclopentane	
16:56	2.2	1977	Nitrogen, refrigerated liquid cryogenic liquid	
17:01	8	1760	Corrosive liquids, n.o.s.	
17:08	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:11	2.1	1978	Propane	
17:15	3	1993	Flammable liquids, n.o.s	
17:21	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
17:23	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
17:38	3	1203	Gasoline	
17:41	8	1830	Sulfuric acid, >51% acid	
17:44	2.1	1075	Liquefied petroleum gas	
17:50	3	1306	Wood preservatives, liquid	
18:08	3	1203	Gasoline	
18:23	3	1987, 1220, 1993	Denatured alcohol, Isopropyl acetate, Flam liq, n.o.s.	
18:29	3	1203	Gasoline	
18:37	D	N/A	Mixed Shipment	
18:41	8	1760	Corrosive liquids, n.o.s.	
18:47	2.3	1076	Phosgene	

19:03	2.2	1073	Oxygen	
19:09	1.1B	360	Detonator assemblies, non-electric for blasting	
19:13	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:21	3	1993	Flammable liquids, n.o.s	
19:32	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
19:40	3	1306	Wood preservatives, liquid	
19:54	3	1203	Gasoline	
20:05	3	1993	Flammable liquids, n.o.s	
20:10	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
20:22	3	1203	Gasoline	
20:34	5.1	2067	Ammonium nitrate based fertilizer	
20:49	3	1203	Gasoline	
21:09	3	1203	Gasoline	
21:23	2.1	1978	Propane	
21:29	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
21:37	3	1203	Gasoline	
21:55	3	1203	Gasoline	
22:04	3	1203	Gasoline	
22:11	3	1202	Diesel fuel	
22:36	3	1203	Gasoline	
22:44	2.2	1072	Oxygen, compressed	
23:03	3	1203	Gasoline	
23:29	3	1203	Gasoline	
23:57	D	N/A	Mixed Shipment	

### Road Side Survey Field Log

Location: I-26 Eastern Star				Date: 15APR06
Time	Hazard Class	UN ID	Description	Notes
0:25	3	1203	Gasoline	
1:55	3	1203	Gasoline	
2:49	3	NA	Flammable and combustible liquid	
4:59	3	1203	Gasoline	
5:21	3	1203	Gasoline	
6:05	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
6:36	3	1203	Gasoline	
7:01	HOT	3257	Elevated temperature liquid, n.o.s.	
7:22	7	2982	Radioactive material, n.o.s.	
7:35	3	1203	Gasoline	



7:37	3	1202	Diesel fuel	
7:39	3	1993	Flammable liquid, n.o.s.	
8:02	1.4	NA	Explosives (no significant blast hazard)	
8:11	3	1203	Gasoline	
8:47	2.2	1066	Nitrogen, compressed	
8:58	2.2	1977	Nitrogen, refrigerated liquid	
9:12	2.2	1951	Argon, refrigerated liquid	
9:33	7	NA	Radioactive	
9:50	5.1	NA	Oxidizer	
9:59	3	1203	Gasoline	
10:36	8	1791	Hypochlorite solution	
10:36	1.4	NA	Explosives (no significant blast hazard)	
10:38	2.1	1978	Propane	
10:39	5.1, 2.2	1073	Oxygen	
11:10	5.1, 2.2	1073	Oxygen	
11:23	2.2	2187	Carbon dioxide, refrigerated liquid	
11:25	3	1203	Gasoline	
11:45	5.1, 2.2	1073	Oxygen	
12:00	7	2909	Radioactive material, excepted package depleted uranium	
12:12	2.1	1075	Propane	
12:20	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:41	3	1203	Gasoline	
13:09	3	1203	Gasoline	
13:15	3	NA	Flammable and combustible liquid	
13:16	3	1203	Gasoline	
13:24	3	2302	5-Methylhexan-2-one	
14:15	5.1	NA	Oxidizer	
14:23	3	1993	Flammable liquid, n.o.s.	
14:40	3	NA	Flammable and combustible liquid	
14:42	D	NA	Mixed hazardous materials	
14:45	3	1203	Gasoline	
15:59	3	1268	Petroleum distillates, n.o.s.	
15:11	2.1	1075	Propane	
15:17	3	NA	Flammable and combustible liquid	
15:44	8	NA	Corrosive	
15:57	3	1267	Petroleum crude oil	
16:03	3	1203	Gasoline	
16:09	8	2031	Nitric acid, with > 70% nitric acid	

16:22	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
16:29	3	1203	Gasoline	
16:39	4.3	3170	Aluminum processing by-products	
16:51	5.1, 2.2	1073	Oxygen	
17:01	5.1	1942	Ammonium nitrate w/ NMT 0.2% CM	
17:19	3	1203	Gasoline	
17:33	3	NA	Flammable and combustible liquid	
17:44	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
18:00	5.1, 2.2	1073	Oxygen	
18:03	3, 9	1110, 1993	Methyl amyl ketone, Flam. liq., n.o.s.	
18:32	3, D	1866	Resin solution, Mixed hazardous materials	
18:34	3	1203	Gasoline	
18:37	8	1830	Sulfuric acid with > 51% acid	
18:48	5.1	NA	Oxidizer	
19:08	8	2218	Acrylic acid, inhibited	
19:24	3	NA	Flammable and combustible liquid	
19:40	2.1	1075	Propane	
19:54	3	1203	Gasoline	
20:01	HOT	3257	Elevated temperature liquid, n.o.s.	
20:19	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
20:22	3, 8	1993, 3264	Flam. liq., n.o.s., Corrosive liquid, acidic, inorganic, n.o.s.	
20:48	HOT	3257	Elevated temperature liquid, n.o.s.	
20:50	3	1203	Gasoline	
20:55	8	1848	Propionic acid	
21:00	3	1203	Gasoline	
21:15	3	1203	Gasoline	
22:11	5.1, 2.2	1073	Oxygen	
22:40	3	1203	Gasoline	
23:12	3	1203	Gasoline	

### Road Side Survey Field Log

Location: 11E Washington County/Sullivan County Line			Date: 21APR06	
Time	Hazard Class	UN ID	Description	Notes
4:46	3	1203	Gasoline	
5:44	3	1203	Gasoline	
5:58	3	NA	Flammable	

6:06	2.1	1075	Propane	
6:43	3	1203	Gasoline	
7:00	3	1090	Acetone	
7:10	3	NA	Flammable and combustible liquid	
7:42	3, 5.1, 8	NA	Flammable, Oxidizer, Corrosive	
8:07	8	NA	Corrosive	
8:20	8	1791	Hypochlorite solution	
8:24	3	1203	Gasoline	
8:53	2.3, 8	3308	Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A	
9:11	5.1, 2.2	1073	Oxygen	
9:44	3	1203	Gasoline	
9:48	3, 8	2924	Flammable liquids, corrosive, n.o.s.	
10:07	3	1203	Gasoline	
10:07	8	1830	Sulfuric acid, > 50% acid	
10:16	3	1993	Flammable liquids, n.o.s	
10:25	3	1866	Resin solution, flammable	
10:58	2.1	1075	Propane	
11:05	2.2	3318	Ammonia solution, with > 50% ammonia	
11:08	6.1	NA	Poisonous	
11:14	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
11:27	3	1203	Gasoline	
11:50	5.1, 2.2	1073	Oxygen	
12:12	6.1	3287	Toxic liquid, inorganic, n.o.s. Inhalation Hazard IA	
12:24	8	2215	Maleic acid	
12:31	2.1	1001	Acetylene, dissolved	
13:31	8	1791, 1830	Hypochlorite soln, Sulfuric acid	
14:21	5.1, 2.2	1073	Oxygen	
14:31	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
14:56	2.1	1075	Propane	
15:29	8	1910	Calcium oxide	
15:34	3	1203	Gasoline	
16:09	3	1203	Gasoline	
16:38	3, 8	NA	Flammable and combustible liquid, Corrosive	
17:21	3	1203	Gasoline	
17:52	2.2	1950	Aerosols, corrosive, packing group III	
18:32	3	1203	Gasoline	
18:55	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
19:25	3	1203	Gasoline	

19:27	3	NA	Flammable and combustible liquid	
20:35	3	1203	Gasoline	
20:54	2.1	1075	Propane	
21:56	5.1, 2.2	1073	Oxygen	
22:26	3	1203	Gasoline	
23:48	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321				Date: 27APR06
Time	Hazard Class	UN ID	Description	Notes
3:28	3	1203	Gasoline	
5:03	3	1203	Gasoline	
5:03	3	1203	Gasoline	
5:55	3	1203	Gasoline	
6:01	3	1267	Petroleum crude oil	
6:19	3	1203	Gasoline	
6:30	3	1203	Gasoline	
6:31	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
6:46	3	1203	Gasoline	
7:14	3	1203	Gasoline	
7:27	3	1123	Butyl acetates	
7:49	3	1203	Gasoline	
8:04	3	1203	Gasoline	
8:16	8, D	NA	Corrosive, Mixed hazardous material	
8:22	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:47	8	1824	Sodium hydroxide, solution	
8:59	2.2	1013	Carbon dioxide	
9:14	2.1	1075	Propane	
9:39	3	1203	Gasoline	
10:03	3	1267	Petroleum crude oil	
10:26	3	1120	Butanols	
11:14	5.1, 2.2	1073	Oxygen	
11:19	6.2	3291	(Bio) medical wastes, n.o.s.	
11:22	3	1993	Flammable liquid, n.o.s.	
11:31	4.3	2463	Aluminum hydride	
11:44	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
12:08	5.1, 2.2	1073	Oxygen	
12:29	3	1203	Gasoline	
12:43	5.1	NA	Oxidizer	

12:51	3	1203	Gasoline	
13:19	5.1, 2.2	1073	Oxygen	
13:39	6.1	1916	2,2'-Dichlorodiethyl ether	
14:00	3	1203	Gasoline	
14:26	5.1	NA	Oxidizer	
15:07	8	1824	Sodium hydroxide, solution	
15:07	3	1203	Gasoline	
15:45	3	1993	Flammable liquid, n.o.s.	
15:54	3	1203	Gasoline	
15:53	2.2	1951	Argon, refrigerated liquid	
16:02	8, D		Corrosive, Mixed hazardous material	
16:11	6.2	3291	(Bio) medical wastes, n.o.s.	
16:25	2.1	1075	Propane	
18:34	8, D		Corrosive, Mixed hazardous material	
18:36	5.1, 2.2	1073	Oxygen	
18:39	3	1993	Flammable liquid, n.o.s.	
18:41	4.2	1362	Carbon, activated	
19:19	3	1993	Flammable liquid, n.o.s.	
19:20	3	1203	Gasoline	
19:36	2.2	NA	Compressed gas (non-flammable)	
20:52	3	1203	Gasoline	
21:02	3	1203	Gasoline	
21:05	3	1203	Gasoline	
22:21	3	1993	Flammable liquid, n.o.s.	

### Road Side Survey Field Log

Location: I-26 near Eastern Star (Exit 45)				Date: 1MAY06
Time	Hazard Class	UN ID	Description	Notes
0:15	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
0:25	3	1203	Gasoline	
0:29	3	1203	Gasoline	
0:44	3	1203	Gasoline	
0:48	3	1203	Gasoline	
0:59	2	1072	Oxygen	
1:13	3	1203	Gasoline	
1:22	3	1203	Gasoline	
1:26	3	1203	Gasoline	
1:30	3	1203	Gasoline	

1:33	8	1814	Potassium hydroxide, solution	
1:33	3	1203	Gasoline	
1:35	2.2	2187	Carbon Dioxide, Refrigerated Liquid	
1:39	6	2078	Toluene diisocyanate	
1:41	3	1203	Gasoline	
1:44	3	1203	Gasoline	
1:48	3	1203	Gasoline	
1:50	3	1203	Gasoline	
1:53	3	1993	Flammable liquid, n.o.s.	
1:57	D		Dangerous	
1:58	2.1	1978	Propane	
2:01	3	1276	n-Propyl acetate	
2:06	D		Dangerous	
2:12	3	1203	Gasoline	
2:17	6	2078	Toluene diisocyanate	
2:23	2	1072	Oxygen	
2:26	1.5	332	Blasting agent	
2:44	3	1203	Gasoline	
2:54	3	1203	Gasoline	
2:55	3	1203	Gasoline	
4:01	2.2	1977	Nitrogen, refrigerated liquid	
4:06	3	1203	Gasoline	
4:07	3	1268	Petroleum distillates, n.o.s.	
4:11	3	1203	Gasoline	
4:14	3	1203	Gasoline	
4:15	3	1203	Gasoline	
4:22	3	1993	Flammable liquids, n.o.s.	
4:26	3	1267	Crude oil	
4:26	3	1993	Flammable liquids, n.o.s.	
4:30	3	1203	Gasoline	
4:32	3	1993	Flammable liquids, n.o.s.	
4:37	6.1	2291	Lead compounds, soluble, n.o.s.	
4:41	3	1203	Gasoline	
4:44	3	2302	5-Methylhexan-2-one	
4:52	3	1203	Gasoline	
4:56	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
4:58	2.2	1066	Nitrogen, compressed	
5:04	8	3066	Paint	
5:11	2.1	1978	Propane	

5:41	6.1	1092	Acrolein, stabilized	
6:00	3	1203	Gasoline	
6:01	3	1203	Gasoline	
6:18	3	1203	Gasoline	
6:26	3	1203	Gasoline	
6:31	D	N/A	Mixed Shipment	
6:39	8	1830	Sulfuric acid with > 51% acid	
6:45	2.1	1075	Propane	
6:57	3	1203	Gasoline	
6:59	3	1203	Gasoline	
7:01	3	1203	Gasoline	
7:17	3	1203	Gasoline	
7:23	D		Dangerous	
7:39	8	2198	Phosphorus	
7:43	3	1178	2-Ethylbutyraldehyde	
7:56	2.3	2186	Hydrogen chloride, refrigerated liquid	
7:59	3	1203	Gasoline	
8:06	D	N/A	Mixed Shipment	
8:07	3	1866	Resin solution	
8:09	3	1173	Ethyl Acetate	
8:13	2.1	1075	Propane	
8:16	2.2	1072	Oxygen, compressed	
8:17	2.2	1073	Oxygen, refrigerated liquid	
8:23	8	2031	Nitric acid, >60% acid	
8:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:27	2.2	3318	Ammonia solution, with > 50% ammonia	
8:30	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:36	3	1203	Gasoline	
8:45	8	3264	Corrosive liquid, acidic, inorganic, NOS	
8:46	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:53	3	1203	Gasoline	
8:55	3	1203	Gasoline	
8:59	3	1133	Adhesives	
9:06	8	1760	Corrosive liquids, n.o.s.	
9:06	3	1203	Gasoline	
9:08	1D	81	Explosive, blasting, type A	
9:15	3	1202	Diesel fuel	
9:15	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
9:22	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	

9:27	2.3	1053	Hydrogen sulfide	
9:38	8	2794	Batteries, Wet, Acid	
9:48	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:50	8	1760	Corrosive liquids, n.o.s.	
9:55	3	1203	Gasoline	
10:01	3	1203	Gasoline	
10:16	3	1203	Gasoline	
10:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:32	3	1223	Kerosene	
10:40	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
10:43	8	1761	Cupriethylenediamine solution	
10:51	3	1203	Gasoline	
10:59	4.2	2793	Ferrous metal borings	
11:03	3	1203	Gasoline	
11:14	2.2	1072	Oxygen, compressed	
11:25	3	1268	Petroleum products, n.o.s.	
11:27	3	1203	Gasoline	
11:35	2.2	1046	Helium, compressed	
11:38	8	2031	Nitric acid, >60% acid	
11:42	3	1203	Gasoline	
12:03	3	1203	Gasoline	
12:08	3	1203	Gasoline	
12:09	3	1963	Helium, refrigerated liquid	
12:10	6.1	1062	Methyl amyl ketone,	
12:25	3	1267	Crude oil	
12:30	2.1	1978	Propane	
12:34	2.2, 2.1	1072 1001 1046	Helium, compressed/Oxygen, compressed/Acetylene, dissolved	
12:46	4.2	2793	Ferrous metal shavings	
12:58	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:05	2.2	1977	Nitrogen, refrigerated liquid (cryogenic)	
13:18	3	1268	Petroleum products, n.o.s.	
13:24	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
13:35	D		Dangerous	
13:41	3	1268	Petroleum products, n.o.s.	
13:49	3	1648	Acetonitrile	
13:57	3	1203	Gasoline	
14:00	3	1231	Methyl Acetate	
14:03	5.1	3139	Oxidizing liquid, n.o.s.	



14:20	3	1203	Gasoline	
14:25	3	1203	Gasoline	
14:31	3	1203	Gasoline	
14:44	3	1223	Kerosene	
14:49	3	1203	Gasoline	
14:57	3	1203	Gasoline	
15:08	3	1203	Gasoline	
15:16	3	1993	Flammable liquids, n.o.s.	
15:21	8	2796	Sulfuric acid with < 51% acid	
15:24	6.1	1843	Ammonium dinitro-o-cresolate	
15:36	3	1203	Gasoline	
15:43	3	1203	Gasoline	
15:57	8	1838	Titanium tetrachloride	
15:59	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:08	3	1203	Gasoline	
16:15	5.1, 2.2	1073	Oxygen	
16:15	3	1203	Gasoline	
16:20	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:23	2.1	1075	Propane	
16:37	8	2796	Sulfuric acid with < 51% acid	
16:39	3	1993	Flammable liquid, n.o.s.	
16:47	3	1231	Methyl Acetate	
16:47	3	1153	Ethylene glycol diethyl ether	
16:55	3	1863	Fuel, aviation, turbine engine	
16:56	3	1203	Gasoline	
17:05	3	1203	Gasoline	
17:08	8	2794	Batteries, wet, filled with acid,	
17:11	9	3077	Environmentally hazardous substances, solid, n.o.s.	
17:15	3	1993	Flammable	
17:18	3	1203	Gasoline	
17:21	3	1993	Flammable liquids, n.o.s	
17:23	5.1, 2.2	1073	Oxygen	
17:39	4.1	3178	Flammable solid, inorganic, n.o.s.	
17:42	D		Dangerous	
17:55	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
18:09	3	1203	Gasoline	
18:17	8	2693	Bisulfites, aqueous solutions, n.o.s.	
18:23	2.2	N/A	Non-Flammable Gas	
18:35	8	1760	Corrosive liquids, n.o.s.	

18:41	3	1203	Gasoline	
18:45	3	1203	Gasoline	
18:51	5.1, 2.2	NA	Oxygen	
19:05	2.2	1073	Oxygen, refrigerated liquid	
19:11	8	2796	Sulfuric acid with < 51% acid	
19:12	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
19:22	3	1230	Methanol	
19:33	3	1993	Flammable liquid, n.o.s.	
19:40	3	1223	Kerosene	
19:51	3	2302	5-Methylhexan-2-one	
20:03	3	1090	Acetone	
20:12	2.2	1072	Oxygen, compressed	
20:34	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:49	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
20:59	8	1789	Hydrochloric acid	
21:11	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
21:49	8	1824	Sodium hydroxide solution	
21:53	6.1, 8	1752	Chloroacetyl Chloride	
22:11	3	1203	Gasoline	
22:34	3	1203	Gasoline	
22:44	3	1203	Gasoline	
23:01	HOT	3257	Elevated temperature liquid, n.o.s.	
23:13	3	1203	Gasoline	
23:29	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 near Eastern Star (Exit 45)				Date: 2MAY06
Time	Hazard Class	UN ID	Description	Notes
0:43	3	1203	Gasoline	
0:59	3	1203	Gasoline	
1:19	3	1203	Gasoline	
1:30	2.1	1075	Petroleum Gases, Liquefied (Propane)	
1:51	3	1203	Gasoline	
2:34	3	1268	Petroleum distillates, n.o.s.	
3:45	3	1203	Gasoline	
3:57	2.1	1075	Propane	
4:14	3	1203	Gasoline	
4:36	3	1203	Gasoline	

5:11	8	1760	Corrosive liquids, n.o.s.	
5:41	3	1203	Gasoline	
6:07	3	1203	Gasoline	
6:18	3	1993	Flammable liquids, n.o.s.	
6:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	
6:29	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:38	8	1760	Corrosive liquids, n.o.s.	
6:45	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
6:52	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
7:17	D	N/A	Mixed Shipment	
7:23	9	2211	Polymeric beads, expandable, evolving flammable vapor	
7:39	2	N/A	Non-Flammable Gas	
7:43	3	1203	Gasoline	
7:49	3, 4.3	3207	Organometallic compound, solution	
8:01	3	1993 1993 1993	Flammable liquids, n.o.s.	
8:06	8	1760	Corrosive liquids, n.o.s.	
8:13	8	NA	Corrosive	
8:16	8	1791	Hypochlorite solutions	
8:25	D	N/A	Mixed Shipment	
8:26	2.1	1075	Propane	
8:27	3	1133	Adhesives, containing a flammable, liquid	
8:38	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
8:38	HOT	9259	Elevated temperature material, liquid, n.o.s.	
8:42	2.2	1977	Nitrogen, refrigerated liquid	
8:46	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
8:53	3	1203	Gasoline	
8:56	5.1, 2.2	1073	Oxygen	
8:58	9	3077	Hazardous waste, solid, n.o.s.	
9:06	3	1203	Gasoline	
9:18	9	3082	Hazardous Waste, Liquid	
9:25	3	1866	Resin solution, flammable	
9:28	3	1203	Gasoline	
9:37	3	1203	Gasoline	
9:38	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
9:48	3	1307	Xylenes	
9:52	3	1203	Gasoline	
9:55	3	1203	Gasoline	

10:01	2.2	1072	Oxygen, compressed	
10:06	2.1, 2.2	N/A	Compressed gas (flam., and non-flam.)	
10:28	3	1203	Gasoline	
10:32	5.1, 2.2	NA	Oxygen	
10:43	8	1719	Caustic alkali liquids, n.o.s.	
10:47	6.1	1092	Acrolein, stabilized	
11:06	2.2	1072	Oxygen, compressed	
11:14	3, 8	1993 3264	Flammable liquids, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	
11:25	9	3077	Hazardous waste, solid, n.o.s.	
11:32	8	2794	Batteries, Wet, Acid	
11:42	2.2	1951	Argon, refrigerated liquid	
12:09	8	1760	Corrosive liquids, n.o.s.	
12:10	3	1993	Flammable liquids, n.o.s.	
12:27	2.2	1073	Oxygen, refrigerated liquid	
12:53	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:05	3	1999	Asphalt	
13:38	3	1203	Gasoline	
13:40	3	1203	Gasoline	
13:41	8	2796	Sulfuric acid with < 51% acid	
13:57	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
14:12	8	1715	Acetic anhydride	
14:23	2.2	N/A	Non-Flammable Gas	
14:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:31	8	1760	Corrosive liquids, n.o.s.	
14:37	2.1	1075	Propane	
14:52	3	1203	Gasoline	
15:08	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:14	3	1268	Petroleum products, n.o.s.	
15:27	8	1784	Hexyltrichlorosilane	
15:43	3	1203	Gasoline	
15:47	3	1993	Flammable liquids, n.o.s.	
16:03	2.2	1072	Oxygen, compressed	
16:20	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
16:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:23	2.2	1066	Nitrogen, compressed	
16:37	3	1203	Gasoline	
16:39	2.1	1978	Propane	
16:45	9	3257	Elevated temperature liquid, n.o.s.	
16:56	3	1993	Flammable liquids, n.o.s.	

17:08	3	2302	5-Methylhexan-2-one	
17:11	3	1245	Methyl isobutyl ketone	
17:22	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:39	8	3066	Paint	
17:52	8	1760	Corrosive liquids, n.o.s.	
17:55	3	1203	Gasoline	
18:06	3	1203	Gasoline	
18:15	3	1993	Flammable liquids, n.o.s	
18:25	3, 2	N/A	Flammable and Non-Flammable Gas	
18:28	9	3082	Hazardous waste, liquid, n.o.s.	
18:32	3	1203	Gasoline	
18:45	2.2	1072	Oxygen, compressed	
19:09	2.1	1978	Propane	
19:21	2.2	1073	Oxygen, refrigerated liquid	
19:33	8	1760	Corrosive liquids, n.o.s.	
19:42	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
19:55	3	1203	Gasoline	
20:01	3	1203	Gasoline	
20:47	3	1203	Gasoline	
21:35	3	1203	Gasoline	
21:49	8	1760	Corrosive liquids, n.o.s.	
22:10	3	1203	Gasoline	
23:43	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 near Fall Branch, TN (Exit 50)				Date: 5MAY06
Time	Hazard Class	UN ID	Description	Notes
0:00	3	1203	Gasoline	
0:01	3	1203	Gasoline	
0:04	3	1203	Gasoline	
0:08	3	1203	Gasoline	
0:44	3	1203	Gasoline	
0:45	8	1814	Potassium hydroxide, solution	
1:01	3	1203	Gasoline	
1:10	2	1072	Oxygen	
1:13	3	1203	Gasoline	
1:19	D		Dangerous	
1:20	6.1	1549	Antimony compounds, inorganic, solid, n.o.s.	

1:21	3	1203	Gasoline	
1:30	3	1203	Gasoline	
1:31	3	1203	Gasoline	
1:33	6.1	2291	Lead compounds, soluble, n.o.s.	
1:33	3	1993	Flammable liquids, n.o.s.	
1:36	3	1203	Gasoline	
1:44	3	1203	Gasoline	
1:47	6	2078	Toluene diisocyanate	
1:47	3	1993	Flammable liquid, n.o.s.	
2:16	8	1759	Corrosive solids, n.o.s.	
2:16	3	1203	Gasoline	
2:17	3	1203	Gasoline	
2:18	6	2078	Toluene diisocyanate	
2:21	3	1203	Gasoline	
2:38	8	NA	Corrosive	
2:32	2	2202	Hydrogen selenide, anhydrous	
2:43	3	1203	Gasoline	
2:44	1.5	332	Blasting agent	
2:47	5.1	3139	Oxidizing liquid, n.o.s.	
2:59	3	1203	Gasoline	
3:02	3	1276	n-Propyl acetate	
3:02	3	1203	Gasoline	
3:03	3	1267	Crude oil	
3:09	3	1150	1,2-Dichloroethylene	
3:28	3	1203	Gasoline	
3:40	3	1203	Gasoline	
3:58	2	1072	Oxygen	
3:33	3/6.1	1986	Alcohols, flammable, toxic, n.o.s.	
3:36	D		Dangerous	
3:42	3	1203	Gasoline	
3:44	9	3077	Environmentally hazardous substances, solid, n.o.s.	
3:45	3	1203	Gasoline	
3:49	2.1	1978	Propane	
3:54	D		Dangerous	
4:03	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
4:09	4.1	3178	Flammable solid, inorganic, n.o.s.	
4:14	3	1993	Flammable liquids, n.o.s.	
4:21	8	2693	Bisulfites, aqueous solutions, n.o.s.	
4:32	3	1203	Gasoline	

4:54	8	1824	Sodium hydroxide solution	
4:55	5.1	1748	Calcium hypochlorite, dry	
4:29	8	1760	Corrosive liquids, n.o.s.	
4:35	3	1203	Gasoline	
4:38	4.2	2793	Ferrous metal powders	
4:43	2.1	1075	Liquefied petroleum gas	
4:44	4.1	3178	Flammable solid, inorganic, n.o.s.	
4:45	3	1203	Gasoline	
5:00	5.1	3139	Oxidizing liquid, n.o.s.	
5:01	3	1203	Gasoline	
5:02	3	1203	Gasoline	
5:27	D	N/A	Mixed Shipment	
5:30	3	1203	Gasoline	
5:31	3	1203	Gasoline	
5:42	3	1307	Xylenes	
5:51	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:55	4.3	1436	Zinc powder	
5:31	3	1203	Gasoline	
5:56	2.2	1073	Oxygen	
6:49	D		Dangerous	
6:37	3	1202	Diesel fuel	
6:58	1.5	332	Blasting agent	
6:35	8	2796	Sulfuric acid with < 51% acid	
6:45	3	1203	Gasoline	
6:49	8	NA	Corrosive	
6:42	3	1173	Ethyl Acetate	
6:43	8	2794	Batteries, Wet, Acid	
6:58	3	1993	Flammable liquids, n.o.s	
7:07	5.1	2880	Calcium hypochlorite, hydrated	
7:09	6.1	1092	Acrolein, stabilized	
7:21	2.1	1978	Propane	
7:21	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:36	3	1203	Gasoline	
7:42	3	1268	Petroleum products, n.o.s.	
7:44	8	2198	Phosphorus	
7:57	2.2	1013	Carbon dioxide	
7:59	8	2796	Sulfuric acid with < 51% acid	
7:45	3	1203	Gasoline	
7:47	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	

8:03	3	1203	Gasoline	
8:11	D	N/A	Mixed Shipment	
8:13	3	1203	Gasoline	
8:29	5.1, 2.2	1073	Oxygen	
8:29	3	1202	Diesel fuel	
8:32	2.2	1066	Nitrogen, compressed	
8:33	8	1830	Sulfuric acid with > 51% acid	
8:38	8	1760	Corrosive liquids, n.o.s.	
8:42	3	2302	5-Methylhexan-2-one	
8:43	6.1	2291	Lead compounds, soluble, n.o.s.	
8:45	3	1203	Gasoline	
8:45	2.2	1072	Oxygen, compressed	
8:51	3	1866	Resin solution, flammable	
8:33	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:38	8	2031	Nitric acid, >60% acid	
8:43	3	1203	Gasoline	
8:47	8	1760	Corrosive liquids, n.o.s.	
8:37	3	1203	Gasoline	
8:39	3, 2	N/A	Flammable and Non-Flammable Gas	
8:45	3	1203	Gasoline	
8:54	2.2	1072	Oxygen, compressed	
8:59	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
9:12	8	1833	Sulfurous acid	
9:13	2.2	N/A	Non-Flammable Gas	
9:16	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:26	3	1203	Gasoline	
9:29	2.2	1073	Oxygen, refrigerated liquid	
9:31	3	1294	Toluene	
9:43	2.2	1073	Oxygen, refrigerated liquid	
9:44	8	2735	Amines, liquid, corrosive, n.o.s.	
9:46	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
9:48	6.1	3285	Vanadium compound, n.o.s.	
9:54	3	1203	Gasoline	
9:05	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:10	3	1203	Gasoline	
9:26	8	NA	Corrosive	
9:31	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
9:44	2.2	1073	Oxygen, refrigerated liquid	
9:56	2.2	1983	Refrigerant gas R 133a	



9:33	5.1	1479	Oxidizing solid, n.o.s.	
9:54	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
9:08	3	1203	Gasoline	
10:00	2.2	1951	Argon, refrigerated liquid	
10:10	3	1993	Flammable liquids, n.o.s.	
10:23	4.2	2546	Titanium powder, dry	
10:24	3	1203	Gasoline	
10:24	8	NA	Corrosive	
10:26	2.2	1072	Oxygen, compressed	
10:33	3	1203	Gasoline	
10:37	3	1203	Gasoline	
10:41	1D	81	Explosive, blasting, type A	
10:51	3	1203	Gasoline	
10:18	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
10:23	3	1203	Gasoline	
10:34	8	2794	Batteries, wet, filled with acid,	
10:53	8	1760	Corrosive liquids, n.o.s.	
11:03	3	1203	Gasoline	
11:12	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
11:16	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
11:22	3	1203	Gasoline	
11:23	6.1	2771	Thiocarbamate pesticides, solid, toxic.	
11:34	2.2	1073	Oxygen, refrigerated liquid	
11:43	3	1203	Gasoline	
11:45	3	1993	Flammable liquids, n.o.s.	
11:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
11:17	3	1294	Toluene	
12:01	8	1719	Caustic alkali liquids, n.o.s.	
12:04	7	3327	Radioactive material, Type A package, fissile	
12:23	3	1203	Gasoline	
12:40	8	1824	Sodium hydroxide solution	
12:43	2.2	1072	Oxygen, compressed	
12:45	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:54	9	2211	Polymeric beads, expandable evolving flammable vapor	
12:59	3	1993	Flammable liquids, n.o.s.	
12:51	3	1203	Gasoline	
12:42	3	1203	Gasoline	
12:31	2.1	1075	Propane	
12:21	3	1203	Gasoline	

12:15	3	1223	Kerosene	
12:08	3	1203	Gasoline	
12:45	8	1760	Corrosive liquids, n.o.s.	
12:20	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:00	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:08	3	1203	Gasoline	
13:16	7	2909	Radioactive material, excepted package	
13:28	3	1203	Gasoline	
13:36	8	NA	Corrosive	
13:55	3	1203	Gasoline	
13:58	8	1760	Corrosive liquids, n.o.s.	
13:38	3	1203	Gasoline	
13:35	2.2	N/A	Non-Flammable Gas	
13:06	8	2796	Sulfuric acid with < 51% acid	
13:19	3	1203	Gasoline	
13:27	3	1203	Gasoline	
13:45	3	1203	Gasoline	
13:43	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
13:27	3	1131	Carbon disulfide	
14:09	3	1203	Gasoline	
14:12	8	1755	Chromic acid solution	
14:19	3	1280	Propylene oxide	
14:27	3	1203	Gasoline	
14:43	3	1993	Flammable liquids, n.o.s.	
14:43	2.2	1072	Oxygen, compressed	
14:48	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
14:57	2.2	1951	Argon, refrigerated liquid	
14:25	3	1090	Acetone	
14:33	3	1203	Gasoline	
14:18	5.1, 2.2	NA	Oxygen	
14:44	8	1796	Nitrating acid mixtures with > 50% nitric acid	
14:03	D, 3	1866	Resin solution, Mixed hazardous materials	
14:37	3	1203	Gasoline	
15:08	3	NA	Flammable and combustible liquid	
15:15	8	2796	Sulfuric acid with < 51% acid	
15:15	2.2	1072	Oxygen, compressed	
15:23	3	1203	Gasoline	
15:41	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
15:49	3	1203	Gasoline	

15:53	3	1203	Gasoline	
15:09	8	1830	Sulfuric acid with > 51% acid	
16:09	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
16:21	8	1760	Corrosive liquids, n.o.s.	
16:25	3	1203	Gasoline	
16:34	3	1203	Gasoline	
16:35	3	1268	Petroleum distillates, n.o.s.	
16:40	3	1268	Petroleum products, n.o.s.	
16:53	8	1715	Acetic anhydride	
16:13	8	NA	Corrosive	
16:48	3	1203	Gasoline	
16:58	6.1	2291	Lead compounds, soluble, n.o.s.	
16:44	8	2796	Sulfuric acid with < 51% acid	
17:10	8	1715	Acetic anhydride	
17:16	3	1202	Diesel fuel	
17:17	3	1178	2-Ethylbutyraldehyde	
17:27	8	2796	Sulfuric acid with < 51% acid	
17:27	3	1203	Gasoline	
17:44	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
17:57	3	1203	Gasoline	
17:00	8	2796	Sulfuric acid with < 51% acid	
17:31	7	2908	Radioactive material, excepted packaging	
17:33	3	1203	Gasoline	
17:47	6.1	2291	Lead compounds, soluble, n.o.s.	
17:24	3	1993	Flammable liquids, n.o.s.	
18:34	3	1203	Gasoline	
18:43	2.1	1075	Propane	
18:53	D, 3	1866	Resin solution, Mixed hazardous materials	
18:57	3	1223	Kerosene	
18:05	8	1760	Corrosive liquids, n.o.s.	
19:06	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:24	4.2	2793	Ferrous metal borings	
19:26	D	N/A	Mixed Shipment	
19:29	3	1203	Gasoline	
19:41	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
19:48	8	2218	Acrylic acid, inhibited	
19:14	D	N/A	Mixed Shipment	
20:16	3	1203	Gasoline	
20:17	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	

20:17	3	N/A	Flammable and Combustible Liquid	
20:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:29	3	1153	Ethylene glycol diethyl ether	
20:32	3	2348	Butyl acrylates, stabilized	
20:40	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
20:00	3	1203	Gasoline	
20:16	3	1203	Gasoline	
20:46	4.2	2009	Zirconium, dry, finished sheets, strips, wires	
20:53	3	1203	Gasoline	
21:32	9	3082	Hazardous Waste, Liquid	
21:50	8	NA	Corrosive	
21:52	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
21:54	3	1203	Gasoline	
21:57	3	1267	Crude oil	
21:04	8	1789	Hydrochloric acid	
21:19	3	1203	Gasoline	
21:29	HOT	9259	Elevated temperature material, liquid, n.o.s.	
22:10	2.2	1977	Nitrogen, refrigerated liquid	
22:13	2.1	1075	Propane	
22:16	3	1203	Gasoline	
22:49	3	1203	Gasoline	
22:50	3	1203	Gasoline	
22:53	3	1203	Gasoline	
22:29	3	1268	Petroleum products, n.o.s.	
22:23	3	1203	Gasoline	
22:39	3	1203	Gasoline	
22:47	8	NA	Corrosive	
23:08	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321

Date: 6MAY06

Time	Hazard Class	UN ID	Description	Notes
6:37	3	1203	Gasoline	
6:41	3	1203	Gasoline	
7:50	3	1203	Gasoline	
8:06	2.1	1075	Propane	
8:43	3	1203	Gasoline	
8:56	3	1203	Gasoline	

9:15	2.1	1075	Propane	
9:57	3	1203	Gasoline	
11:02	3	1203	Gasoline	
12:31	3	1203	Gasoline	
12:33	3	1268	Petroleum products, n.o.s.	
13:01	2.2	3156	Compressed gas, oxidizing, n.o.s.	
13:13	3	1203	Gasoline	
13:26	3	1203	Gasoline	
14:09	3	1203	Gasoline	
17:31	3	1993	Flammable liquid, n.o.s.	
18:24	3	1203	Gasoline	
18:38	5.1, 2.2	1073	Oxygen	
19:58	3	1203	Gasoline	
20:26	3	1993	Flammable liquid, n.o.s.	
20:51	8	NA	Corrosive	
21:44	5.1, 2.2	1073	Oxygen	
22:00	3	1203	Gasoline	
22:12	3	1203	Gasoline	
22:37	5.1	NA	Oxidizer	
22:52	3	1203	Gasoline	
23:46	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E near Jockey Creek			Date: 10MAY06	
Time	Hazard Class	UN ID	Description	Notes
4:36	3	1203	Gasoline	
5:24	2.1	1075	Propane	
7:10	2.1	1075	Propane	
7:47	3	1203	Gasoline	
7:55	3	1999	Asphalt	
8:17	3	1203	Gasoline	
8:51	2.1	1075	Propane	
9:30	2.1	1075	Propane	
9:41	2.1	1075	Propane	
10:33	2.1	1075	Propane	
10:54	2.1	1075	Propane	
11:16	2.1	1075	Propane	
11:46	8	1760	Corrosive liquids, n.o.s.	

12:39	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
13:20	2.1	1075	Propane	
14:10	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:29	3	3286	Flammable liquid, toxic, corrosive, n.o.s..	
15:42	2.1	1075	Propane	
15:55	2.1	1075	Propane	
16:05	2.1	1049	Hydrogen, compressed	
16:06	D		Dangerous	
16:43	4.2	1376	Iron oxide, spent	
17:20	2.1	1075	Propane	
17:44	3	1219	Isopropanol	
17:50	3	1999	Asphalt	
18:35	3	1999	Asphalt	
19:02	3	1999	Asphalt	
20:37	8	1719	Caustic alkali liquids, n.o.s.	
21:40	3	1203	Gasoline	
21:52	3	1203	Gasoline	
22:20	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 near Okolona Road (Exit 28)			Date: 18MAY06	
Time	Hazard Class	UN ID	Description	Notes
0:02	3	1203	Gasoline	
0:03	3	1203	Gasoline	
0:35	3	1993	Flammable liquids, n.o.s.	
0:39	2.2	1072	Oxygen, compressed	
0:40	3	1203	Gasoline	
0:47	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
1:07	3	1090	Acetone	
1:09	3	1203	Gasoline	
1:12	5.1, 2.2	NA	Oxygen	
1:15	8	1719	Caustic alkali liquids, n.o.s.	
1:27	3	1203	Gasoline	
1:32	3	1993	Flammable liquids, n.o.s.	
1:37	3	1203	Gasoline	
1:37	3	1268	Petroleum distillates, n.o.s.	
2:12	2.3	1050	Hydrogen chloride, anhydrous	
2:14	8	1715	Acetic anhydride	

2:15	3	1203	Gasoline	
2:23	8	1760	Corrosive liquids, n.o.s.	
2:26	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
2:32	D	N/A	Mixed Shipment	
2:49	8	2491	Ethanolamine	
3:05	3	1203	Gasoline	
3:25	D	N/A	Mixed Shipment	
3:39	2.1	1075	Propane	
3:45	D	N/A	Mixed Shipment	
3:46	3	1203	Gasoline	
3:58	2.1	1075	Propane	
4:45	3	1203	Gasoline	
4:58	4.3	2013	Strontium Phosphide	
5:10	8	1773	Ferric chloride, anhydrous	
5:32	3	1203	Gasoline	
5:41	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:44	3	1203	Gasoline	
5:54	5.1, 2.2	1073	Oxygen	
6:01	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
6:04	HOT	9259	Elevated temperature material, liquid, n.o.s.	
6:06	3	1219	Isopropanol	
6:13	2.2	1977	Nitrogen, refrigerated liquid	
6:36	3	1203	Gasoline	
6:39	9	3082	Hazardous Waste, Liquid	
6:42	3	1203	Gasoline	
6:44	3	1203	Gasoline	
6:52	3	1203	Gasoline	
6:56	D	N/A	Mixed Shipment	
6:58	2.2, 2.1	1072 1001 1046	Helium, compressed / Oxygen, compressed / Acetylene, dissolved	
7:18	4.2	1376	Iron oxide, spent	
7:19	6.1	1092	Acrolein, stabilized	
7:23	D	N/A	Mixed Shipment	
7:37	2.2	1072	Oxygen, compressed	
7:39	3	1203	Gasoline	
7:40	3	1203	Gasoline	
7:45	3	1203	Gasoline	
7:49	2.1	1075	Propane	
8:06	3	1203	Gasoline	

8:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:34	3, 8	1993 3264	Flammable liquids, n.o.s. / Corrosive liquid, acidic, inorganic, n.o.s.	
8:35	3	1203	Gasoline	
8:41	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:10	3	1999	Asphalt	
9:14	3	1203	Gasoline	
9:20	3	1203	Gasoline	
9:28	2.2	1029	Dichlorofluoromethane	
9:33	7	N/A	Radio Active Material	
9:41	3, 2.1, 5.1	1193 1037 1504	Ethyl methyl ketone / Ethyl chloride / Sodium peroxide	
9:42	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
9:44	8	1791	Hypochlorite solutions	
9:55	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
10:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:01	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:06	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:12	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
10:24	3, 8, 8	1193 2834 1760	Ethyl methyl ketone / Phosphorous acid / Corrosive liquids, n.o.s.	
10:28	6.1	2312	Phenol, molten	
10:33	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:38	3	1203	Gasoline	
10:43	8	NA	Corrosive	
10:49	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
10:53	3	1866	Resin solution	
11:02	8	1760	Corrosive liquids, n.o.s.	
11:19	3	1131	Carbon disulfide	
11:26	3	1203	Gasoline	
11:30	3	1203	Gasoline	
11:35	3	1203	Gasoline	
11:38	2.2	1046	Helium, compressed	
11:43	8	2794	Batteries, Wet, Acid	
11:43	3	1203	Gasoline	
11:44	3, 4.3	3207	Organometallic compound, solution	
11:51	2.2	1072	Oxygen, compressed	
11:57	2.2	1951	Argon, refrigerated liquid	



12:05	2.2	1046	Helium, compressed	
12:29	2.2	1073	Oxygen, refrigerated liquid	
12:35	8	1910	Calcium oxide	
12:42	3	1203	Gasoline	
13:03	9	3257	Elevated temperature liquid, n.o.s.	
13:16	3	1993	Flammable liquids, n.o.s.	
13:27	3	1203	Gasoline	
13:37	2.2	1072	Oxygen, compressed	
13:42	3	1203	Gasoline	
13:54	3	1203	Gasoline	
14:02	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:03	8	1784	Hexyltrichlorosilane	
14:18	6.1	1092	Acrolein, stabilized	
14:20	8	1789	Hydrochloric acid	
14:32	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
14:36	3	N/A	Flammable and Combustible Liquid	
14:44	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:46	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
14:57	3	1203	Gasoline	
15:15	3	1203	Gasoline	
15:21	3	1203	Gasoline	
15:37	3, 2	N/A	Flammable and Non-Flammable Gas	Loose tanks
15:42	3	2348	Butyl acrylates, stabilized	
16:01	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:15	3	1280	Propylene oxide	
16:36	4.2	2793	Ferrous metal powders	
16:40	2.2	1072	Oxygen, compressed	
16:43	2.2	1073	Oxygen, refrigerated liquid	
16:45	8	1760	Corrosive liquids, n.o.s.	
16:49	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:51	3	1203	Gasoline	
16:53	2.2	1073	Oxygen, refrigerated liquid	
17:08	3	1993	Flammable liquids, n.o.s.	
17:15	3	1203	Gasoline	
17:31	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
17:50	3	1203	Gasoline	
17:53	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
17:56	1D	81	Explosive, blasting, type A	
18:03	9	3082	Hazardous waste, liquid, n.o.s.	

18:06	3	1993	Flammable liquids, n.o.s.	
18:19	3	1203	Gasoline	
18:21	9	3077	Environmentally hazardous substances, solid, n.o.s.	
18:33	3	NA	Flammable and combustible liquid	
18:35	3	1203	Gasoline	
18:50	3	1203	Gasoline	
19:20	8	1760	Corrosive liquids, n.o.s.	
19:32	3	1203	Gasoline	
19:36	3	1203	Gasoline	
19:55	3	1993	Flammable liquids, n.o.s.	
20:16	2.2	1073	Oxygen, refrigerated liquid	
20:25	2.2	N/A	Non-Flammable Gas	
20:30	4.1	1869	Magnesium	
20:40	3	1203	Gasoline	
20:42	3	1203	Gasoline	
20:44	2.2	1072	Oxygen, compressed	
20:52	3	1203	Gasoline	
21:09	3	1307	Xylenes	
21:17	2.2	2187	Carbon dioxide, refrigerated liquid	
21:29	3	1203	Gasoline	
21:31	3	1203	Gasoline	
21:31	2.1	1075	Propane	
21:34	3	1203	Gasoline	
21:41	2.1	1049	Hydrogen, compressed	
21:47	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
21:50	3	1203	Gasoline	
21:50	2.2	1073	Oxygen, refrigerated liquid	
21:55	3	1203	Gasoline	
21:55	3	1203	Gasoline	
22:03	3	1203	Gasoline	
22:27	8	2794	Batteries, wet, filled with acid,	
22:33	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
22:40	8	1760	Corrosive liquids, n.o.s.	
23:12	3	1203	Gasoline	
23:32	2.2	N/A	Non-Flammable Gas	
23:48	2.2	1073	Oxygen, refrigerated liquid	

### Road Side Survey Field Log

Location: US-11E at Sullivan County Line

Date: 20MAY06

Time	Hazard Class	UN ID	Description	Notes
3:56	3	1203	Gasoline	
6:05	D	NA	Mixed hazardous materials	
7:04	2.1	1075	Propane	
7:25	4.1	2001	Cobalt naphthenates, powder	
8:04	3	1203	Gasoline	
9:47	8	NA	Corrosive	
9:58	3	1203	Gasoline	
10:05	5.1, 2.2	1073	Oxygen	
10:19	2.3	1017	Chlorine	
10:53	2.1	1075	Propane	
11:04	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:23	3	1203	Gasoline	
11:52	2.3	1016	Carbon monoxide, compressed	
12:59	8	NA	Corrosive	
13:08	3	1203	Gasoline	
13:39	5.1, 2.2	1073	Oxygen	
14:22	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:19	2.1	1075	Propane	
17:32	3	1203	Gasoline	
18:00	3	NA	Flammable and combustible liquid	
19:37	3	1203	Gasoline	
20:45	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 near Eastern Star (Exit 45)

Date: 2JUN06

Time	Hazard Class	UN ID	Description	Notes
0:02	3	NA	Flammable and combustible liquid	
0:26	3	1203	Gasoline	
1:42	3	1203	Gasoline	
2:34	3	1203	Gasoline	
3:58	5.1	NA	Oxidizer	
4:35	3	1203	Gasoline	
5:19	3	1203	Gasoline	
5:33	3, 9	1110, 3082,	Methyl amyl ketone, Haz. waste, liquid, Flam. liq.	

		1993		
5:43	2.1	1978	Propane	
6:01	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
6:12	3	1203	Gasoline	
6:24	3	1202	Diesel fuel	
6:27	HOT	3257	Elevated temperature liquid, n.o.s.	
6:32	3	1203	Gasoline	
6:38	3	1202	Diesel fuel	
6:42	3	1993	Flammable liquid, n.o.s.	
7:03	2.2	1951	Argon, refrigerated liquid	
7:15	3	1268	Petroleum products, n.o.s.	
7:21	1.4	NA	Explosives (no significant blast hazard)	
7:24	3	1203	Gasoline	
7:27	2.2	1066	Nitrogen, compressed	
7:32	2.2	1951	Argon, refrigerated liquid	
7:34	5.1	NA	Oxidizer	
7:37	3	1203	Gasoline	
7:43	3	1145	Cyclohexane	
7:50	8	1791	Hypochlorite solution	
7:57	2.1	1978	Propane	
8:04	4.1	1334	Naphthalene, crude	
8:05	5.1, 2.2	1073	Oxygen	
8:09	5.1, 2.2	1073	Oxygen	
8:09	2.2	2187	Carbon dioxide, refrigerated liquid	
8:11	3	1203	Gasoline	
8:25	5.1, 2.2	1073	Oxygen	
8:44	8	1830	Sulfuric acid with > 51% acid	
8:45	8	1824	Sodium hydroxide solution	
8:46	2.3, 8	1017	Chlorine	
8:55	3	1203	Gasoline	
9:10	3	1203	Gasoline	
9:23	3	NA	Flammable and combustible liquid	
9:30	3	1280	Propylene oxide	
9:33	8	1759	Corrosive solids, n.o.s.	
9:34	5.1	NA	Oxidizer	
9:38	3	1993	Flammable liquid, n.o.s.	
9:50	3	1134	Chlorobenzene	
9:55	D	NA	Mixed hazardous materials	
10:00	3	1268	Petroleum products, n.o.s.	

10:00	3	1268	Petroleum distillates, n.o.s.	
10:05	8	1805	Phosphoric acid, liquid	
10:35	4.1	1350	Sulfur	
10:38	3	NA	Flammable and combustible liquid	
10:48	8	NA	Corrosive	
10:55	1.1G	333	Fireworks	
10:56	8	2031	Nitric acid, with > 70% nitric acid	
10:59	3	1203	Gasoline	
11:00	2.2	1013	Carbon dioxide	
11:04	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
11:09	5.1	3375	Ammonium nitrate emulsion	
11:19	5.1	1942	Ammonium nitrate w/ NMT 0.2% CM	
11:24	3	1203	Gasoline	
11:24	3	1268	Petroleum products, n.o.s.	
11:33	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:48	5.1, 2.2	1073	Oxygen	
11:51	3, 9	1110, 1993	Methyl amyl ketone, Flam. liq., n.o.s.	
12:12	3, D	1866	Resin solution, Mixed hazardous materials	
12:25	4.1	3089	Metal powders, flammable, n.o.s.	
12:29	5.1	NA	Oxidizer	
12:29	8	1715	Acetic anhydride	
12:39	8	2218	Acrylic acid, inhibited	
12:41	3	NA	Flammable and combustible liquid	
12:48	2.1	1075	Propane	
12:49	2.2	1066	Nitrogen, compressed	
12:49	HOT	3257	Elevated temperature liquid, n.o.s.	
12:54	8	1760	Corrosive liquids, n.o.s.	
13:08	3	1219	Isopropanol	
13:11	HOT	3257	Elevated temperature liquid, n.o.s.	
13:13	3	1203	Gasoline	
13:24	1.2G	334	Fireworks	
13:26	3	1203	Gasoline	
13:30	3	1203	Gasoline	
13:35	5.1, 2.2	1073	Oxygen	
13:54	3	1203	Gasoline	
13:54	3	1268	Petroleum products, n.o.s.	
13:58	3	1203	Gasoline	
14:09	3	1203	Gasoline	

14:26	8	1760	Corrosive liquids, n.o.s.	
14:27	2.2	1073	Oxygen	
14:32	3	1203	Gasoline	
14:33	3	1203	Gasoline	
14:42	3	1268	Petroleum products, n.o.s.	
14:44	3	1203	Gasoline	
14:46	8, 3	NA	Corrosive, Flammable and combustible liquid	
14:49	3	1203	Gasoline	
14:57	8	1830	Sulfuric acid with > 51% acid	
15:09	8	3093	Corrosive liquids, oxidizing, n.o.s.	
15:16	4.1	3178	Flammable solid, inorganic, n.o.s.	
15:18	3	1268	Petroleum distillates, n.o.s.	
15:20	3	1993	Flammable liquid, n.o.s.	
15:21	8	1907	Soda lime	
15:27	HOT	3257	Elevated temperature liquid, n.o.s.	
15:31	2.1	1075	Propane	
15:35	3	1267	Petroleum crude oil	
15:35	3	1093	Acrylonitrile	
15:48	2.1	1075	Propane	
15:54	6.2	3291	(Bio) medical waste	
16:01	1.4S	337	Fireworks	
16:01	3	1129	Butyraldehyde	
16:04	3	1308	Vinyl acetate	
16:07	2.2	1073	Oxygen	
16:08	2.2	1977	Nitrogen, refrigerated liquid	
16:16	2.2	1013	Carbon dioxide	
16:24	8	1824	Sodium hydroxide, solution	
16:32	3	1090	Acetone	
16:34	3	1203	Gasoline	
16:34	8	1715	Acetic anhydride	
16:39	4.3	3170	Aluminum processing by-products	
16:39	5.1, 2.2	1073	Oxygen	
16:59	2.1	1978	Propane	
17:01	2.1	1075	Propane	
17:02	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
17:13	2.1	1075	Propane	
17:15	8, 3	1715	Acetic anhydride	
17:19	2.2	3318	Ammonia solution, with > 50% ammonia	

17:33	3	1993	Flammable liquid, n.o.s.	
17:44	3	1203	Gasoline	
17:49	8	3259	Amines, solid, corrosive, n.o.s	
17:49	3	1993	Flammable liquids, n.o.s	
17:50	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
17:55	3	1203	Gasoline	
17:55	2.1	1075	Propane	
17:57	2.2	2187	Carbon dioxide, refrigerated liquid	
17:58	2.2	1977	Nitrogen, refrigerated liquid	
18:11	2.1	1075	Propane	
18:15	3	1203	Gasoline	
18:20	2.3, 8	3308	Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A	
18:21	8	1830	Sulfuric acid	
18:22	2.1	1978	Propane	
18:30	2.2	1066	Nitrogen, compressed	
18:34	2.2	1072	Oxygen	
18:40	D	NA	Mixed hazardous materials	
18:46	D	NA	Mixed hazardous materials	
18:50	2.2	2187	Carbon dioxide, refrigerated liquid	
18:55	2.1	1075	Propane	
19:07	8	1760	Corrosive liquids, n.o.s.	
19:12	D	NA	Mixed hazardous materials	
19:21	2.2	1073	Oxygen	
19:28	2.2	2187	Carbon dioxide, refrigerated liquid	
19:31	2.1	1075	Propane	
19:39	8	1832	Sodium hydroxide, solid	
19:42	3	1203	Gasoline	
19:54	3	1203	Gasoline	
20:02	2.1	1978	Propane	
20:04	3	1203	Gasoline	
20:14	2.2	1073	Oxygen	
20:23	9	3257	Elevated temperature liquid, n.o.s.	
20:23	8	2796	Sulfuric acid with < 51% acid	
20:29	3	1198	Formaldehyde	
20:43	3	1203	Gasoline	
9:02	8, 2.3	3318	Ammonia, anhydrous	
21:26	3	1203	Gasoline	
21:26	3	1203	Gasoline	
21:27	3	1203	Gasoline	

21:31	3	1993	Flammable liquids, n.o.s	
21:57	3	1203	Gasoline	
22:13	5.1	2428	Sodium chlorate, aqueous solution	
22:41	3	1268	Petroleum products, n.o.s.	
22:45	3	1203	Gasoline	
22:49	3	1203	Gasoline	
23:20	3	1203	Gasoline	
23:23	D	NA	Mixed hazardous materials	
23:46	3	1993	Flammable liquid, n.o.s.	

### Road Side Survey Field Log

Location: I-26 near Okolona Road (Exit 28)				Date: 6JUN06
Time	Hazard Class	UN ID	Description	Notes
0:06	6.1	2821	Phenol solutions	
0:20	2.1	1978	Propane	
0:39	3	1993	Flammable liquids, n.o.s	
0:55	1.1G	333	Fireworks	
0:57	D	NA	Mixed hazardous materials	
1:02	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
1:11	3	1993	Flammable liquids, n.o.s	
1:30	2.1	1978	Propane	
1:31	3	1230	Methanol	
1:48	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
2:01	9	3077	Environmentally hazardous substances, solid, n.o.s.	
2:15	8	1814	Potassium hydroxide, solution	
2:23	3	1203	Gasoline	
2:25	2.2	3156	Compressed gas, oxidizing, n.o.s.	
2:30	4.1	3178	Flammable solid, inorganic, n.o.s.	
2:37	4.1	1338	Phosphorus	
2:38	D	NA	Mixed hazardous materials	
2:43	5.1	3139	Oxidizing liquid, n.o.s.	
2:45	8	1824	Sodium hydroxide solution	
3:19	8	1760	Corrosive liquids, n.o.s.	
3:26	2.1	1978	Propane	
3:55	2.2	1951	Argon, refrigerated liquid	
3:59	3	1203	Gasoline	
4:06	8	2789	Acetic acid, glacial	
4:08	2.2	1951	Argon, refrigerated liquid	



4:13	5.1	1479	Oxidizing solid, n.o.s.	
4:16	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
4:27	3	1203	Gasoline	
4:33	3	1203	Gasoline	
4:40	2.3	1076	Phosgene	
4:55	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
5:01	2	N/A	Non-Flammable Gas	
5:05	3	1303	Vinyl chloride	
5:14	3	1203	Gasoline	
5:31	2.2	1072	Oxygen, compressed	
5:35	3	1294	Toluene	
6:26	9	3257	Elevated temperature liquid, n.o.s.	
6:37	2.2	1977	Nitrogen, refrigerated liquid	
6:47	3	1203	Gasoline	
7:09	3	1993	Flammable liquids, n.o.s	
7:21	1.4G	353	Articles, explosive, n.o.s.	
7:36	3	1203	Gasoline	
7:46	8	NA	Corrosive	
8:00	3	1999	Asphalt	
8:17	3	1203	Gasoline	
8:24	8	1830	Sulfuric acid, >51% acid	
8:52	2.1	1010	Butadienes, stabilized	
8:57	3	1210	Printing ink related material	
9:00	3	1203	Gasoline	
9:01	3	1146	Cyclopentane	
9:11	3	2055	Styrene	
9:15	8	NA	Corrosive	
9:15	2.2	1072	Oxygen, compressed	
9:33	1.1G	333	Fireworks	
9:34	3	1203	Gasoline	
10:38	2.2	2187	Carbon dioxide, refrigerated liquid	
11:09	6.1	1547	Carbon tetrachloride	
11:17	D	NA	Mixed hazardous materials	
11:25	3	1307	Xylene	
11:47	2.1	1075	Petroleum gases, liquefied	
11:56	3	1203	Gasoline	
11:58	6.1	2831	Methylchloroform	
12:06	2.2	1073	Oxygen, refrigerated liquid	
12:08	9	3257	Elevated temperature liquid, n.o.s.	

12:17	8	1823	Sodium hydroxide, solid	
12:27	2.2	2187	Carbon dioxide, refrigerated liquid	
12:34	3	1999	Asphalt	
12:37	3	1203	Gasoline	
12:44	3	1170	Ethanol	
12:59	3	1268	Petroleum distillates, n.o.s.	
13:17	3	1999	Asphalt	
13:23	2.2	1066	Nitrogen, compressed	
13:46	3	1089	Acetaldehyde	
14:04	6.1	2078	Toluene diisocyanate	
14:19	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
14:27	8	NA	Corrosive	
14:31	3	1203	Gasoline	
14:38	2.2	1977	Nitrogen, refrigerated liquid	
14:56	8	1760	Corrosive liquids, n.o.s.	
15:04	8	1719	Caustic alkali liquids, n.o.s.	
15:48	HOT	3257	Elevated temperature liquid, n.o.s.	
15:58	3	1114	Benzene	
16:07	3	1203	Gasoline	
16:17	3	1993	Flammable liquids, n.o.s	
16:23	1.5D	331	Agent blasting, Type B	
16:29	3	1203	Gasoline	
16:36	2.1	1075	Petroleum gases, liquefied	
16:40	3	1987	Denatured alcohol	
16:49	3	1193	Methyl ethyl ketone	
16:58	5.1	1495	Sodium chlorate	
17:17	2.1	1075	Propane	
17:23	3	1220	Isopropyl acetate	
17:49	8	2031	Nitric acid, >70% nitric acid	
17:58	6.1	1547	Aniline	
18:08	3	NA	Flammable and combustible liquid	
18:34	3	1203	Gasoline	
18:58	3	1203	Gasoline	
19:06	2.1	1049	Hydrogen	
19:06	3	1993	Flammable liquids, n.o.s	
19:24	3	1999	Asphalt	
19:31	3	1203	Gasoline	
19:36	3	1993	Flammable liquids, n.o.s	
19:40	3	1203	Gasoline	

19:46	5.1	2880	Calcium hypochlorite, hydrated	
19:49	3	1294	Toluene	
19:52	3	1203	Gasoline	
19:53	2.3	3300	Ethylene oxide	
20:15	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
20:16	2.2	2187	Carbon dioxide, refrigerated liquid	
20:41	2.1	1978	Propane	
21:19	3	1208	Hexane	
21:24	3	1203	Gasoline	
21:30	8	1760	Corrosive liquids, n.o.s.	
21:46	3	2398	Methyl tert-butyl ether	
21:53	3	1203	Gasoline	
22:06	2.2	1073	Oxygen, refrigerated liquid	
22:22	3	1993	Flammable liquids, n.o.s	
22:45	D	NA	Mixed hazardous materials	
23:30	2.2	2187	Carbon dioxide, refrigerated liquid	
23:40	3	1203	Gasoline	
23:41	3	1203	Gasoline	
23:55	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E near Jockey Creek				Date: 10JUN06
Time	Hazard Class	UN ID	Description	Notes
3:45	3	1203	Gasoline	
4:27	3	1203	Gasoline	
4:52	8	1760	Corrosive liquids, n.o.s.	
5:50	3	1203	Gasoline	
6:13	3	1999	Asphalt	
6:25	3	1203	Gasoline	
6:51	5.1, 2.2	1073	Oxygen	
6:58	2.1	1075	Propane	
7:18	3	1999	Asphalt	
7:18	3	1999	Asphalt	
7:23	3	1999	Asphalt	
9:06	6.1	2996	Organochlorine, pesticides, liquid, toxic	
9:12	3	1203	Gasoline	
10:22	2.1	1075	Propane	
10:41	2.1	1075	Propane	

11:00	8	1759	Corrosive solids, n.o.s.	
11:37	2.1	1075	Propane	
11:49	3	1999	Asphalt	
12:14	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
12:30	3	1203	Gasoline	
12:42	2.1	1978	Propane	
12:51	3	1203	Gasoline	
13:57	3	1999	Asphalt	
14:23	2.1	1978	Propane	
14:49	2.1	1978	Propane	
14:50	3	1203	Gasoline	
15:51	2.1	1075	Propane	
16:27	2.1	1075	Propane	
16:33	3	1999	Asphalt	
16:41	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:54	D	NA	Mixed hazardous materials	
17:01	3	1203	Gasoline	
18:12	8	1760	Corrosive liquids, n.o.s.	
18:37	5.1, 2.2	1073	Oxygen	
19:20	3	1203	Gasoline	
20:07	2.1	1075	Propane	
21:32	3	1993	Flammable	
22:39	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E at Sullivan County Line			Date: 14JUN06	
Time	Hazard Class	UN ID	Description	Notes
5:31	3	1203	Gasoline	
6:54	3	1202	Diesel fuel	
7:01	2.2	1073	Oxygen	
7:05	3	1203	Gasoline	
7:38	D	NA	Mixed hazardous materials	
7:57	3	1993	Flammable, liquid, n.o.s.	
8:34	D	NA	Mixed hazardous materials	
8:56	8	2796	Sulfuric acid with < 51% acid	
9:00	3	1203	Gasoline	
9:05	3	1203	Gasoline	
9:11	3	1993	Flammable, liquid, n.o.s.	

9:23	3	1203	Gasoline	
9:46	3	1203	Gasoline	
9:58	8	2794	Batteries, wet, filled with acid, electric storage	
10:05	3	1203	Gasoline	
10:38	3	1203	Gasoline	
10:44	D	NA	Mixed hazardous materials	
11:00	2.1	1075	Propane	
11:31	2.1	1075	Propane	
11:32	6.1	2291	Lead compounds, soluble, n.o.s.	
11:44	D	NA	Mixed hazardous materials	
12:27	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:50	3	1203	Gasoline	
13:21	8	2796	Sulfuric acid with < 51% acid	
13:31	2.1	1075	Propane	
13:40	1.1G	333	Fireworks	
14:02	3	NA	Flammable and combustible liquid	
14:07	3	1203	Gasoline	
14:18	3	1993	Flammable liquids, n.o.s	
14:37	1.2G	334	Fireworks	
14:49	3	1999	Asphalt	
15:11	3	1999	Asphalt	
15:40	D	NA	Mixed hazardous materials	
16:00	2.1	1075	Propane	
16:10	8	2796	Sulfuric acid with < 51% acid	
16:23	3	1203	Gasoline	
17:06	3	1203	Gasoline	
17:18	D	NA	Mixed hazardous materials	
17:58	5.1, 2.2	1073	Oxygen	
18:13	2.1	1075	Propane	
18:21	2.2	1013	Carbon dioxide	
18:25	3	1203	Gasoline	
18:51	3	1993	Flammable liquids, n.o.s.	
19:54	5.1, 2.2	1073	Oxygen	
20:15	3	1203	Gasoline	
22:41	3	1203	Gasoline	
23:09	D	NA	Mixed hazardous materials	

### Road Side Survey Field Log

Location: I-81 near Fall Branch, TN (Exit 50)			Date: 18JUN06	
Time	Hazard Class	UN ID	Description	Notes
0:13	3	1202	Diesel fuel	
0:20	3	1203	Gasoline	
0:25	9	3257	Elevated temperature liquid, n.o.s	
0:34	8	NA	Corrosive	
0:40	3	2302	5-Methylhexan-2-one	
0:52	6.1	1092	Acrolein, stabilized	
1:40	8	1824	Sodium hydroxide solution	
2:01	3, 8	1993 3264	Flammable liquids, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	
2:15	6.1	2312	Phenol, molten	
2:27	2.2	1073	Oxygen, refrigerated liquid	
2:31	3	1203	Gasoline	
2:44	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
2:47	3	1230	Methanol	
2:47	8	1784	Hexyltrichlorosilane	
2:51	2.1	1075	Petroleum Gases, Liquefied (Propane)	
2:54	3	1203	Gasoline	
3:15	3	1203	Gasoline	
3:27	6.1	1092	Acrolein, stabilized	
3:38	4.1	3178	Flammable solid, inorganic, n.o.s.	
3:44	3	2348	Butyl acrylates, stabilized	
4:02	3	1203	Gasoline	
4:04	2	N/A	Non-Flammable Gas	
4:10	2.1	1037	Ethyl chloride	
4:26	8	2735	Amines, liquid, corrosive, n.o.s.	
4:42	2.2	1072	Oxygen, compressed	
5:04	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:05	3	1203	Gasoline	
5:06	3	1203	Gasoline	
5:17	3	1202	Diesel fuel	
5:34	3, 2	N/A	Flammable and Non-Flammable Gas	
5:37	8	2218	Acrylic acid, inhibited	
5:47	3	1203	Gasoline	
5:52	3	1268	Petroleum products, n.o.s.	
6:37	2.2	1072	Oxygen, compressed	
7:10	3	1203	Gasoline	

7:26	3	1203	Gasoline	
7:30	2.1	1075	Petroleum Gases, Liquefied (Propane)	
7:39	3	1203	Gasoline	
8:07	2.2	1951	Argon, refrigerated liquid	
8:20	3	N/A	Flammable and Combustible Liquid	
8:22	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:39	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
8:51	8	1759	Corrosive solids, n.o.s.	
8:55	3	1203	Gasoline	
8:57	8	1760	Corrosive liquids, n.o.s.	
9:05	2.2	1072	Oxygen, compressed	
9:10	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:10	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
9:16	6.1	2291	Lead compounds, soluble, n.o.s.	
9:17	3	1203	Gasoline	
9:37	1.1G	333	Fireworks	
9:52	3	1268	Petroleum products, n.o.s.	
10:08	8	1760	Corrosive liquids, n.o.s.	
10:09	3	1203	Gasoline	
10:15	2.2	1072	Oxygen, compressed	
10:22	8	2031	Nitric acid, >60% acid	
10:26	8	1760	Corrosive liquids, n.o.s.	
10:31	3	1203	Gasoline	
10:36	3, 2	N/A	Flammable and Non-Flammable Gas	
10:42	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
11:03	2.2	1072	Oxygen, compressed	
11:12	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
11:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:29	2.2	N/A	Non-Flammable Gas	
11:46	3	1294	Toluene	
11:55	3	1203	Gasoline	
12:27	2.2	1073	Oxygen, refrigerated liquid	
12:59	9	3082	Hazardous waste, liquid, n.o.s.	
13:06	8	2735	Amines, liquid, corrosive, n.o.s.	
13:10	1.1G	333	Fireworks	
13:22	6.1	3285	Vanadium compound, n.o.s.	
13:25	3	1203	Gasoline	
13:36	3	1153	Ethylene glycol diethyl ether	
13:54	2.2	1983	Refrigerant gas R 133a	

13:57	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:05	3	1203	Gasoline	
14:09	8	NA	Corrosive	
14:14	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
14:19	2.2	1073	Oxygen, refrigerated liquid	
14:23	2.2	2187	Carbon Dioxide, Refrigerated Liquid	
14:27	3	1203	Gasoline	
14:31	8	NA	Corrosive	
14:32	3	1993	Flammable liquids, n.o.s.	
14:33	8	1789	Hydrochloric acid	
14:34	3	1203	Gasoline	
14:35	1.2G	334	Fireworks	
14:41	2.2	1072	Oxygen, compressed	
14:48	3	1268	Petroleum products, n.o.s.	
14:52	3	1203	Gasoline	
14:53	1D	81	Explosive, blasting, type A	
14:53	8	NA	Corrosive	
14:57	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
15:03	3	1203	Gasoline	
15:06	8	1755	Chromic acid solution	
15:16	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:17	3	1203	Gasoline	
15:19	3	2348	Butyl acrylates, stabilized	
15:30	3	1993 1993 1993	Flammable liquids, n.o.s.	
15:39	3	1280	Propylene oxide	
15:52	2.1	1978	Propane	
15:58	8	1760	Corrosive liquids, n.o.s.	
16:01	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:09	3	1203	Gasoline	
16:13	3	1150	1,2-Dichloroethylene	
16:21	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
16:25	3	2302	5-Methylhexan-2-one	
16:31	2.2	1983	Refrigerant gas R 133a	
16:33	1.2G	334	Fireworks	
16:49	3	1993	Flammable liquids, n.o.s.	
16:50	8	2215	Maleic anhydride	
16:50	1D	81	Explosive, blasting, type A	
17:04	3	1993	Flammable liquids, n.o.s.	



17:06	3	1203	Gasoline	
17:18	9	3082	Hazardous waste, liquid, n.o.s.	
17:22	8	1760	Corrosive liquids, n.o.s.	
17:28	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
17:29	2.2	1073	Oxygen, refrigerated liquid	
17:31	6.1	1843	Ammonium dinitro-o-cresolate	
17:36	8	1760	Corrosive liquids, n.o.s.	
17:39	3	1203	Gasoline	
17:45	8	NA	Corrosive	
17:47	3	1993	Flammable liquids, n.o.s.	
17:56	3	1203	Gasoline	
18:02	3	1178	2-Ethylbutyraldehyde	
18:13	3	1203	Gasoline	
18:21	1.2G	334	Fireworks	
18:33	3	1203	Gasoline	
18:37	5.1	3139	Oxidizing liquid, n.o.s.	
18:42	5.1	2880	Calcium hypochlorite, hydrated	
18:53	3	1203	Gasoline	
18:55	8	1833	Sulfurous acid	
19:02	9	2211	Polymeric beads, expandable evolving flammable vapor	
19:15	7	2908	Radioactive material, excepted packaging	
19:17	3	1203	Gasoline	
19:21	2.2	2187	Carbon dioxide, refrigerated liquid	
19:27	2.1	1075	Propane	
19:28	8	2198	Phosphorus	
19:30	3	1203	Gasoline	
19:32	3	1203	Gasoline	
19:34	5.1	3139	Oxidizing liquid, n.o.s.	
19:41	3	1203	Gasoline	
19:44	8	1715	Acetic anhydride	
19:53	3	1203	Gasoline	
20:04	4.2	2546	Titanium powder, dry	
20:06	3	1178	2-Ethylbutyraldehyde	
20:07	3	1203	Gasoline	
20:08	3	1294	Toluene	
20:12	3	1203	Gasoline	
20:14	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
20:17	3	1202	Diesel fuel	
20:18	2.1	1978	Propane	

20:23	8	2796	Sulfuric acid with < 51% acid	
20:25	3	1294	Toluene	
20:33	3	1993	Flammable liquids, n.o.s.	
20:39	3	1203	Gasoline	
20:41	5.1	1479	Oxidizing solid, n.o.s.	
20:42	8	1760	Corrosive liquids, n.o.s.	
20:54	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:57	2.1	1075	Propane	
21:02	3	1203	Gasoline	
21:08	3	1268	Petroleum products, n.o.s.	
21:15	3	1268	Petroleum products, n.o.s.	
21:18	D	N/A	Mixed Shipment	
21:20	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
21:26	3	1203	Gasoline	
21:35	3	1193	Methyl ethyl ketone	
21:40	8	2218	Acrylic acid, inhibited	
21:44	D	N/A	Mixed Shipment	
21:52	3	1203	Gasoline	
22:02	3	1268	Petroleum products, n.o.s.	
22:02	2.1	1075	Petroleum Gases, Liquefied (Propane)	
22:02	3	1153	Ethylene glycol diethyl ether	
22:10	8	3066	Paint	
22:17	3	1202	Diesel fuel	
22:24	3	1203	Gasoline	
22:29	3	1203	Gasoline	
22:30	2.2	1977	Nitrogen, refrigerated liquid	
22:32	3	1203	Gasoline	
22:34	8	NA	Corrosive	
22:38	1.1G	333	Fireworks	
22:44	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
22:48	9	3082	Hazardous waste, liquid, n.o.s.	
22:54	3	1267	Crude oil	
23:04	8	1789	Hydrochloric acid	
23:05	8	NA	Corrosive	
23:13	HOT	9259	Elevated temperature material, liquid, n.o.s.	
23:16	2.2	1977	Nitrogen, refrigerated liquid	
23:16	3	1268	Petroleum products, n.o.s.	
23:28	3	1203	Gasoline	
23:34	3	1203	Gasoline	

23:35	1.1G	333	Fireworks	
23:42	3	1203	Gasoline	
23:47	3	1268	Petroleum products, n.o.s.	
23:55	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 near Fall Branch, TN (Exit 50) Date: 19JUNE06

Time	Hazard Class	UN ID	Description	Notes
0:03	3	1203	Gasoline	
0:06	8	1824	Sodium hydroxide solution	
0:08	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
0:12	3	1203	Gasoline	
0:22	3	1203	Gasoline	
0:28	3	1203	Gasoline	
0:39	3	2370	1-Hexene	
0:49	3	1203	Gasoline	
0:53	6	2078	Toluene diisocyanate	
0:55	3	3286	Flammable liquid, toxic, corrosive, n.o.s.	
1:06	3	1993	Flammable liquids, n.o.s.	
1:13	3	1203	Gasoline	
1:20	3	1203	Gasoline	
1:36	2.1	1075	Propane	
1:37	3	1203	Gasoline	
1:38	3	1203	Gasoline	
1:41	3	1993	Flammable liquid, n.o.s.	
1:48	8	1848	Propionic acid	
2:14	2.2	1072	Oxygen, compressed	
2:17	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
2:21	3	1203	Gasoline	
2:24	8	1719	Caustic alkali liquids, n.o.s.	
2:29	8	1760	Corrosive liquids, n.o.s.	
2:37	2.1	1075	Petroleum Gases, Liquefied (Propane)	
2:39	8	NA	Corrosive	
2:40	3	1203	Gasoline	
2:40	2.1	1075	Petroleum Gases, Liquefied (Propane)	
2:42	3	1203	Gasoline	
2:45	4.3	1340	Phosphorus pentasulfide	
2:47	3	1203	Gasoline	

2:55	2.1	1075	Petroleum Gases, Liquefied (Propane)	
3:00	3	1203	Gasoline	
3:09	3	1218	Isoprene, stabilized	
3:16	3	1203	Gasoline	
3:18	2.2	N/A	Non-Flammable Gas	
3:20	3	1203	Gasoline	
3:26	8	1760	Corrosive liquids, n.o.s.	
3:30	8	2796	Sulfuric acid with < 51% acid	
3:31	3	1203	Gasoline	
3:34	3	1203	Gasoline	
3:44	3	1203	Gasoline	
3:44	9	1931	Zinc hydrosulfite	
3:48	3	1203	Gasoline	
3:51	D	N/A	Mixed Shipment	
3:55	2.1	1075	Propane	
4:01	3	1203	Gasoline	
4:02	3	1203	Gasoline	
4:06	3	1171	Ethylene glycol monoethyl ether	
4:08	3	1178	2-Ethylbutyraldehyde	
4:14	D	N/A	Mixed Shipment	
4:31	3	1173	Ethyl Acetate	
4:45	3	1203	Gasoline	
4:47	D	NA	Mixed hazardous materials	
4:54	2.2	1073	Oxygen	
5:05	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
5:15	3	1212	Isobutanol	
5:25	1.5	332	Blasting agent	
5:30	3	1203	Gasoline	
5:38	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
5:45	3	1203	Gasoline	
5:50	2.2	1072	Oxygen, compressed	
5:50	3	1203	Gasoline	
5:51	3	1203	Gasoline	
5:52	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:53	5.1	2880	Calcium hypochlorite, hydrated	
6:01	8	2198	Phosphorus	
6:06	3	1203	Gasoline	
6:06	3	3271	Ethers, n.o.s.	
6:07	3	1153	Ethylene glycol diethyl ether	

6:10	7	2908	Radioactive material, excepted packaging	
6:11	2.2	1983	Refrigerant gas R 133a	
6:15	3	2368	Pinene	
6:21	8	NA	Corrosive	
6:22	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
6:23	2.2	1073	Oxygen, refrigerated liquid	
6:29	2.2	2187	Carbon Dioxide, Refrigerated Liquid	
6:35	3	1203	Gasoline	
6:41	3	1203	Gasoline	
6:51	3	1268	Petroleum distillates, n.o.s.	
6:52	3	2302	5-Methylhexan-2-one	
6:53	5.1	3098	Oxidizing liquid, corrosive, n.o.s.	
6:54	8	1715	Acetic anhydride	
6:56	3	1203	Gasoline	
6:57	3	1203	Gasoline	
6:58	4.2	1384	Sodium hydrosulfite	
7:02	3, 8, 5.1	1193 2834 1504	Ethyl methyl ketone / Phosphorous acid / Sodium peroxide	
7:04	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:05	3	2348	Butyl acrylates, stabilized	
7:10	6.1	1897	Perchloroethylene	
7:10	3	1203	Gasoline	
7:16	3	1150	1,2-Dichloroethylene	
7:17	3	1993	Flammable liquids, n.o.s.	
7:18	2.1	1978	Propane	
7:23	8	1760	Corrosive liquids, n.o.s.	
7:29	3	1245	Methyl isobutyl ketone	
7:29	2.2	1983	Refrigerant gas R 133a	
7:29	3	1203	Gasoline	
7:39	3	1131	Carbon disulfide	
7:41	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
7:42	3	1203	Gasoline	
7:46	3	1193	Ethyl methyl ketone	
7:46	D	N/A	Mixed Shipment	
7:49	2.1	1075	Propane	
7:50	3	1993	Flammable liquids, n.o.s	
7:57	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
8:00	8	NA	Corrosive	
8:03	8	1833	Sulfurous acid	

8:06	8	NA	Corrosive	
8:13	5.1	2880	Calcium hypochlorite, hydrated	
8:14	3	2048	Dicyclopentadiene	
8:14	7	2908	Radioactive material, excepted packaging	
8:17	3	1203	Gasoline	
8:21	2.2	2187	Carbon dioxide, refrigerated liquid	
8:22	2.1	1075	Propane	
8:26	8	2198	Phosphorus	
8:28	3	1203	Gasoline	
8:29	3	1203	Gasoline	
8:31	5.1	3139	Oxidizing liquid, n.o.s.	
8:37	3	1203	Gasoline	
8:47	2.1	1037	Ethyl chloride	
8:47	3	1203	Gasoline	
8:51	4.2	2546	Titanium powder, dry	
8:54	3	1203	Gasoline	
8:57	3	1178	2-Ethylbutyraldehyde	
9:01	8	1744	Bromine	
9:03	3	1203	Gasoline	
9:13	2.1	1075	Propane	
9:20	3	1203	Gasoline	
9:24	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:29	3	1993	Flammable	
9:31	D	NA	Mixed hazardous materials	
9:43	3	1203	Gasoline	
9:45	3	1203	Gasoline	
9:46	3	1203	Gasoline	
9:49	6.1	2997	Triazine pesticides, liquid, toxic, flammable	
9:50	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:53	8	2218	Acrylic acid	
9:57	5.1, 2.2	1073	Oxygen	
10:01	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
10:03	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
10:06	3	1203	Gasoline	
10:07	3	1993	Flammable liquids, n.o.s.	
10:14	2.2	1046	Helium, compressed	
10:20	2.1	1075	Propane	
10:20	3	1203	Gasoline	
10:26	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	

10:27	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
10:30	3	1203	Gasoline	
10:38	2.1	1001	Acetylene	
10:49	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:49	3	1203	Gasoline	
10:50	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
10:52	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:58	8	1784	Hexyltrichlorosilane	
11:02	3, 8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
11:03	6.1	2312	Phenol, molten	
11:06	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
11:09	6.1	1092	Acrolein, stabilized	
11:10	6.1	1578	Chloronitrobenzene	
11:11	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
11:12	9	3257	Elevated temperature liquid, n.o.s	
11:18	5.1	1748	Calcium hypochlorite, dry	
11:20	3	1203	Gasoline	
11:21	2.1	1075	Liquefied petroleum gas	
11:26	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
11:26	1.5	332	Blasting agent	
11:29	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:29	3	1993	Flammable liquids, n.o.s.	
11:32	2.2, 2.1	1072 1001 1046	Helium, compressed/Oxygen, compressed/Acetylene, dissolved	
11:32	3	1993	Flammable liquids, n.o.s.	
11:32	3	1203	Gasoline	
11:34	3	1203	Gasoline	
11:36	3	1202	Diesel fuel	
11:43	2.2	1977	Nitrogen, refrigerated liquid (cryogenic)	
11:44	3	1203	Gasoline	
11:48	2	2202	Hydrogen selenide, anhydrous	
11:49	3	1993	Flammable liquids, n.o.s.	
11:53	6.1	1062	Methyl amyl ketone,	
11:55	1D	81	Explosive, blasting, type A	
11:55	8	1790	Hydrofluoric acid	
11:56	3	2302	5-Methylhexan-2-one	
12:09	3	1993	Flammable liquids, n.o.s	
12:13	3, 8	1993 3264	Flammable liquids, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	

12:17	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
12:17	8	1784	Hexyltrichlorosilane	
12:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:28	3	1203	Gasoline	
12:29	2.2	1073	Oxygen, refrigerated liquid	
12:32	3	1203	Gasoline	
12:33	8	NA	Corrosive	
12:36	3	2348	Butyl acrylates, stabilized	
12:37	4.1	3178	Flammable solid, inorganic, n.o.s.	
12:37	3	1203	Gasoline	
12:41	6.1	1092	Acrolein, stabilized	
12:41	3	1230	Methanol	
12:45	8	1824	Sodium hydroxide solution	
12:48	3	2056	Tetrahydrofuran	
12:51	8	2735	Amines, liquid, corrosive, n.o.s.	
12:52	2.2	1072	Oxygen, compressed	
12:52	2	N/A	Non-Flammable Gas	
13:01	2.1	1037	Ethyl chloride	
13:04	3	2850	Propylene tetramer	
13:04	3	1203	Gasoline	
13:04	3	1203	Gasoline	
13:05	3	1202	Diesel fuel	
13:07	3, 2	N/A	Flammable and Non-Flammable Gas	
13:07	8	2218	Acrylic acid, inhibited	
13:09	1.2G	334	Fireworks	
13:15	3	1993	Flammable liquids, n.o.s.	
13:16	3	2057	Tripropylene	
13:17	3	1993	Flammable liquids, n.o.s.	
13:23	3	1203	Gasoline	
13:26	9	3082	Hazardous waste, liquid, n.o.s.	
13:26	8	1760	Corrosive liquids, n.o.s.	
13:33	2.2	1073	Oxygen, refrigerated liquid	
13:34	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
13:38	2.2	1072	Oxygen, compressed	
13:38	2.1	1063	Methyl chloride	
13:42	8	1759	Corrosive solids, n.o.s.	
13:43	3	1203	Gasoline	
13:43	8	1760	Corrosive liquids, n.o.s.	
13:49	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	



13:50	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:52	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
14:04	6.1	2291	Lead compounds, soluble, n.o.s.	
14:04	3	1203	Gasoline	
14:05	3	1917	Ethyl acrylate, stabilized	
14:13	1.1G	333	Fireworks	
14:16	3	1268	Petroleum products, n.o.s.	
14:17	8	1760	Corrosive liquids, n.o.s.	
14:21	3	1203	Gasoline	
14:21	2.2	1072	Oxygen, compressed	
14:26	3	1203	Gasoline	
14:27	3	2348	n-Butyl acrylate	
14:33	3, 2	N/A	Flammable and Non-Flammable Gas	
14:33	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
14:38	2.2	1072	Oxygen, compressed	
14:38	3	1203	Gasoline	
14:45	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:48	8	2812	Sodium aluminate, solid	
14:49	8	2735	Amines, liquid, corrosive, n.o.s.	
14:51	3	1294	Toluene	
14:53	3	1203	Gasoline	
14:56	2.2	1073	Oxygen, refrigerated liquid	
14:57	1.1G	333	Fireworks	
15:05	5.1	2428	Sodium chlorate, aqueous solution	
15:07	3	1203	Gasoline	
15:10	2.2	N/A	Non-Flammable Gas	
15:17	3	1203	Gasoline	
15:17	3	1203	Gasoline	
15:23	5.1	2880	Calcium hypochlorite, hydrated	
15:27	3	1203	Gasoline	
15:29	3	1203	Gasoline	
15:32	3	1203	Gasoline	
15:32	5.1, 2.2	1073	Oxygen	
15:36	6.1	1689	Sodium cyanide	
15:43	3	1203	Gasoline	
15:52	8	NA	Corrosive	
15:58	3	1993	Flammable liquids, n.o.s.	
16:05	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
16:09	5.1	1495	Potassium hydroxide, solid	

16:09	1.2G	334	Fireworks	
16:09	2.2	1072	Oxygen, compressed	
16:10	3	1993	Flammable liquids, n.o.s	
16:13	3	1268	Petroleum products, n.o.s.	
16:17	3	1203	Gasoline	
16:21	8	NA	Corrosive	
16:22	8	2215	Maleic anhydride	
16:27	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:33	3	1203	Gasoline	
16:33	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
16:34	3	1203	Gasoline	
16:37	8	1755	Chromic acid solution	
16:44	3	1993	Flammable liquids, n.o.s.	
16:46	8	1760	Corrosive liquids, n.o.s.	
16:47	2.1	1978	Propane	
16:49	8	1760	Corrosive liquids, n.o.s.	
16:53	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:59	3	1203	Gasoline	
17:02	3	1268	Petroleum products, n.o.s.	
17:06	4.3	1402	Calcium carbide	
17:06	3	1203	Gasoline	
17:12	3	1203	Gasoline	
17:12	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:14	3	1203	Gasoline	
17:19	2.2	1072	Oxygen, compressed	
17:20	3	1213	Isobutyl acetate	
17:21	2.2	1073	Oxygen	
17:24	3	1203	Gasoline	
17:25	8	3264	Corrosive liquid, acidic, inorganic, NOS	
17:26	3	N/A	Flammable and Combustible Liquid	
17:30	2.2	1977	Nitrogen, refrigerated liquid	
17:35	3	1993	Flammable liquid, n.o.s.	
17:41	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:41	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:41	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:53	3	1203	Gasoline	
17:54	6.1	2023	Epichlorohydrin	
17:57	3	1203	Gasoline	
17:57	8	NA	Corrosive	

18:02	3	1993	Flammable liquids, n.o.s.	
18:03	3	1203	Gasoline	
18:04	8	2582	Ferric chloride, solution	
18:09	3	1203	Gasoline	
18:13	1.2G	334	Fireworks	
18:15	9	3082	Environmentally hazardous substance, liquid, n.o.s.	
18:17	5.1	3139	Oxidizing liquid, n.o.s.	
18:24	3	1203	Gasoline	
18:25	8	2794	Batteries, Wet, Acid	
18:27	2.1	1075	Propane	
18:34	8	1760	Corrosive liquids, n.o.s.	
18:40	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:46	3	1105	Pentanols	
18:51	8	2031	Nitric acid, >60% acid	
18:51	2.2	1073	Oxygen	
18:58	6.1	1710	Trichloroethylene	
19:05	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:06	3	1993	Flammable liquids, n.o.s.	
19:14	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:15	6.1	1051	Hydrogen cyanide, stabilized w/ <3% water	
19:19	3	1203	Gasoline	
19:20	8	3264	Corrosive liquid, acidic, inorganic, NOS	
19:35	3	1993	Flammable	
19:39	3	1203	Gasoline	
19:46	2.2	1028	Dichlorodifluoromethane (F12)	
19:47	8	2031	Nitric acid, >60% acid	
19:50	3	1203	Gasoline	
19:50	3	1133	Adhesives	
20:01	3	1203	Gasoline	
20:05	3	1203	Gasoline	
20:10	6.1	2074	Acrylamide	
20:11	3	1131	Carbon disulfide	
20:20	3	1203	Gasoline	
20:25	3	1203	Gasoline	
20:32	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
20:39	3	1863	Fuel, aviation, turbine engine	
20:41	8	1761	Cupriethylenediamine solution	
20:43	2.2	1072	Oxygen, compressed	
20:46	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	

20:56	8	NA	Corrosive	
21:01	3	1203	Gasoline	
21:09	8	1760	Corrosive liquids, n.o.s.	
21:16	3	1203	Gasoline	
21:20	3	1203	Gasoline	
21:23	3	1203	Gasoline	
21:28	2.3	1079	Sulfur dioxide	
21:36	3	1203	Gasoline	
21:46	8	1715	Acetic anhydride	
21:56	3	1203	Gasoline	
22:00	3	1268	Petroleum distillates, n.o.s.	
22:01	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
22:28	6.1	1888	Chloroform	
22:34	2.1	1075	Petroleum Gases, Liquefied (Propane)	
22:37	3	1203	Gasoline	
22:59	3	1203	Gasoline	
23:03	3	1203	Gasoline	
23:09	3	1203	Gasoline	
23:14	3	2348	Butyl acrylates, stabilized	
23:22	2	N/A	Non-Flammable Gas	
23:25	2.2	3158	Gas, refrigerated liquid, n.o.s. (cryogenic)	
23:31	8		Corrosive	
23:32	3	1993	Flammable liquids, n.o.s.	
23:34	8	1789	Hydrochloric acid	
23:37	3	1203	Gasoline	
23:38	8	2280	Hexamethylenediamine, solid	
23:38	3	1203	Gasoline	
23:40	3	1203	Gasoline	
23:46	8	NA	Corrosive	
23:46	HOT	9259	Elevated temperature material, liquid, n.o.s.	
23:47	2.1	1075	Propane	
23:49	3	1203	Gasoline	
23:50	3	1203	Gasoline	
23:52	3	1203	Gasoline	
23:59	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321

Date: 29JUN06

Time	Hazard Class	UN ID	Description	Notes
2:37	D	NA	Mixed hazardous material	
3:12	3	1203	Gasoline	
5:55	D	NA	Mixed hazardous material	
6:03	D	NA	Mixed hazardous materials	
6:22	3	1267	Petroleum crude oil	
6:49	2.1	1075	Propane	
7:01	3	1993	Flammable, liquid, n.o.s.	
7:33	5.1, 2.2	1073	Oxygen	
7:45	3	1203	Gasoline	
7:45	3	1203	Gasoline	
8:00	2.3	1017	Chlorine	
9:27	3	1203	Gasoline	
9:38	3	1203	Gasoline	
9:41	8	NA	Corrosive	
9:45	2.3	1016	Carbon monoxide, compressed	
9:53	3	1203	Gasoline	
10:03	3	1203	Gasoline	
10:15	2.1	1075	Propane	
10:50	D	NA	Mixed hazardous material	
11:22	D	NA	Mixed hazardous material	
11:37	3	1203	Gasoline	
12:18	3	1203	Gasoline	
12:22	D	NA	Mixed hazardous material	
12:25	2.1	1075	Propane	
12:46	3	1863	Fuel, aviation, turbine engine	
12:47	D	NA	Mixed hazardous materials	
12:50	3	1203	Gasoline	
13:00	2.1	1075	Propane	
13:14	D	NA	Mixed hazardous material	
13:29	8	NA	Corrosive	
13:59	2.1	1075	Propane	
14:01	3	1203	Gasoline	
14:33	8	NA	Corrosive	
14:41	D	NA	Mixed hazardous material	
14:54	2.1	1075	Propane	

14:57	3	1863	Fuel, aviation, turbine engine	
14:59	5.1	NA	Oxidizer	
15:21	8	NA	Corrosive	
15:32	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
15:47	5.1, 2.2	1073	Oxygen	
16:20	3	1203	Gasoline	
16:39	5.1, 2.2	1073	Oxygen	
17:12	5.1, 2.2	1073	Oxygen	
17:33	1.1D	209	TNT, dry	
17:44	D	NA	Mixed hazardous material	
17:44	3	1203	Gasoline	
17:44	5.1	NA	Oxidizer	
17:45	3	1203	Gasoline	
18:01	2.1	1075	Propane	
18:37	D	NA	Mixed hazardous material	
18:47	3	1203	Gasoline	
19:33	3	1203	Gasoline	
19:54	2.1	1075	Propane	
20:49	D	NA	Mixed hazardous material	
21:13	D	NA	Mixed hazardous material	
21:30	2.1	1075	Propane	
22:10	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321

Date: 12JUL06

Time	Hazard Class	UN ID	Description	Notes
2:26	D	NA	Mixed hazardous material	
3:12	D	NA	Mixed hazardous material	
3:37	5.1, 2.2	1073	Oxygen	
5:25	3	1203	Gasoline	
6:03	5.1	2427	Potassium chlorate, solution	
6:49	3	1203	Gasoline	
7:21	3	1203	Gasoline	
7:33	3	1203	Gasoline	
7:45	D	NA	Mixed hazardous material	
8:00	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:15	5.1, 2.2	1073	Oxygen	
8:27	3	1203	Gasoline	

8:41	5.1, 2.2	1073	Oxygen	
9:08	5.1, 2.2	1073	Oxygen	
9:35	6.2	3291	(Bio) medical wastes, n.o.s.	
9:45	3	1993	Flammable liquid, n.o.s.	
9:55	2.1	1075	Propane	
10:15	3	1203	Gasoline	
10:22	2.1	1075	Propane	
10:37	3	1203	Gasoline	
11:18	5.1	NA	Oxidizer	
11:32	3	1203	Gasoline	
11:37	5.1, 2.2	1073	Oxygen	
12:25	5.1, 2.2	1073	Oxygen	
12:46	8	NA	Corrosive	
12:50	5.1, 2.2	1073	Oxygen	
13:00	5.1, 2.2	1073	Oxygen	
13:14	2.1	1075	Propane	
13:29	D	NA	Mixed hazardous material	
13:59	3	1203	Gasoline	
14:22	5.1, 2.2	1073	Oxygen	
14:37	3	1203	Gasoline	
14:41	3	1203	Gasoline	
14:54	3	1203	Gasoline	
14:59	8, D	NA	Corrosive, Mixed hazardous material	
15:09	2.2	NA	Compressed gas (non-flammable)	
15:21	D	NA	Mixed hazardous material	
15:27	D	NA	Mixed hazardous material	
15:32	3	1993	Flammable liquid, n.o.s.	
16:05	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:20	3	1203	Gasoline	
17:03	D	NA	Mixed hazardous material	
17:12	5.1, 2.2	1073	Oxygen, refrigerated liquid	
17:25	3	1993	Flammable liquid, n.o.s.	
17:44	3	1203	Gasoline	
17:44	2.1	1075	Propane	
18:01	5.1, 2.2	1073	Oxygen, refrigerated liquid	
18:37	2.1	1075	Propane	
18:45	3	1203	Gasoline	
18:47	3	1203	Gasoline	
19:03	3	1203	Gasoline	

19:54	5.1, 2.2	1073	Oxygen	
20:49	3	1203	Gasoline	
22:17	D	NA	Mixed hazardous material	

### Road Side Survey Field Log

Location: I-26 near Eastern Star (Exit 45)				Date: 15JUL06
Time	Hazard Class	UN ID	Description	Notes
0:28	3	1203	Gasoline	
1:47	8	1760	Corrosive liquid, n.o.s.	
2:07	HOT	3257	Elevated temperature liquid, n.o.s.	
2:52	4.3	3170	Aluminum processing by-products	
3:22	3	1203	Gasoline	
4:33	9	3077	Hazardous waste, solid, n.o.s.	
4:37	3	1303	Vinyl chloride	
5:11	3	1267	Petroleum crude oil	
5:17	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
5:22	8	NA	Corrosive	
5:23	3, 5.1	1942, 1993	Ammonium nitrate, w/ >0.2% combustible material / Flammable liquid, n.o.s.	
5:32	1.1D	475	Substances, explosive, n.o.s.	
5:55	3	1203	Gasoline	
6:01	2.1	1075	Propane	
6:24	8, D		Corrosive/Mixed hazardous materials	
6:36	3	1203	Gasoline	
6:50	2.1, 2.2, 2.3	NA	Comp. gases (flam., non-flam., poisonous)	
7:15	5.1	NA	Oxidizer	
7:17	3	1203	Gasoline	
7:23	3	NA	Flammable and combustible liquid	
7:26	3	1133	Adhesives	
7:31	8	2491	Ethanolamine	
7:34	1.4	NA	Explosives	
7:42	1.5	NA	Blasting agents	
7:48	HOT	3257	Elevated temperature liquid, n.o.s.	
8:09	2.1	1978	Propane	
8:09	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
8:11	5.1	2428	Sodium chlorate, aqueous solution	
8:18	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
8:24	2.1	1075	Propane	
8:25	3	1203	Gasoline	



8:31	8	2834	Phosphorous acid	
8:51	3	NA	Flammable and combustible liquid	
9:00	3	1203	Gasoline	
9:02	3	1230	Methanol	
9:06	3	1203	Gasoline	
9:23	3	1203	Gasoline	
9:24	5.1, 2.2	1075	Oxygen	
9:26	8	1715	Acetic anhydride	
9:34	5.1, 2.2	1073	Oxygen	
9:45	7	NA	Radioactive	
9:55	6.2	3291	(Bio) medical waste, n.o.s.	
10:04	5.1	2880	Calcium hypochlorite, hydrated	
10:08	3	2302	5-methylhexan-2-one	
10:10	2.2	1072	Oxygen	
10:30	3	1203	Gasoline	
11:16	3	1203	Gasoline	
11:16	5.1, 2.2	1073	Oxygen	
11:38	5.1, 2.2	NA	Oxygen	
12:06	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
12:16	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
12:20	3	1203	Gasoline	
12:30	8,D	NA	Corrosive/Mixed hazardous materials	
12:38	3	1203	Gasoline	
12:40	8	1824	Sodium hydroxide solution	
12:49	3	1203	Gasoline	
13:05	8	NA	Corrosive	
13:22	5.1	2428	Sodium chlorate, aqueous solution	
13:36	3	1203	Gasoline	
13:40	8	2794	Batteries, wet, filled w/ acid	
14:02	3	1203	Gasoline	
14:03	8	2031	Nitric acid, other than red fuming	
14:04	8	NA	Corrosive	
14:10	3	1993	Flammable liquid, n.o.s.	
14:17	3	1203	Gasoline	
14:30	3	1993	Flammable liquids, n.o.s	
14:30	8, 3	NA	Corrosive and flammable	
14:35	2.1	1075	Propane	
14:40	3	1993, 1123	Flammable liquid, n.o.s / Butyl acetates	
14:56	5.1, 2.2	1073	Oxygen	

14:57	3	1203	Gasoline	
15:00	5.1	2428	Sodium chlorate, aqueous solution	
15:04	3	1203	Gasoline	
15:08	HOT	3257	Elevated temperature liquid, n.o.s.	
15:15	5.1	2428	Sodium chlorate, aqueous solution	
15:24	5.1, 2.2	1073	Oxygen	
15:30	3	NA	Flammable and combustible liquid	
15:51	3	1203	Gasoline	
15:56	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
16:00	2.2, 5.1	1073	Oxygen	
16:01	3	1203	Gasoline	
16:10	3	1203	Gasoline	
16:14	2.1	1075	Propane	
16:17	2.1	1075	Propane	
16:22	3	1203	Gasoline	
16:30	3	1203	Gasoline	
16:52	2.2	1977	Nitrogen, refrigerated liquid	
17:00	3	1294	Toluene	
17:01	3	1203	Gasoline	
17:29	3	1203	Gasoline	
17:40	5.1, 2.2	1073	Oxygen	
17:41	5.1	NA	Oxidizer	
17:48	3	NA	Flammable and combustible liquid	
17:56	8	1910	Calcium oxide	
17:59	3	1203	Gasoline	
17:59	3	1203	Gasoline	
18:00	3	NA	Flammable and combustible liquid	
18:01	HOT	3257	Elevated temperature liquid, n.o.s.	
18:05	5.1, 2.2	1073	Oxygen	
18:11	8, 3	NA	Corrosive, Flammable and combustible liquid	
18:17	3	2302	5-Methylhexan-2-one	
18:23	8	NA	Corrosive	
18:31	3	1993	Flammable liquid, n.o.s.	
18:32	3	1203	Gasoline	
18:34	3	1114	Benzene	
18:38	8	1824	Sodium hydroxide, solution	
18:45	3	1203	Gasoline	
18:52	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
19:14	2.2	1951	Argon, refrigerated liquid	

19:32	3	1267	Petroleum crude oil	
19:33	3	1203	Gasoline	
19:36	3	1203	Gasoline	
19:38	6.2	3291	(Bio) medical waste	
19:47	5.1	NA	Oxidizer	
19:51	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
20:15	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
20:54	3	1993	Flammable liquid, n.o.s.	
21:15	3	1203	Gasoline	
21:42	2.2	1066	Nitrogen, compressed	
21:46	3	1203	Gasoline	
21:50	2.1	1075	Propane	
21:57	3	1110, 1993	Methyl amyl ketone / Flammable liquid, n.o.s.	
22:24	3	1203	Gasoline	
22:29	D	NA	Mixed hazardous materials	
22:56	2.1	1075	Propane	
23:15	5.1, 2.2	1073	Oxygen	
23:38	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
23:49	2.1	1075	Propane	
23:51	6.1	1017	Chlorine	

### Road Side Survey Field Log

Location: I-81 near Fall Branch, TN (Exit 50)				Date: 18JUL06
Time	Hazard Class	UN ID	Description	Notes
0:12	2.2	1006	Argon, compressed	
0:14	3	1203	Gasoline	
0:17	3	1203	Gasoline	
0:27	8	1715	Acetic anhydride	
0:35	2.1	1075	Petroleum Gases, Liquefied (Propane)	
0:37	8	2794	Batteries, wet, filled with acid,	
0:46	D	NA	Mixed hazardous materials	
0:54	3	1203	Gasoline	
1:13	3	1123	Butyl acetates	
1:43	2.2	1072	Oxygen, compressed	
1:45	5.1	1942	Ammonium nitrate, w/ >0.2% combustibile material	
1:48	5.1	1942	Ammonium nitrate, w/ >0.2% combustibile material	
2:03	9	3257	Elevated temperature liquid, n.o.s	
2:04	2.1	1978	Propane	

2:15	3	2045	Isobutyraldehyde	
2:15	8	NA	Corrosive	
2:16	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
2:26	2.2	1066	Nitrogen, compressed	
2:30	5.1	2984	Hydrogen peroxide, aqueous solution 8-20%	
2:31	3	1203	Gasoline	
2:33	7	NA	Radioactive	
2:38	8, 3	NA	Corrosive, Flammable and combustible liquid	
2:40	3	1866	Resin solution, flammable	
2:51	3	1993	Flammable liquids, n.o.s.	
3:06	3	1274	n-Propanol	
3:16	2.1	1075	Petroleum Gases, Liquefied (Propane)	
3:27	3	1203	Gasoline	
3:45	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
3:49	3	1203	Gasoline	
3:50	8	1715	Acetic anhydride	
4:01	2.1	1075	Liquefied petroleum gas	
4:06	8	NA	Corrosive	
4:16	2.1	1075	Petroleum gases, liquefied	
4:20	6.1	2649	1,3-Dichloroacetone	
4:28	2.2	1951	Argon, refrigerated liquid	
4:32	3	1203	Gasoline	
4:35	3	1993	Flammable liquids, n.o.s	
4:46	D	NA	Mixed hazardous materials	
4:48	8	1783	Hexamethylenediamine solution	
4:54	3	1993	Flammable liquids, n.o.s	
5:03	4.1	3175	Solids containing flammable liquid, n.o.s.	
5:07	3	1203	Gasoline	
5:15	5.1, 2.2	1073	Oxygen	
5:16	3	1203	Gasoline	
5:18	8, 3	NA	Corrosive, Flammable and combustible liquid	
5:29	2.1	1075	Liquefied petroleum gas	
5:31	5.1, 2.2	1073	Oxygen	
5:44	3	1203	Gasoline	
5:52	8	3264	Corrosive liquid, acidic, inorganic, NOS	
5:55	8	1760	Corrosive liquids, n.o.s.	
5:55	6.1	3294	Hydrogen cyanide, solution in alcohol	
6:01	5.1	NA	Oxidizer	
6:12	2.1	1075	Propane	

6:14	9	3334	Aviation regulated liquid, n.o.s.
6:17	3	1993	Flammable liquid, n.o.s.
6:25	3	1203	Gasoline
6:26	8	2491	Ethanolamine
6:30	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.
6:32	5.1	2428	Potassium hydroxide, aqueous solution
6:46	1.4	NA	Explosives (no significant blast hazard)
6:49	8	2031	Nitric acid, >70% Acid
6:50	3	1203	Gasoline
6:52	3	1212	Isobutylene
7:02	3	1203	Gasoline
7:13	2	1072	Oxygen
7:17	3	1203	Gasoline
7:25	D	NA	Mixed hazardous materials
7:29	2.2	1018	Chlorodifluoromethane (F22)
7:30	3	1203	Gasoline
7:37	3	1203	Gasoline
7:49	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.
8:13	2.1	1075	Petroleum Gases, Liquefied (Propane)
8:16	3	1915	Cyclohexanone
8:22	2.1	1075	Propane
8:22	9	3082	Environmentally hazardous substances, liquid, n.o.s.
8:36	3	1203	Gasoline
8:37	8	2949	Sodium hydrosulfide > 25% water of crystallization
8:37	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)
8:46	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>
8:57	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.
8:58	5.1	2067	Ammonium nitrate based fertilizer
9:07	2.2	1073	Oxygen
9:17	3/6.1	1986	Alcohols, flammable, toxic, n.o.s.
9:19	4.3	1400	Barium
9:23	2	1072	Oxygen
9:28	3	1203	Gasoline
9:28	3	1265	Pentanes
9:31	3	1202	Diesel fuel
9:33	3	1203	Gasoline
9:44	3	1268	Petroleum distillates, n.o.s.
9:49	3	1133	Adhesives
9:51	3	1146	Cyclopentane

9:52	3	1993	Flammable liquid, n.o.s.	
9:52	3	1189	Ethylene glycol monoethyl ether acetate	
10:30	D	NA	Mixed hazardous materials	
10:32	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
10:35	2.1	1075	Liquefied petroleum gas	
10:48	3	1133	Adhesives, containing a flammable liquid	
11:08	3	1203	Gasoline	
11:10	3	1203	Gasoline	
11:10	3	1203	Gasoline	
11:18	4.2	1362	Carbon, activated	
11:24	D	NA	Mixed hazardous materials	
11:25	5.1	2067	Ammonium nitrate based fertilizer	
11:31	D	NA	Mixed hazardous materials	
11:39	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:52	8	2218	Acrylic acid, inhibited	
12:02	3	1203	Gasoline	
12:09	8	1773	Ferric chloride, anhydrous	
12:16	3	1203	Gasoline	
12:22	9	3257	Elevated temperature liquid, n.o.s	
12:22	3	1203	Gasoline	
12:24	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:25	3	1203	Gasoline	
12:39	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:49	2.1	1075	Propane	
12:52	8	1719	Caustic alkali liquids, n.o.s.	
13:20	8	2491	Ethanolamine, solution	
13:21	8	1773	Ferric chloride, anhydrous	
13:24	3	1203	Gasoline	
13:36	3	1294	Toluene	
13:41	2.1	1075	Liquefied petroleum gas	
14:16	6.1	1809	Phosphorus trichloride	
14:16	2.1	1075	Propane	
14:22	8	2734	Amines, liquid, corrosive, flammable, n.o.s.	
14:22	3	1203	Gasoline	
14:24	3	1993	Flammable liquids, n.o.s.	
14:31	D	NA	Mixed hazardous materials	
14:32	D	NA	Mixed hazardous materials	
14:32	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:48	3	1173	Ethyl acetate	

14:49	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:50	3	1203	Gasoline	
15:01	8	2031	Nitric acid, >70% Acid	
15:01	3	1203	Gasoline	
15:04	3	1203	Gasoline	
15:05	3	1203	Gasoline	
15:15	8	2214	Phthalic anhydride	
15:17	8	1760	Corrosive liquids, n.o.s.	
15:20	D	NA	Mixed hazardous materials	
15:37	8	3264	Corrosive liquid, acidic, inorganic, NOS	
15:47	3,8	N/A	Corrosive, Flammable and Combustible Liquid	
15:50	9	3077	Environmentally hazardous substances, solid, n.o.s.	
15:51	3	1203	Gasoline	
15:54	8	1719	Caustic alkali liquids, n.o.s.	
16:06	3	1203	Gasoline	
16:07	3	1203	Gasoline	
16:20	3	1203	Gasoline	
16:20	3	1203	Gasoline	
16:20	3	1203	Gasoline	
16:22	6.1	1614	Hydrogen cyanide, stabilized in porous material	
16:38	D	NA	Mixed hazardous materials	
16:39	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:42	3	1307	Xylenes	
16:56	3	1203	Gasoline	
17:02	3	1203	Gasoline	
17:08	3	1203	Gasoline	
17:13	6	2078	Toluene diisocyanate	
17:14	2.1	1978	Propane	
17:17	2	1072	Oxygen	
17:24	3	1203	Gasoline	
17:28	6.1	1710	Trichloroethylene	
17:39	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
17:48	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:54	2	1072	Oxygen	
18:07	D	NA	Mixed hazardous materials	
18:22	3	1268	Petroleum distillates, n.o.s.	
18:27	6.1	2281	Hexamethylene diisocyanate	
18:27	2, 2.2	N/A	Compressed Gas (Flammable Non-Flammable)	
18:35	2.1	1978	Propane	

18:36	3	1203	Gasoline	
18:45	3	1265	Pentanes	
18:47	3	1203	Gasoline	
19:03	6.1	2821	Phenol solutions	
19:07	3	1133	Adhesives	
19:12	4.1	2304	Naphthalene, molten	
19:33	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
19:40	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
19:45	3	1203	Gasoline	
19:46	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
19:54	D	NA	Mixed hazardous materials	
20:00	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
20:02	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
20:10	3	1203	Gasoline	
20:13	3	NA	Flammable and combustible liquid	
20:17	3	1275	Propionaldehyde	
20:29	D	NA	Mixed hazardous materials	
20:32	3	1294	Toluene	
20:32	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
20:32	3	1203	Gasoline	
20:34	8	1719	Caustic alkali liquids, n.o.s.	
20:35	3	1133	Adhesives	
20:40	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
20:57	6.1	1199	Furaldehydes	
20:58	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
21:02	3	1203	Gasoline	
21:05	2.1	1075	Petroleum gases, liquefied	
21:14	8	1760	Corrosive liquids, n.o.s.	
21:19	3	1203	Gasoline	
21:20	3	1120 1220 1146	Butanols / Isopropyl acetate / Cyclopentane	
21:25	3	1203	Gasoline	
21:37	3	1247	Methyl methacrylate	
21:37	3, 2	N/A	Flammable and Non-Flammable Gas	
21:41	3	1203	Gasoline	
21:47	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
21:50	3	1203	Gasoline	
21:54	3	1203	Gasoline	



21:58	3	1203	Gasoline	
22:15	3	1133	Adhesives, containing a flammable liquid	
22:16	5.1	2426	Ammonium nitrate, liquid	
22:19	3	1203	Gasoline	
22:29	D	NA	Mixed hazardous materials	
22:29	6	2078	Toluene diisocyanate	
22:36	2.1	1075	Propane	
22:45	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
22:56	3	1203	Gasoline	
23:14	3	1203	Gasoline	
23:18	3	1203	Gasoline	
23:46	8	1824	Sodium hydroxide solution	
23:49	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E at Sullivan County Line				Date: 20JUL06
Time	Hazard Class	UN ID	Description	Notes
5:29	3	1203	Gasoline	
6:14	D	NA	Mixed hazardous materials	
6:32	2.1	1075	Propane	
6:49	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
7:29	3	1203	Gasoline	
7:37	3	1203	Gasoline	
7:49	3	1203	Gasoline	
8:13	3	NA	Flammable	
8:18	5.1, 2.2	1073	Oxygen	
8:22	2.1	1075	Propane	
8:57	2.1	1075	Propane	
9:07	3	1203	Gasoline	
9:28	3	1203	Gasoline	
9:30	5.1, 2.2	1073	Oxygen	
9:33	3	1203	Gasoline	
9:51	5.1, 2.2	1073	Oxygen	
10:12	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
10:33	2.1	1075	Propane	
10:35	3	1203	Gasoline	
10:45	3,8	2924	Flammable liquids, corrosive, n.o.s.	
10:51	3	1203	Gasoline	

11:10	3	1203	Gasoline	
11:23	8	NA	Corrosive	
11:25	3	1203	Gasoline	
11:31	5.1, 2.2	1073	Oxygen	
12:11	2.1	1075	Propane	
12:24	3	1203	Gasoline	
12:39	8	1830	Sulfuric acid, >51% acid	
12:49	3	1203	Gasoline	
13:08	3	1203	Gasoline	
13:20	8	NA	Corrosive	
13:42	3	1203	Gasoline	
14:20	2.1, 2.2	NA	Compressed gases (flam.and nonflam.)	
14:32	2.3, 8	3308	Liquefied gas, toxic, corrosive, n.o.s. Inhalation Hazard Zone A	
14:48	3	1170	Ethanol	
15:05	3	1203	Gasoline	
15:17	3	1203	Gasoline	
15:20	3	1203	Gasoline	
15:38	2.1	1075	Propane	
15:47	3	1993	Flammable liquids, n.o.s	
15:51	3	NA	Flammable and combustible liquid	
16:06	2.1	1075	Propane	
16:07	2.2	3318	Ammonia solution, with > 50% ammonia	
16:20	8	3093	Corrosive liquids, oxidizing, n.o.s.	
16:30	8	1830	Sulfuric acid, > 50% acid	
16:38	8	1791, 1830	Hypochlorite soln, Sulfuric acid	
16:42	5.1, 2.2	1073	Oxygen	
16:55	8	2215	Maleic acid	
17:08	6.1	3287	Toxic liquid, inorganic, n.o.s. Inhalation Hazard IA	
17:13	2.1	1075	Propane	
17:17	8	1791	Hypochlorite solution	
17:23	3	NA	Flammable and combustible liquid	
17:26	2.1	1075	Propane	
17:31	2.1	1075	Propane	
17:54	5.1, 2.2	1073	Oxygen	
18:19	3	1203	Gasoline	
18:22	3	1203	Gasoline	
18:27	3,8	2924	Flammable liquids, corrosive, n.o.s.	
18:36	4.1	3178	Flammable solid, inorganic, n.o.s.	

18:45	3	1203	Gasoline	
18:51	2.2	1950	Aerosols, corrosive, packing group III	
19:03	3	1203	Gasoline	
19:12	3	1203	Gasoline	
19:19	3	1203	Gasoline	
19:33	3	1203	Gasoline	
19:44	8	NA	Corrosive	
20:00	5.1, 2.2	1073	Oxygen	
20:29	3	1203	Gasoline	
20:32	8	NA	Corrosive	
20:57	3	1203	Gasoline	
21:14	3	2924	Flammable liquids, corrosive, n.o.s.	
21:20	3	1203	Gasoline	
21:41	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E near Jockey Creek			Date: 23JUL06	
Time	Hazard Class	UN ID	Description	Notes
5:43	3	1203	Gasoline	
6:27	3	1203	Gasoline	
6:59	8	2215	Maleic acid	
7:03	3	1203	Gasoline	
7:10	2.1	1075	Propane	
7:53	3	1203	Gasoline	
8:33	5.1, 2.2	1073	Oxygen	
8:42	2.1	1075	Propane	
9:01	5.1, 2.2	1073	Oxygen	
9:02	3	1203	Gasoline	
9:04	3	1203	Gasoline	
9:16	2.1	1075	Propane	
9:31	3	1203	Gasoline	
9:54	3	NA	Flammable	
10:03	3	1203	Gasoline	
10:12	3	1203	Gasoline	
10:33	8	NA	Corrosive	
10:37	8	1805	Phosphoric acid, liquid	
10:45	5.1, 2.2	1073	Oxygen	
10:47	8	NA	Corrosive	

10:51	3	1203	Gasoline	
11:03	D	NA	Mixed hazardous materials	
11:23	2.1	1075	Propane	
11:25	3	1203	Gasoline	
11:44	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:04	3	1203	Gasoline	
12:36	3	1203	Gasoline	
12:43	2.1	1075	Propane	
13:24	2.1	1075	Propane	
13:33	3	1999	Asphalt	
14:25	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
14:30	2.1	1966	Hydrogen, refrigerated liquid	
14:50	3	1203	Gasoline	
15:18	2.3, 8	1017	Chlorine	
15:38	3	1999	Asphalt	
15:47	3	1999	Asphalt	
16:17	3	1203	Gasoline	
16:22	3	1999	Asphalt	
16:22	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
16:30	2.1, 2.2	NA	Compressed gases (flam.and nonflam.)	
16:55	8	NA	Corrosive	
17:13	2.1	1075	Propane	
17:23	3	1999	Asphalt	
17:25	3	1203	Gasoline	
17:26	3	1203	Gasoline	
17:31	8	1824	Sodium hydroxide solution	
17:33	3	1999	Asphalt	
18:04	2.1	1075	Propane	
18:08	4.1	1350	Sulfur	
18:17	D	NA	Mixed hazardous materials	
18:19	3	1203	Gasoline	
18:27	2.1	1075	Propane	
18:27	3	1999	Asphalt	
18:49	2.1	1075	Propane	
18:51	3	1203	Gasoline	
19:13	3	1203	Gasoline	
19:19	2.1	1075	Propane	
19:24	5.1, 2.2	1073	Oxygen	
19:44	3	1203	Gasoline	

20:00	3	1203	Gasoline	
21:44	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E near Jockey Creek

Date: 24JUL06

Time	Hazard Class	UN ID	Description	Notes
0:23	D	NA	Mixed hazardous materials	
1:24	3	1203	Gasoline	
2:50	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
3:32	3	1203	Gasoline	
4:02	3	1203	Gasoline	
4:50	2.1	1075	Propane	
5:30	3	1203	Gasoline	
5:37	2.1	1075	Propane	
6:13	3	1999	Asphalt	
6:14	3	1203	Gasoline	
6:34	2.1	1978	Propane	
6:57	3	1999	Asphalt	
7:18	3	1999	Asphalt	
7:20	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
7:27	2.1	1075	Propane	
7:34	2.1	1075	Propane	
7:36	2.1	1075	Propane	
7:46	2.1	1075	Propane	
8:01	3	1203	Gasoline	
8:07	3	1203	Gasoline	
8:31	5.1, 2.2	1073	Oxygen	
8:31	3	1203	Gasoline	
8:59	2.1	1075	Propane	
9:16	8, 2.3	1005	Ammonia, anhydrous	
9:36	D	NA	Mixed hazardous materials	
9:38	3	1999	Asphalt	
9:57	3	NA	Flammable and combustible liquid	
10:26	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
10:28	5.1, 2.2	1073	Oxygen	
10:32	3	1203	Gasoline	
10:40	3	1203	Gasoline	
11:04	8	1832	Sodium hydroxide, solid	

11:19	2.1	1075	Propane	
11:30	D	NA	Mixed hazardous materials	
11:35	2.1	1075	Propane	
12:21	3	1203	Gasoline	
12:22	5.1, 2.2	1073	Oxygen	
12:25	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
12:40	7	NA	Radioactive	
13:07	3	1999	Asphalt	
13:13	2.1	1966	Hydrogen, refrigerated liquid	
13:17	3	1203	Gasoline	
13:52	3	1999	Asphalt	
14:04	8	1830	Sulfuric acid, >51% acid	
14:10	3	1203	Gasoline	
14:20	3	NA	Flammable	
14:39	2.1	1075	Propane	
14:39	5.1, 2.2	1073	Oxygen	
15:05	3	NA	Flammable and combustible liquid	
15:17	3, 8	NA	Flammable and combustible liquid, Corrosive	
15:22	3	1203	Gasoline	
15:25	3	1203	Gasoline	
15:35	2.2	1072	Oxygen	
15:38	3	1203	Gasoline	
16:06	8	1791	Hypochlorite solution	
16:17	3	1203	Gasoline	
16:21	3	1203	Gasoline	
16:23	5.1, 2.2	1073	Oxygen	
16:31	3	1203	Gasoline	
16:34	3	1203	Gasoline	
17:02	5.1, 2.2	1073	Oxygen	
17:25	5.1, 2.2	1073	Oxygen	
17:40	3	1999	Asphalt	
17:41	2.1	1075	Propane	
17:42	3	1203	Gasoline	
17:55	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
17:58	8	1910	Calcium oxide	
18:03	2.1	1075	Propane	
18:09	3	1999	Asphalt	Dripping product
18:30	3	NA	Flammable and combustible liquid	
18:37	2.1	1075	Propane	

18:38	8	2215	Maleic acid	
18:44	3	1999	Asphalt	
19:04	3	1203	Gasoline	
19:20	3	1203	Gasoline	
19:21	8	1830	Sulfuric acid	
19:26	D	NA	Mixed hazardous materials	
19:50	8	NA	Corrosive	
20:03	3	1203	Gasoline	
20:54	2.1	1075	Propane	
20:55	2.2	1066	Nitrogen, compressed	
20:55	3	1203	Gasoline	
21:09	8	NA	Corrosive	
21:25	3	1203	Gasoline	
21:43	5.1, 2.2	1073	Oxygen	
22:00	3	1203	Gasoline	
22:57	2.1	1075	Propane	
23:56	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 near Okolona Road (Exit 28)			Date: 28JUL06	
Time	Hazard Class	UN ID	Description	Notes
0:09	3	1203	Gasoline	
0:14	3	1203	Gasoline	
0:21	3	1203	Gasoline	
0:26	5.1, 2.2	1073	Oxygen	
0:29	3	1203	Gasoline	
0:33	D	NA	Mixed hazardous material	
0:41	8	3093	Corrosive liquids, oxidizing, n.o.s.	
0:44	2.1	1075	Propane	
0:51	5.1	2428	Sodium chlorate, aqueous solution	
0:56	3	1203	Gasoline	
1:06	8	NA	Corrosive	
1:07	HOT	3257	Elevated temperature liquid, n.o.s.	
1:18	5.1	2428	Sodium chlorate, aqueous solution	
1:21	2.2	2187	Carbon dioxide, refrigerated liquid	
1:27	8	2209	Formaldehyde, solutions	
1:33	4.1	3178	Flammable solid, inorganic, n.o.s.	
2:04	8	NA	Corrosive	

2:11	2.3	3308	Liquefied gas, toxic, corrosive, n.o.s.	
2:21	1.1D	NA	Explosive (mass explosion hazard)	
2:30	HOT	3257	Elevated temperature liquid, n.o.s.	
2:34	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
2:34	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
3:10	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
3:13	5.1, 2.2	1073	Oxygen	
3:15	3	1308	Vinyl acetate	
3:20	3	1294	Toluene	
3:21	2.1	1075	Propane	
3:26	5.1, 2.2	1073	Oxygen	
3:34	3	1993	Flammable liquid, n.o.s.	
3:46	8	NA	Corrosive	
4:00	3	1220	Isopropyl acetate	
4:12	3	NA	Flammable and combustible liquid	
4:29	2.1	1075	Propane	
4:33	3	1280	Propylene oxide	
4:41	HOT	3257	Elevated temperature liquid, n.o.s.	
4:56	2.1	1075	Propane	
5:00	2.3	3308	Liquefied gas, toxic, corrosive, n.o.s.	
5:03	8	NA	Corrosive	
5:04	5.1	2428	Sodium chlorate, aqueous solution	
5:17	8	2215	Maleic acid	
5:21	8	NA	Corrosive	
5:29	5.1, 2.2	1073	Oxygen	
5:47	HOT	9259	Elevated temperature material, liquid, n.o.s.	
5:51	3	1993	Flammable liquid, n.o.s.	
6:10	3	1090	Acetone	
6:11	3	1203	Gasoline	
6:21	HOT	3257	Elevated temperature liquid, n.o.s.	
6:31	8	NA	Corrosive	
6:34	8	2209	Formaldehyde, solutions	
6:36	3	1203	Gasoline	
7:14	3	1210	Printing ink related material	
7:24	D	NA	Mixed hazardous materials	
7:36	3	1198	Formaldehyde	
7:49	2.2	1977	Nitrogen, refrigerated liquid	
7:52	5.1	2428	Sodium chlorate, aqueous solution	
7:57	5.1	2428	Sodium chlorate, aqueous solution	



8:34	8	NA	Corrosive	
9:03	3	1268	Petroleum distillates, n.o.s.	
9:16	2.2	2187	Carbon dioxide, refrigerated liquid	
9:21	8	2209	Formaldehyde, solutions	
9:30	3	1987	Denatured alcohol	
9:35	3	1120	1-Butanol	
9:37	2.2	2187	Carbon dioxide, refrigerated liquid	
9:40	2.2	2187	Carbon dioxide, refrigerated liquid	
9:42	8	1715	Acetic anhydride	
9:54	8	NA	Corrosive	
10:13	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
10:15	2.2	2187	Carbon dioxide, refrigerated liquid	
10:26	3	1993	Flammable liquid, n.o.s.	
10:43	3	1224	Ketones, liquid, n.o.s.	
10:44	6.1	1662	Nitrobenzene	
10:52	3	1203	Gasoline	
11:24	2.1	1075	Propane	
11:46	3	1993	Flammable liquid, n.o.s.	
12:00	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
12:06	3	1993	Flammable liquid, n.o.s.	
12:07	3	1203	Gasoline	
12:21	5.1	2428	Sodium chlorate, aqueous solution	
12:35	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:37	3	1129	Butyraldehyde	
12:37	8	NA	Corrosive	
12:45	7	2982	Radioactive material, n.o.s.	
12:52	2.2	2187	Carbon dioxide, refrigerated liquid	
13:41	8, 2.3	NA	Corrosive, Poison gas	
14:01	5.1	1486	Potassium nitrate	
14:16	HOT	3257	Elevated temperature liquid, n.o.s.	
14:19	3	1993	Flammable liquid, n.o.s.	
14:29	2.3, 8	1050	Hydrogen chloride, anhydrous	
14:29	8	2280	Hexamethylenediamine, solid	
14:33	D	NA	Mixed hazardous materials	
14:41	3	1294	Toluene	
15:21	3	NA	Flammable and combustible liquid	
15:32	8	1715	Acetic anhydride	
15:33	3	1145	Cyclohexane	
16:04	5.1, 2.2	1073	Oxygen	

16:10	2.1	1075	Propane	
16:16	HOT	3257	Elevated temperature liquid, n.o.s.	
16:24	8	NA	Corrosive	
16:27	8	2215	Maleic acid	
16:38	8	2218	Acrylic acid	
16:51	2.1	1075	Propane	
17:38	HOT	9259	Elevated temperature material, liquid, n.o.s.	
17:46	2.2	2187	Carbon dioxide, refrigerated liquid	
17:48	5.1, 2.2	1073	Oxygen	
17:58	8	NA	Corrosive	
18:05	8	1760	Corrosive liquids, n.o.s.	
18:08	3	1993	Flammable liquid, n.o.s.	
18:15	2.2	2187	Carbon dioxide, refrigerated liquid	
18:34	HOT	3257	Elevated temperature liquid, n.o.s.	
18:41	D	NA	Mixed hazardous materials	
18:52	D	NA	Mixed hazardous materials	
19:08	5.1	2428	Sodium chlorate, aqueous solution	
19:18	5.1	2428	Sodium chlorate, aqueous solution	
19:39	8	1715	Acetic anhydride	
19:52	2.2	1977	Nitrogen, refrigerated liquid	
19:53	3	1203	Gasoline	
20:11	6.1	NA	Poisonous material	
20:14	HOT	9259	Elevated temperature material, liquid, n.o.s.	
20:15	8	NA	Corrosive	
20:16	3	1210	Printing ink related material	
20:31	3	1219	Isopropanol	
20:32	2.2	2187	Carbon dioxide, refrigerated liquid	
20:46	HOT	3257	Elevated temperature liquid, n.o.s.	
20:48	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
20:51	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
21:18	5.1	2428	Sodium chlorate, aqueous solution	
21:20	3	1093	Acrylonitrile	
21:24	HOT	3257	Elevated temperature liquid, n.o.s.	
21:26	3	1220	Isopropyl acetate	
21:36	7	2982	Radioactive material, n.o.s.	
21:38	2.1	1075	Propane	
21:40	3	1220	Isopropyl acetate	
21:43	7	NA	Radioactive	
21:57	2.2	2187	Carbon dioxide, refrigerated liquid	

22:06	2.2	1006	Argon	
22:13	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
22:32	3	1993	Flammable liquid, n.o.s.	
22:44	3	1203	Gasoline	
23:20	8	NA	Corrosive	
23:22	3	1203	Gasoline	
23:32	3	1224	Ketones, liquid, n.o.s.	
23:34	3	1203	Gasoline	
23:44	8	1760	Corrosive liquid, n.o.s.	
23:56	HOT	3257	Elevated temperature liquid, n.o.s.	

### Road Side Survey Field Log

Location: I-26 near Okolona Road (Exit 28)				Date: 2AUG06
Time	Hazard Class	UN ID	Description	Notes
0:29	3	1203	Gasoline	
0:44	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
1:06	3	1203	Gasoline	
1:21	3	1203	Gasoline	
1:33	7	2982	Radioactive material, n.o.s.	
2:11	D	NA	Mixed hazardous material	
2:30	8	3093	Corrosive liquids, oxidizing, n.o.s.	
2:34	5.1, 2.2	NA	Oxygen	
3:13	8	1719	Caustic alkali liquids, n.o.s.	
3:20	2.1	1075	Petroleum gases, liquefied	
3:26	8	1715	Acetic anhydride	
3:41	8	1719	Caustic alkali liquids, n.o.s.	
3:46	3	1203	Gasoline	
4:12	D	NA	Mixed hazardous materials	
4:33	8	1715	Acetic anhydride	
4:39	3	1203	Gasoline	
4:56	8	1760	Corrosive liquids, n.o.s.	
5:03	8	1805	Phosphoric acid, liquid	
5:17	2.1	1075	Propane	
5:29	2.2	1073	Oxygen	
5:42	2.2	2187	Carbon dioxide, refrigerated liquid	
5:51	3	1993	Flammable liquid, n.o.s.	
6:11	2.1	1075	Propane	
6:18	2.1	1075	Propane	

6:31	8	NA	Corrosive	
6:36	D	NA	Mixed hazardous materials	
7:24	2.1	1075	Propane	
7:38	3	1203	Gasoline	
7:49	3	1993	Flammable liquid, n.o.s.	
7:57	8	NA	Corrosive	
8:49	3	1220	Isopropyl acetate	
9:03	2.3, 8	1017	Chlorine	
9:21	3	1203	Gasoline	
9:35	2.1	1075	Propane	
9:40	3	1993	Flammable liquid, n.o.s.	
9:51	3	1203	Gasoline	
9:54	8	NA	Corrosive	
10:15	2.2	1977	Nitrogen, refrigerated liquid	
10:33	5.1	2428	Sodium chlorate, aqueous solution	
10:43	8	2215	Maleic acid	
10:52	8	NA	Corrosive	
11:38	5.1, 2.2	1073	Oxygen	
11:44	D	NA	Mixed hazardous materials	
11:46	2.2	2187	Carbon dioxide, refrigerated liquid	
11:50	3	1203	Gasoline	
12:06	2.2	2187	Carbon dioxide, refrigerated liquid	
12:21	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
12:25	D	NA	Mixed hazardous materials	
12:37	8	NA	Corrosive	
12:37	8	2789	Acetic acid, glacial	
12:41	2.2	1977	Nitrogen, refrigerated liquid	
12:52	2.1	1075	Propane	
13:41	3	1203	Gasoline	
13:49	2.1	1075	Propane	
14:01	3	1203	Gasoline	
14:19	8	NA	Corrosive	
14:29	3	1268	Petroleum distillates, n.o.s.	
14:33	2.2	2187	Carbon dioxide, refrigerated liquid	
14:41	3	1999	Asphalt	
14:47	3	1203	Gasoline	
15:32	3	1203	Gasoline	
15:33	8	NA	Corrosive	
15:56	2.1	1075	Propane	

16:00	8	1791	Hypochlorite solutions	
16:04	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
16:16	8	NA	Corrosive	
16:24	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:38	3	1203	Gasoline	
16:51	D	NA	Mixed hazardous materials	
17:38	3	1993	Flammable liquid, n.o.s.	
17:46	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
17:48	3	1203	Gasoline	
18:05	2.1	1075	Propane	
18:08	3	1993	Flammable liquid, n.o.s.	
18:34	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
18:39	2.2	1073	Oxygen	
18:41	3	1220	Isopropyl acetate	
19:08	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
19:22	8	1760	Corrosive liquids, n.o.s.	
19:39	3	1203	Gasoline	
19:52	8	NA	Corrosive	
20:11	2.2	1073	Oxygen	
20:15	2.1	1075	Propane	
20:31	8	1830	Sulfuric acid, >51% acid	
20:36	8	2215	Maleic acid	
20:46	5.1, 2.2	1073	Oxygen	
20:51	2.1	1075	Propane	
21:18	3	1993	Flammable liquid, n.o.s.	
21:24	D	NA	Mixed hazardous materials	
21:36	2.2	1072	Oxygen, compressed	
21:38	8	NA	Corrosive	
21:56	D	NA	Mixed hazardous materials	
22:06	2.2	1046	Helium, compressed	
22:32	2.2	1073	Oxygen, refrigerated liquid	
22:57	3	1203	Gasoline	
23:34	3	1203	Gasoline	
23:56	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E at Sullivan County Line

Date: 7AUG06

Time	Hazard Class	UN ID	Description	Notes
1:26	3	1203	Gasoline	
3:14	3	1203	Gasoline	
4:56	2.2	1073	Oxygen	
5:25	3	1203	Gasoline	
6:00	2.1	1075	Propane	
6:13	3	1203	Gasoline	
6:24	3	1203	Gasoline	
6:46	2.1	1978	Propane	
7:43	D	NA	Mixed hazardous materials	
7:50	3	1203	Gasoline	
7:51	2.1	1075	Propane	
7:57	3	1993	Flammable	
8:01	8	1759	Corrosive solids, n.o.s.	
8:43	2.1	1075	Propane	
8:47	3	1999	Asphalt	
8:58	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
9:21	3	1203	Gasoline	
9:35	2.1	1978	Propane	
9:40	2.1	1075	Propane	
9:40	2.1	1075	Propane	
9:50	8, 2.3	1005	Ammonia, anhydrous	
10:08	3	1203	Gasoline	
10:12	5.1, 2.2	1073	Oxygen	
10:12	3	NA	Flammable and combustible liquid	
10:13	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
10:47	3	1203	Gasoline	
10:48	3	1203	Gasoline	
10:57	3	1203	Gasoline	
11:10	3	1999	Asphalt	
11:24	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:24	D	NA	Mixed hazardous materials	
11:49	2.1	1075	Propane	
11:50	3	1993	Flammable liquid, n.o.s.	
12:02	5.1, 2.2	1073	Oxygen	
12:16	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	

12:31	3, 8	NA	Flammable and combustible liquid, Corrosive	
12:38	3	1203	Gasoline	
12:45	3	1203	Gasoline	
12:50	8	1760	Corrosive liquids, n.o.s.	
13:03	2.1	1075	Propane	
13:11	5.1, 2.2	1073	Oxygen	
13:21	3	1203	Gasoline	
13:36	3	1993	Flammable	
13:57	3	1203	Gasoline	
14:27	3	1203	Gasoline	
14:32	3	NA	Flammable	
14:34	3	1203	Gasoline	
14:37	3	1999	Asphalt	
14:58	3	NA	Flammable and combustible liquid	
15:02	2.2	1072	Oxygen	
15:02	3	1203	Gasoline	
15:10	3	1203	Gasoline	
15:40	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:14	3	1203	Gasoline	
16:17	3	1203	Gasoline	
16:38	3	1203	Gasoline	
16:42	8	1760	Corrosive liquids, n.o.s.	
17:28	3	1203	Gasoline	
17:29	3	1203	Gasoline	
17:38	3	1203	Gasoline	
17:53	5.1, 2.2	1073	Oxygen	
18:04	2.1	1075	Propane	
18:24	3	1999	Asphalt	
18:28	3	1999	Asphalt	
18:30	3	1999	Asphalt	
18:34	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
18:38	8	1910	Calcium oxide	
19:00	2.1	1075	Propane	
19:03	8	2215	Maleic acid	
19:05	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:06	3	1203	Gasoline	
19:15	3	1203	Gasoline	
20:12	D	NA	Mixed hazardous materials	
20:42	3	1203	Gasoline	

20:50	8	NA	Corrosive	
20:52	3	1203	Gasoline	
21:08	3	1203	Gasoline	
21:37	2.2	1066	Nitrogen, compressed	
22:00	3	1203	Gasoline	
22:40	3	1993	Flammable	
23:26	3	NA	Flammable	
23:37	5.1, 2.2	1073	Oxygen	

### Road Side Survey Field Log

Location: US-11E at Sullivan County Line				Date: 8AUG06
Time	Hazard Class	UN ID	Description	Notes
3:51	5.1, 2.2	1073	Oxygen	
6:11	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
6:48	3, 8	NA	Flammable and combustible liquid, Corrosive	
6:52	3	1203	Gasoline	
7:48	3	1203	Gasoline	
8:24	8	1760	Corrosive liquids, n.o.s.	
8:41	2.1	1075	Propane	
9:17	5.1, 2.2	1073	Oxygen	
9:30	D	NA	Mixed hazardous materials	
10:29	3	1203	Gasoline	
10:31	3	1993	Flammable	
11:01	3	1145	Cyclohexane	
11:03	3	1203	Gasoline	
11:09	3	1203	Gasoline	
11:42	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:01	3	1203	Gasoline	
12:24	8	3093	Corrosive liquids, oxidizing, n.o.s.	
12:53	3	1203	Gasoline	
13:17	3	1203	Gasoline	
13:30	2.1	1075	Propane	
14:54	8, 2.3	1005	Ammonia, anhydrous	Blown Tire
14:57	3	1203	Gasoline	
15:28	5.1, 2.2	1073	Oxygen	
15:33	2.1	1075	Propane	
16:19	8	1760	Corrosive liquids, n.o.s.	
16:22	3	1203	Gasoline	



17:24	3	1198	Formaldehyde	
18:08	3	1203	Gasoline	
18:49	3	1999	Asphalt	
19:00	3	1203	Gasoline	
19:20	2.2	1073	Oxygen	
21:37	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321				Date: 11AUG06
Time	Hazard Class	UN ID	Description	Notes
4:51	3	1203	Gasoline	
5:23	8	NA	Corrosive	
5:40	3	1203	Gasoline	
6:20	5.1, 2.2	1073	Oxygen	
6:48	3	1203	Gasoline	
7:03	D	NA	Mixed hazardous material	
7:55	3	1203	Gasoline	
8:20	5.1, 2.2	1073	Oxygen	
8:34	3	1203	Gasoline	
9:49	3	1203	Gasoline	
9:57	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
10:13	D	NA	Mixed hazardous material	
10:46	3	1203	Gasoline	
11:06	6.2	3291	(Bio) medical wastes, n.o.s.	
11:19	5.1, 2.2	1073	Oxygen	
12:19	2.1	1075	Propane	
12:29	3	1993	Flammable liquid, n.o.s.	
12:30	3	1993	Flammable liquid, n.o.s.	
12:42	3	1203	Gasoline	
13:24	3	1203	Gasoline	
13:32	3	1203	Gasoline	
14:22	3	1203	Gasoline	
14:35	3	1203	Gasoline	
15:22	3	1203	Gasoline	
15:41	3	1993	Flammable liquid, n.o.s.	
15:53	2.2	NA	Compressed gas (non-flammable)	
16:02	5.1, 2.2	1073	Oxygen	
16:09	D	NA	Mixed hazardous material	

16:17	3	1203	Gasoline	
17:19	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
17:47	5.1, 2.2	1073	Oxygen, refrigerated liquid	
18:22	D	NA	Mixed hazardous material	
18:34	3	1203	Gasoline	
19:19	3	1993	Flammable liquid, n.o.s.	
19:25	3	1203	Gasoline	
20:41	2.1	1075	Propane	
22:00	3	1203	Gasoline	
22:27	5.1	NA	Oxidizer	
22:41	8, D	NA	Corrosive, Mixed hazardous material	

### Road Side Survey Field Log

Location: US-11E near Jockey Creek				Date: 17AUG06
Time	Hazard Class	UN ID	Description	Notes
0:51	3	1203	Gasoline	
2:28	2.1	1075	Propane	
5:12	2.1	1075	Propane	
6:23	3	1203	Gasoline	
6:40	2.1	1075	Propane	
6:55	2.1	1075	Propane	
7:02	3	1203	Gasoline	
7:44	2.2	1073	Oxygen	
8:18	3	1203	Gasoline	
8:33	3, 8	NA	Flammable and combustible liquid, Corrosive	
8:47	2.1	1075	Propane	
8:55	8	3093	Corrosive liquids, oxidizing, n.o.s.	
9:01	8	1760	Corrosive liquids, n.o.s.	
9:29	3	NA	Flammable and combustible liquid	
9:33	3	1203	Gasoline	
9:42	3	1999	Asphalt	
9:57	3	3286	Flammable liquid, toxic, corrosive, n.o.s..	
10:27	2.1	1075	Propane	
10:42	3	1993	Flammable liquids, n.o.s	
10:44	3	1203	Gasoline	
10:57	2.1	1075	Propane	
11:23	2.1	1075	Propane	
12:04	3	1203	Gasoline	

12:17	3	1203	Gasoline	
12:37	3	3286	Flammable liquid, toxic, corrosive, n.o.s..	
12:40	2.1	1075	Propane	
13:09	5.1	N/A	Oxidizer	
13:17	2.1	1075	Propane	
13:29	2.3, 8	1017	Chlorine	
13:35	3	1203	Gasoline	
13:45	D	NA	Mixed hazardous materials	
13:50	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
13:54	3	1203	Gasoline	
14:00	2.1, 2.2	NA	Compressed gases (flam. and nonflam.)	
14:10	3	NA	Flammable and combustible liquid	
14:12	3	1993	Flammable liquids, n.o.s.	
14:15	5.1, 2.2	1073	Oxygen	
14:25	2.1	1075	Propane	
14:26	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
14:28	3	1993	Flammable liquids, n.o.s.	
14:29	4.1	3178	Flammable solid, inorganic, n.o.s.	
14:32	D	NA	Mixed hazardous materials	
14:37	2.1	1966	Hydrogen, refrigerated liquid	
14:40	3	1203	Gasoline	
15:02	3	1203	Gasoline	
15:16	3	1993	Flammable	
15:35	8	1830	Sulfuric acid	
16:22	8	NA	Corrosive	
16:29	2.1	1075	Propane	
16:38	2.1	1075	Propane	
16:42	5.1, 2.2	1073	Oxygen	
16:43	3	1203	Gasoline	
17:04	D	NA	Mixed hazardous materials	
17:18	3	1993	Flammable liquids, n.o.s.	
17:36	3	1203	Gasoline	
17:42	3, 5.1, 8	NA	Flammable, Oxidizer, Corrosive	
18:28	D	NA	Mixed hazardous materials	
18:33	3	1203	Gasoline	
19:23	3	1999	Asphalt	
19:32	3	1999	Asphalt	
19:37	8	3093	Corrosive liquids, oxidizing, n.o.s.	
19:49	3	1203	Gasoline	

19:54	2.1	1075	Propane	
20:34	2.1	1075	Propane	
20:43	3	1203	Gasoline	
21:03	2.1	1075	Propane	
21:12	8	1719	Caustic alkali liquids, n.o.s.	
22:18	3	1203	Gasoline	
22:57	3	1203	Gasoline	
23:05	3	1993	Flammable	
23:19	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 near Eastern Star (Exit 45)

Date: 20AUG06

Time	Hazard Class	UN ID	Description	Notes
1:38	3	1268	Petroleum distillates, n.o.s.	
2:43	3	1203	Gasoline	
2:50	3	1203	Gasoline	
3:08	3	1303	Vinyl chloride	
3:19	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
3:53	2.1	1075	Propane	
4:12	3	1203	Gasoline	
4:25	3	1203	Gasoline	
4:30	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
4:31	8	2834	Phosphorous acid	
5:25	8	1726	Aluminum chloride, anhydrous	
5:39	3	1230	Methanol	
5:48	3	1203	Gasoline	
5:56	3	1993	Flammable liquids, n.o.s.	
6:04	8, D		Corrosive/Mixed hazardous materials	
6:07	6.1	1809	Phosphorus trichloride	
6:11	8	1791	Hypochlorite solutions	
6:17	3	1203	Gasoline	
6:22	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:31	3	1203	Gasoline	
6:35	3	1203	Gasoline	
6:37	2.1	1075	Propane	
6:38	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:43	D	N/A	Mixed Shipment	
6:45	HOT	3257	Elevated temperature liquid, n.o.s.	

6:49	3, 6.1	1193 1593	Ethyl methyl ketone / Dichloromethane	
6:56	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
7:00	8	NA	Corrosive	
7:04	3	1203	Gasoline	
7:19	3	1230	Methanol	
7:22	3	1203	Gasoline	
7:27	3	NA	Flammable and combustible liquid	
7:29	2.2	1072	Oxygen, compressed	
7:35	8	2491	Ethanolamine	
7:38	2.1	1075	Petroleum Gases, Liquefied (Propane)	
7:58	3	1203	Gasoline	
7:59	3	1203	Gasoline	
8:01	5.1, 2.2	1073	Oxygen	
8:05	4.2	2318	Sodium hydrosulfide < 25% water of crystallization	
8:10	3	1203	Gasoline	
8:22	5.1, 2.2	1073	Oxygen	
8:24	3	1203	Gasoline	
8:32	5.1	2880	Calcium hypochlorite, hydrated	
8:32	3	1131	Carbon disulfide	
8:35	5.1	2428	Sodium chlorate, aqueous solution	
8:40	2.1	1601	Methylamine, anhydrous	
8:46	HOT	3257	Elevated temperature liquid, n.o.s.	
8:54	3	1203	Gasoline	
8:57	5.1, 2.2	1073	Oxygen	
9:02	3	1203	Gasoline	
9:03	2.2	1983	Refrigerant gas R 133a	
9:41	2.1	1075	Propane	
9:52	8	NA	Corrosive	
9:53	3	1203	Gasoline	
10:06	8	1824	Sodium hydroxide solution	VENTING
10:16	8	NA	Corrosive	
10:24	8	NA	Corrosive	
10:32	5.1	2428	Sodium chlorate, aqueous solution	
10:38	3	1114	Benzene	
10:44	3	1221	Isopropylamine	
10:49	2.2	1073	Oxygen, refrigerated liquid	
10:55	3	1203	Gasoline	
11:00	2.1	1075	Propane	
11:21	5.1, 2.2	1073	Oxygen	

11:27	3	1203	Gasoline	
11:46	3	1993	Flammable liquids, n.o.s	
11:47	6.1	1017	Chlorine	
12:08	3	1206	Heptane	
12:14	3	1993, 1123	Flammable liquid, n.o.s/Butyl acetates	
12:18	5.1, 2.2	1073	Oxygen	
12:20	3, 8	1993 3264	Flammable liquids, n.o.s. / Corrosive liquid, acidic, inorganic, n.o.s.	
12:31	6.1	2312	Phenol, molten	
12:34	3	1993	Flammable liquids, n.o.s.	
12:37	3	2302	5-Methylhexan-2-one	
12:49	5.1	2426	Ammonium nitrate, liquid	
12:54	2.2	1072	Oxygen	
13:00	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
13:14	3	NA	Flammable and combustible liquid	
13:17	5.1, 2.2	1073	Oxygen	
13:25	5.1, 2.2	NA	Oxygen	
13:28	2.2, 5.1	1073	Oxygen	
13:33	3	1203	Gasoline	
13:44	3	1203	Gasoline	
13:55	6.1	1199	Furaldehydes	
14:00	3	1203	Gasoline	
14:07	3	1203	Gasoline	
14:21	3	1203	Gasoline	
14:27	3	1203	Gasoline	
14:28	2	N/A	Non-Flammable Gas	
14:38	3	1203	Gasoline	
14:44	3	1203	Gasoline	
14:47	2.2	1072	Oxygen, compressed	
15:02	3	NA	Flammable and combustible liquid	
15:22	3	1173	Ethyl acetate	
15:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:30	3	1203	Gasoline	
15:33	8	1760	Corrosive liquids, n.o.s.	
15:49	3	1203	Gasoline	
15:52	3	N/A	Flammable and Combustible Liquid	
16:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:26	3	1203	Gasoline	
16:29	3	1203	Gasoline	

16:32	2.2	1072	Oxygen, compressed	
16:36	8	2491	Ethanolamine	
16:40	5.1, 2.2	1073	Oxygen	
16:48	8, 3	NA	Corrosive, Flammable and combustible liquid	
16:51	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:55	3	1280	Propylene oxide	
16:55	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:57	8	1783	Hexamethylenediamine solution	
16:59	5.1	NA	Oxidizer	
17:02	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
17:03	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
17:07	2.2	1951	Argon, refrigerated liquid	
17:30	3	1203	Gasoline	
17:30	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
17:35	3	1189	Ethylene glycol monoethyl ether acetate	
17:35	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
17:40	3	1203	Gasoline	
17:43	2.2	1072	Oxygen, compressed	
17:45	1D	81	Explosive, blasting, type A	
17:46	9	3082	Hazardous waste, liquid, n.o.s.	
17:46	3	1203	Gasoline	
17:49	3	1203	Gasoline	
17:50	5.1	1748	Calcium hypochlorite, dry	
17:51	3	1993	Flammable liquid, n.o.s.	
18:00	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
18:09	3	1203	Gasoline	
18:17	3	1203	Gasoline	
18:23	2.1	1075	Propane	
18:29	3	1203	Gasoline	
18:33	5.1, 2.2	NA	Oxygen	
18:57	4.2	1362	Carbon, activated	
18:57	3	1203	Gasoline	
19:26	3	1203	Gasoline	
19:37	2.2	1977	Nitrogen, refrigerated liquid	
19:56	2.2	1072	Oxygen, compressed	
20:04	3	1090	Acetone	
20:33	3	1203	Gasoline	
20:40	8	2794	Batteries, wet, filled w/ acid	
20:52	3	1203	Gasoline	
21:24	3	1203	Gasoline	

21:29	8	NA	Corrosive	
22:06	3	1993	Flammable liquid, n.o.s.	
22:34	3	1203	Gasoline	
23:09	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 near Fall Branch, TN (Exit 50)

Date: 26AUG06

Time	Hazard Class	UN ID	Description	Notes
0:10	2.1	1075	Petroleum gases, liquefied	
0:40	8	1760	Corrosive liquids, n.o.s.	
1:22	D	NA	Mixed hazardous materials	
1:37	3	1203	Gasoline	
2:15	3	1203	Gasoline	
3:12	2.2	1006	Argon, compressed	
3:50	3	1203	Gasoline	
4:12	3	1203	Gasoline	
4:44	8	1715	Acetic anhydride	
4:45	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:04	3	1123	Butyl acetates	
5:07	3	1203	Gasoline	
5:13	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
5:54	2.1	1075	Petroleum Gases, Liquefied (Propane)	
5:59	2.2	1072	Oxygen, compressed	
6:00	3	1203	Gasoline	
6:05	3	1268	Petroleum distillates, n.o.s.	
6:13	6.1	2281	Hexamethylene diisocyanate	
6:21	5.1	NA	Oxidizer	
6:25	3	1203	Gasoline	
6:35	8	NA	Corrosive	
6:53	5.1	1942	Ammonium nitrate, w/ >0.2% combustible material	
7:07	2.1	1075	Propane	
7:09	3	1203	Gasoline	
7:12	3	1203	Gasoline	
7:13	9	3257	Elevated temperature liquid, n.o.s	
7:25	6.1	2649	1,3-Dichloroacetone	
7:45	3	1203	Gasoline	
7:56	3	1203	Gasoline	
8:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	



8:28	2.2	1951	Argon, refrigerated liquid	
8:31	D	NA	Mixed hazardous materials	
8:33	3	1203	Gasoline	
8:45	6	2078	Toluene diisocyanate	
8:47	3	1203	Gasoline	
8:54	3	1203	Gasoline	
8:58	D	NA	Mixed hazardous materials	
9:01	3	1294	Toluene	
9:10	3	1993	Flammable liquids, n.o.s.	
9:11	2	1072	Oxygen	
9:12	8	1719	Caustic alkali liquids, n.o.s.	
9:13	3	1203	Gasoline	
9:21	D	NA	Mixed hazardous materials	
9:30	3	1203	Gasoline	
9:34	4.2	1362	Carbon, activated	
9:34	D	NA	Mixed hazardous materials	
9:59	3	1133	Adhesives	
10:12	3	1993	Flammable liquids, n.o.s.	
10:19	8	NA	Corrosive	
		1120 1220 1146	Butanols / Isopropyl acetate / Cyclopentane	
10:26	3			
10:29	6.1	1199	Furaldehydes	
10:39	3	1993	Flammable liquids, n.o.s.	
10:44	3, 2	N/A	Flammable and Non-Flammable Gas	
10:46	3	1203	Gasoline	
10:56	3	1203	Gasoline	
10:58	3	1268	Petroleum distillates, n.o.s.	
10:58	8, 3	NA	Corrosive, Flammable and combustible liquid	
11:02	2.1	1075	Liquefied petroleum gas	
11:21	3	1203	Gasoline	
11:35	3	1203	Gasoline	
11:35	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
11:35	8	1760	Corrosive liquids, n.o.s.	
11:41	8	1824	Sodium hydroxide solution	
11:54	3	1203	Gasoline	
12:05	2.1	1075	Propane	
12:25	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:25	3	1203	Gasoline	
12:34	2.1	1075	Propane	

12:35	3	1993	Flammable liquids, n.o.s.	
12:55	3	1274	n-Propanol	
12:58	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
13:04	2.2	1073	Oxygen	
13:10	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
13:21	3	1203	Gasoline	
13:30	2.2	1073	Oxygen	
13:53	D	NA	Mixed hazardous materials	
13:55	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
13:57	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:04	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
14:10	3	1173	Ethyl Acetate	
14:13	3	1203	Gasoline	
14:16	3	1133	Adhesives	
14:17	2	1072	Oxygen	
14:42	3	1203	Gasoline	
15:14	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
15:17	3	1203	Gasoline	
15:18	3	1203	Gasoline	
15:31	3	1203	Gasoline	
15:41	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
15:48	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
15:59	3	1265	Pentanes	
16:01	3	1203	Gasoline	
16:15	3	1275	Propionaldehyde	
16:24	3	1203	Gasoline	
16:27	9	3334	Aviation regulated liquid, n.o.s.	
16:38	3	1203	Gasoline	
16:57	3	1146	Cyclopentane	
17:03	3	1993	Flammable liquid, n.o.s.	
17:06	3	1993	Flammable liquid, n.o.s.	
17:10	3	1203	Gasoline	
17:16	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
17:18	2.1	1075	Liquefied petroleum gas	
17:44	3	1203	Gasoline	
17:55	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:56	3	1203	Gasoline	
18:10	3	1133	Adhesives, containing a flammable liquid	
18:14	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	

18:16	8	2031	Nitric acid, >60% acid	
18:23	D	NA	Mixed hazardous materials	
18:36	6	2078	Toluene diisocyanate	
18:41	2.1	1075	Petroleum gases, liquefied	
18:46	2.2	1073	Oxygen	
18:53	3	1203	Gasoline	
18:54	8	1773	Ferric chloride, anhydrous	
19:00	D	NA	Mixed hazardous materials	
19:02	3	1203	Gasoline	
19:03	3	1203	Gasoline	
19:13	3	1212	Isobutylene	
19:18	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:22	3	1203	Gasoline	
19:24	3	1203	Gasoline	
19:29	D	NA	Mixed hazardous materials	
19:29	3	1173	Ethyl acetate	
19:29	3	1203	Gasoline	
19:52	3	1203	Gasoline	
19:56	2	1072	Oxygen	
20:01	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:02	3	1203	Gasoline	
20:29	2.1	1075	Propane	
20:42	8	2734	Amines, liquid, corrosive, flammable, n.o.s.	
20:45	3	1203	Gasoline	
20:46	D	NA	Mixed hazardous materials	
20:52	D	NA	Mixed hazardous materials	
20:53	2.1	1978	Propane	
21:01	8	2031	Nitric acid, >70% Acid	
21:10	2.1	1075	Petroleum Gases, Liquefied (Propane)	
21:10	3	1203	Gasoline	
21:17	6.1	2821	Phenol solutions	
21:29	3	1203	Gasoline	
21:44	8	3264	Corrosive liquid, acidic, inorganic, NOS	
21:57	2.1	1075	Petroleum Gases, Liquefied (Propane)	
21:59	3	1307	Xylenes	
22:03	3	1203	Gasoline	
22:07	D	NA	Mixed hazardous materials	
22:09	8	1719	Caustic alkali liquids, n.o.s.	
22:30	3	1203	Gasoline	

22:31	3	1203	Gasoline	
22:49	8	1760	Corrosive liquids, n.o.s.	
23:02	3	1203	Gasoline	
23:38	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E near Jockey Creek

Date: 5SEP06

Time	Hazard Class	UN ID	Description	Notes
5:23	3	1203	Gasoline	
6:56	3	1203	Gasoline	
7:29	2.1	1075	Propane	
7:37	3	1203	Gasoline	
8:38	2.1	1075	Propane	
8:56	2.1	1075	Propane	
9:07	3	1203	Gasoline	
9:58	D	NA	Mixed hazardous materials	
10:33	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:14	3	1203	Gasoline	
12:05	2.1	1075	Propane	
12:11	2.1	1075	Propane	
12:33	3	1203	Gasoline	
12:59	3	1999	Asphalt	
13:08	3	1999	Asphalt	
13:17	3	1993	Flammable liquids, n.o.s.	
13:22	3	1993	Flammable liquids, n.o.s	
14:52	3	1212	Isobutylene	
14:55	3	1999	Asphalt	
15:03	2.1	1075	Propane	
15:47	3	1203	Gasoline	
16:16	3	1999	Asphalt	
16:50	3	1999	Asphalt	
17:22	D	NA	Mixed hazardous materials	
17:25	3	1203	Gasoline	
17:57	3	1993	Flammable liquids, n.o.s.	
18:02	5.1, 2.2	1073	Oxygen	
18:20	5.1, 2.2	1073	Oxygen	
18:38	3	1999	Asphalt	
18:43	3	1203	Gasoline	

19:34	3	1203	Gasoline	
21:48	2.1	1075	Propane	

### Road Side Survey Field Log

Location: I-26 near Okolona Road			Date: 9SEP06	
Time	Hazard Class	UN ID	Description	Notes
1:40	3	1203	Gasoline	
2:22	3	1203	Gasoline	
3:14	3	1203	Gasoline	
3:47	3	1203	Gasoline	
4:21	2.1	1075	Propane	
4:39	2.3	1050	Hydrogen chloride, anhydrous	
5:01	3	1123	Butyl acetates	
5:24	5.1, 2.2	NA	Oxygen	
6:10	8	1719	Caustic alkali liquids, n.o.s.	
6:33	2.2	1977	Nitrogen, refrigerated liquid	
6:59	8	2209	Formaldehyde, solutions (Formalin)	
7:06	3	1189	Ethylene glycol monoethyl ether acetate	
7:36	3	1203	Gasoline	
7:37	D	NA	Mixed hazardous materials	
7:39	D	NA	Mixed Hazardous Shipment	
7:56	2.2	1073	Oxygen	
8:22	8	1760	Corrosive liquids, n.o.s.	
8:24	8	1805	Phosphoric acid, liquid	
8:43	2.1	1075	Propane	
8:43	2.2	2187	Carbon dioxide, refrigerated liquid	
8:47	3	1993	Flammable liquid, n.o.s.	
9:06	3	1993	Flammable liquid, n.o.s.	
9:11	8	NA	Corrosive	
9:39	2.1	1075	Propane	
9:47	8	NA	Corrosive	
9:54	D	NA	Mixed hazardous materials	
10:06	8, 3	2789	Acetic acid, glacial	
10:14	3	1203	Gasoline	
10:37	3	1993	Flammable liquid, n.o.s.	
10:39	8	NA	Corrosive	
10:43	3	1203	Gasoline	
11:02	8	NA	Corrosive	

11:13	3	1203	Gasoline	
11:35	2.1	1075	Propane	
11:38	3	1993	Flammable liquid, n.o.s.	
11:55	D	NA	Mixed hazardous materials	
12:06	8	NA	Corrosive	
12:07	2.2	1977	Nitrogen, refrigerated liquid	
12:28	5.1	2428	Sodium chlorate, aqueous solution	
12:52	2.2	2187	Carbon dioxide, refrigerated liquid	
13:01	8	NA	Corrosive	
13:15	5.1, 2.2	1073	Oxygen	
13:21	2.1	1075	Propane	
13:35	D	NA	Mixed hazardous materials	
13:38	3	1203	Gasoline	
14:09	2.1	1075	Propane	
14:12	3	1203	Gasoline	
14:37	2.1	1075	Propane	
14:40	8	NA	Corrosive	
14:48	8	2789	Acetic acid, glacial	
15:04	2.1	1075	Propane	
15:10	3	3271	Ethers, n.o.s.	
15:27	3	1203	Gasoline	
15:35	2.1	1075	Propane	
15:47	3	1203	Gasoline	
16:11	5.1	2428	Sodium chlorate, aqueous solution	
16:20	3	1993	Flammable liquid, n.o.s.	
16:30	2.2	2187	Carbon dioxide, refrigerated liquid	
16:31	3	1999	Asphalt	
16:37	3	1203	Gasoline	
16:38	8	1824	Sodium hydroxide solution	
16:52	8	NA	Corrosive	
16:59	2.1	1075	Propane	
17:02	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
17:11	8	NA	Corrosive	
17:14	D	NA	Mixed hazardous materials	
17:44	3	1993	Flammable liquid, n.o.s.	
17:56	3	1203	Gasoline	
17:59	D	NA	Mixed hazardous materials	
18:06	3	1993	Flammable liquid, n.o.s.	
18:31	2.1	1075	Propane	

18:39	D	NA	Mixed hazardous materials	
18:42	2.2	2187	Carbon dioxide, refrigerated liquid	
20:27	D	NA	Mixed hazardous materials	
21:50	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
22:00	2.2	1073	Oxygen	
22:39	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
23:32	3	1203	Gasoline	
23:44	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 near Eastern Star

Date: 13SEP06

Time	Hazard Class	UN ID	Description	Notes
0:38	3	1203	Gasoline	
2:20	3	1203	Gasoline	
2:45	3	1203	Gasoline	
3:15	3	1268	Petroleum distillates, n.o.s.	
3:21	3	1203	Gasoline	
4:06	5.1, 2.2	1073	Oxygen	
4:13	3	1203	Gasoline	
4:41	2.1	1075	Propane	
5:13	3	1203	Gasoline	
5:38	3	1203	Gasoline	
5:53	8	NA	Corrosive	
6:18	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:20	3	1203	Gasoline	
6:53	2.2	2187	Carbon dioxide, refrigerated liquid	
6:57	8	2209	Formaldehyde, solutions	
7:24	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
7:38	5.1, 2.2	1073	Oxygen	
7:40	2.3	3308	Liquefied gas, toxic, corrosive, n.o.s.	
7:45	1.1D	NA	Explosive (mass explosion hazard)	
7:49	3	1203	Gasoline	
8:00	3	1131	Carbon disulfide	
8:09	3	1308	Vinyl acetate	
8:17	8	NA	Corrosive	
8:46	3	1203	Gasoline	
8:47	3	1203	Gasoline	
9:16	3	1993	Flammable liquid, n.o.s.	

9:26	3	1294	Toluene	
9:31	3	1203	Gasoline	
9:36	8	2794	Batteries, Wet, Acid	
9:46	8	NA	Corrosive	
9:58	3	1280	Propylene oxide	
9:59	3	1203	Gasoline	
10:02	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:03	2.3	3308	Liquefied gas, toxic, corrosive, n.o.s.	
10:14	8	NA	Corrosive	
10:15	3	1993	Flammable liquids, n.o.s.	
10:23	3	2302	5-Methylhexan-2-one	
10:26	8	NA	Corrosive	
10:35	5.1, 2.2	1073	Oxygen	
10:50	3	1203	Gasoline	
11:15	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
11:17	3	1090	Acetone	
11:21	3	1203	Gasoline	
11:26	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
11:29	3	1203	Gasoline	
11:42	3	1210	Printing ink related material	
11:54	3	1987	Denatured alcohol	
11:55	3	2348	Butyl acrylates, stabilized	
11:57	3, 4.3	3207	Organometallic compound, solution	
12:06	3	1120	1-Butanol	
12:09	2.2	2187	Carbon dioxide, refrigerated liquid	
12:14	3	1203	Gasoline	
12:25	8	2218	Acrylic acid, inhibited	
12:30	8	NA	Corrosive	
12:32	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
12:49	3	1203	Gasoline	
12:57	3	1203	Gasoline	
13:00	3	1993	Flammable liquid, n.o.s.	
13:09	6.1	1662	Nitrobenzene	
13:19	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:22	2.2	1072	Oxygen, compressed	
13:28	3	1993	Flammable liquid, n.o.s.	
13:45	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
13:46	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:09	8	1760	Corrosive liquids, n.o.s.	



14:11	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
14:15	5.1	1486	Potassium nitrate	
14:16	3	1224	Ketones, liquid, n.o.s.	
14:26	3	1993	Flammable liquid, n.o.s.	
14:34	3	1203	Gasoline	
14:37	3	1203	Gasoline	
		1993 1993 1993		
15:03	3	1993	Flammable liquids, n.o.s.	
15:06	3	1294	Toluene	
15:19	3	NA	Flammable and combustible liquid	
15:26	2.2	1983	Refrigerant gas R 133a	
15:28	3	1203	Gasoline	
15:40	5.1, 2.2	1073	Oxygen	
16:08	2.1	1075	Propane	
16:09	3	1178	2-Ethylbutyraldehyde	
16:19	3	1203	Gasoline	
16:23	HOT	3257	Elevated temperature liquid, n.o.s.	
16:26	8	NA	Corrosive	
16:43	5.1	2880	Calcium hypochlorite, hydrated	
16:55	3	1203	Gasoline	
17:03	2.2	2187	Carbon dioxide, refrigerated liquid	
17:16	5.1, 2.2	1073	Oxygen	
17:26	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:36	3	1203	Gasoline	
17:40	3	1993	Flammable liquid, n.o.s.	
17:50	2.2	2187	Carbon dioxide, refrigerated liquid	
17:57	2.2	1073	Oxygen, refrigerated liquid	
18:06	2.2	N/A	Non-Flammable Gas	
18:14	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
18:26	2.2	2187	Carbon dioxide, refrigerated liquid	
18:28	2.2	1072	Oxygen, compressed	
18:35	3	1203	Gasoline	
18:46	3	1090	Acetone	
18:47	8	NA	Corrosive	
18:47	3	1210	Printing ink related material	
19:24	3	1219	Isopropanol	
19:29	2.2	1072	Oxygen, compressed	
19:32	3	1203	Gasoline	
19:35	2.2	1072	Oxygen, compressed	

19:45	3	1993	Flammable liquid, n.o.s.	
19:48	3	1203	Gasoline	
20:09	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
20:13	3	1203	Gasoline	
20:26	3	1224	Ketones, liquid, n.o.s.	
20:48	3	1203	Gasoline	
21:47	8	1760	Corrosive liquids, n.o.s.	
22:13	3	1203	Gasoline	
23:50	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E at Washington County/Sullivan

Date: 17SEP06

Time	Hazard Class	UN ID	Description	Notes
5:30	3	1203	Gasoline	
6:23	3	1223	Kerosene	
6:28	3	1203	Gasoline	
7:23	2.1	1075	Propane	
7:37	3	1203	Gasoline	
7:55	3	1203	Gasoline	
8:05	3	1203	Gasoline	
8:22	2.1	1075	Propane	
8:40	5.1, 2.2	1073	Oxygen	
8:41	2.1	1075	Propane	
9:08	2.1	1075	Propane	
9:52	5.1, 2.2	1073	Oxygen	
9:55	3	1203	Gasoline	
9:57	3	1203	Gasoline	
10:10	5.1, 2.2	1073	Oxygen	
10:34	4.1	3178	Flammable solid, inorganic, n.o.s.	
10:47	3	1203	Gasoline	
11:50	5.1, 2.2	1073	Oxygen	
12:24	3	1203	Gasoline	
13:23	3,8	2924	Flammable liquids, corrosive, n.o.s.	
14:06	3	1203	Gasoline	
15:51	3	1203	Gasoline	
16:11	3	1203	Gasoline	
17:03	5.1, 2.2	1073	Oxygen	
17:09	5.1, 2.2	1073	Oxygen	
17:39	2.1	1075	Propane	

18:03	8	1719	Caustic alkali liquids, n.o.s.	
18:18	8	1830	Sulfuric acid, >51% acid	
18:24	2.1	1075	Propane	
18:30	3	1203	Gasoline	
19:02	D	NA	Mixed hazardous materials	
19:05	3	1203	Gasoline	
19:31	3	1203	Gasoline	
19:47	3	1223	Kerosene	
20:33	2.1	1075	Propane	
20:35	2.1	1075	Propane	
20:54	2.1	1075	Propane	
21:28	3	1203	Gasoline	
21:47	3	1203	Gasoline	
21:50	5.1, 2.2	1073	Oxygen	
22:10	3	1203	Gasoline	
23:54	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 near Fall Branch			Date: 21SEP06	
Time	Hazard Class	UN ID	Description	Notes
0:07	3	1203	Gasoline	
0:40	3	1203	Gasoline	
1:00	3	1203	Gasoline	
1:10	3	1203	Gasoline	
1:15	3	1203	Gasoline	
1:16	8	2794	Batteries, wet, filled with acid,	
1:38	D	NA	Mixed hazardous materials	
2:13	3	1203	Gasoline	
2:23	2	1072	Oxygen	
2:24	3	1203	Gasoline	
2:51	3	1203	Gasoline	
2:58	2.1	1075	Propane	
3:08	3	1203	Gasoline	
3:12	3	1203	Gasoline	
3:12	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
3:15	8	NA	Corrosive	
3:22	3	1203	Gasoline	
3:37	3	1203	Gasoline	

3:38	5.1	2984	Hydrogen peroxide, aqueous solution 8-20%	
3:47	3	1203	Gasoline	
3:58	3	1203	Gasoline	
4:11	3	1993	Flammable liquid, n.o.s.	
4:21	2.1	1075	Petroleum Gases, Liquefied (Propane)	
4:22	3	1203	Gasoline	
4:27	6	2078	Toluene diisocyanate	
4:27	D	NA	Mixed hazardous materials	
4:36	3	1203	Gasoline	
4:37	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
4:48	3	1203	Gasoline	
4:51	1.5	332	Blasting agent	
4:53	3, 2	N/A	Flammable and Non-Flammable Gas	
5:02	8	2218	Acrylic acid, inhibited	
5:06	3	1276	n-Propyl acetate	
5:17	3	1203	Gasoline	
5:25	3	1203	Gasoline	
5:26	3	1203	Gasoline	
5:38	3	1203	Gasoline	
5:43	3	1203	Gasoline	
5:44	2	1072	Oxygen	
5:53	3	1993	Flammable liquids, n.o.s	
6:00	3	1203	Gasoline	
6:00	2.1	1075	Petroleum Gases, Liquefied (Propane)	
6:01	3	1203	Gasoline	
6:04	3	1203	Gasoline	
6:09	D	NA	Mixed hazardous materials	
6:12	2.1	1075	Liquefied petroleum gas	
6:25	5.1, 2.2	1073	Oxygen	
6:26	3	1203	Gasoline	
6:34	3	1993	Flammable liquids, n.o.s.	
6:39	3	1203	Gasoline	
6:45	3	1993	Flammable liquids, n.o.s.	
6:47	2.1	1075	Petroleum Gases, Liquefied (Propane)	
6:51	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
6:51	3	1231	Methyl Acetate	
6:55	3	1268	Petroleum distillates, n.o.s.	
6:55	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
6:56	8	2491	Ethanolamine	

6:58	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:02	3	1203	Gasoline	
7:03	3	1203	Gasoline	
7:03	3	1203	Gasoline	
7:04	2.1	1075	Petroleum Gases, Liquefied (Propane)	
7:06	3	1203	Gasoline	
7:10	3	1203	Gasoline	
7:18	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
7:18	3	1203	Gasoline	
7:41	2.1	1075	Propane	
7:41	3	1203	Gasoline	
7:51	D	NA	Mixed hazardous materials	WAL-MART
7:53	3	1203	Gasoline	
7:58	2.2	1073	Oxygen	
8:14	D	NA	Mixed hazardous materials	
8:23	8	1760	Corrosive liquids, n.o.s.	
8:23	2.1	1075	Petroleum Gases, Liquefied (Propane)	
8:25	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
8:25	3	1203	Gasoline	
8:27	8	2949	Sodium hydrosulfide > 25% water of crystallization	
8:38	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
8:42	3	1173	Ethyl Acetate	
8:47	3	1203	Gasoline	
8:50	3	N/A	Flammable and Combustible Liquid	
8:53	2.2	1072	Oxygen, compressed	
9:00	3	1203	Gasoline	
9:19	2.1	1075	Petroleum Gases, Liquefied (Propane)	
9:23	2.2	1072	Oxygen, compressed	
9:30	3	1203	Gasoline	
9:31	3	1203	Gasoline	
9:35	7	2908	Radioactive material, excepted packaging	
9:55	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
10:14	3	1203	Gasoline	
10:15	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:21	3	1203	Gasoline	
10:22	3	1203	Gasoline	
10:27	3	1203	Gasoline	
10:33	3	1203	Gasoline	
10:39	5.1, 2.2	1073	Oxygen	

10:50	2.1	1075	Liquefied petroleum gas	
10:55	3	1133	Adhesives, containing a flammable liquid	
10:57	3	1203	Gasoline	
10:59	8	2794	Batteries, Wet, Acid	
11:06	3	1203	Gasoline	
11:07	3	1307	Xylenes	
11:20	3	1203	Gasoline	
11:25	3	1203	Gasoline	
11:29	3	1993	Flammable liquid, n.o.s.	
11:33	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:35	8	2218	Acrylic acid, inhibited	
11:59	3	1203	Gasoline	
11:59	8	1773	Ferric chloride, anhydrous	
12:09	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:15	2.2	1073	Oxygen	
12:23	3	1203	Gasoline	
12:34	3	1203	Gasoline	
12:36	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
12:40	3	1203	Gasoline	
12:46	3	1863	Fuel, aviation, turbine engine	
12:53	8	1719	Caustic alkali liquids, n.o.s.	
13:03	8	2491	Ethanolamine, solution	
13:05	3	1203	Gasoline	
13:06	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
13:09	3	1294	Toluene	
13:17	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
13:36	3	1203	Gasoline	
13:47	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
13:53	2.2	1073	Oxygen	
13:55	3	1203	Gasoline	
13:56	3	1203	Gasoline	
13:59	2.2	1977	Nitrogen, refrigerated liquid (cryogenic)	
13:59	D	NA	Mixed hazardous materials	
13:59	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:07	D	NA	Mixed hazardous materials	
14:08	3	1203	Gasoline	
14:27	3	1993	Flammable liquid, n.o.s.	
14:36	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:39	3	1231	Methyl Acetate	

14:44	5.1, 2.2	1073	Oxygen	
14:46	3	1203	Gasoline	
14:52	8	2214	Phthalic anhydride	
14:55	3	1203	Gasoline	
14:56	3	1993	Flammable liquids, n.o.s.	
14:59	8	3264	Corrosive liquid, acidic, inorganic, NOS	
15:00	3	1203	Gasoline	
15:22	3	1203	Gasoline	
15:29	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
15:37	3	1203	Gasoline	
15:39	3	1863	Fuel, aviation, turbine engine	
15:47	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
15:48	3	1203	Gasoline	
15:56	3	1203	Gasoline	
16:07	3	1203	Gasoline	
16:09	3	1203	Gasoline	
16:11	3	1308	Vinyl acetate	
16:19	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
16:22	3	1231	Methyl Acetate	
16:25	2.1	1075	Propane	
16:28	2.2	N/A	Non-Flammable Gas	
16:35	3	1203	Gasoline	
16:38	6	2078	Toluene diisocyanate	
16:41	8	1760	Corrosive liquids, n.o.s.	
16:46	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:50	3	1203	Gasoline	
17:13	6.1	1710	Trichloroethylene	
17:25	8	2794	Batteries, wet, filled with acid	
17:35	5.1	1942	Ammonium nitrate, <0.2% <i>combustible mat.</i>	
17:42	2.2	1073	Oxygen, refrigerated liquid	
17:43	3	1203	Gasoline	
17:43	8	1744	Bromine	
17:48	3	1203	Gasoline	
17:53	3	1993	Flammable liquid, n.o.s.	
17:54	D			
17:59	2.1	1075	Propane	
18:17	3	1265	Pentanes	
18:21	3	1203	Gasoline	
18:31	3	1203	Gasoline	

18:37	3	1133	Adhesives	
18:41	4.1	2304	Naphthalene, molten	
18:42	2.1	1075	Petroleum Gases, Liquefied (Propane)	
18:59	3	1203	Gasoline	
19:05	2.2	1073	Oxygen, refrigerated liquid	
19:30	8	1760	Corrosive liquids, n.o.s.	
19:48	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
19:53	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:54	HOT	3257	Elevated temperature liquid, n.o.s.	
19:56	3	1993	Flammable liquids, n.o.s.	
20:02	3	2302	5-Methylhexan-2-one	
20:07	3	1275	Propionaldehyde	
20:16	D	NA	Mixed hazardous materials	
20:22	2.1	1075	Petroleum Gases, Liquefied (Propane)	
20:23	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
20:24	3	1203	Gasoline	
20:25	8	1719	Caustic alkali liquids, n.o.s.	
20:27	3	2302	5-Methylhexan-2-one	
20:31	2.2	1951	Argon, refrigerated liquid	
20:41	6.1	1199	Furaldehydes	
21:00	2.1	1075	Petroleum Gases, Liquefied (Propane)	
21:03	8	1760	Corrosive liquids, n.o.s.	
21:07	2.1	1075	Petroleum Gases, Liquefied (Propane)	
21:17	3	1203	Gasoline	
21:30	3	1203	Gasoline	
21:41	7	N/A	Radio Active Material	
21:45	3	1203	Gasoline	
22:03	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
22:05	3	1203	Gasoline	
22:15	3	2348	Butyl acrylates, stabilized	
22:21	2.1	1075	Petroleum Gases, Liquefied (Propane)	
22:28	3	1203	Gasoline	
22:46	3	1203	Gasoline	
22:49	3	1133	Adhesives, containing a flammable liquid	
22:52	5.1	2426	Ammonium nitrate, liquid	
23:02	3	1203	Gasoline	
23:13	D	NA	Mixed hazardous materials	
23:27	3	1203	Gasoline	
23:30	3	1203	Gasoline	



23:42	3	1203	Gasoline	
23:42	2.1	1075	Propane	
23:56	8	1760	Corrosive liquids, n.o.s.	

### Road Side Survey Field Log

Location: HWY 321 at the Washington County/Carter				Date: 25SEP06
Time	Hazard Class	UN ID	Description	Notes
5:44	3	1203	Gasoline	
6:03	3	1203	Gasoline	
6:04	3	1203	Gasoline	
6:08	5.1, 2.2	1073	Oxygen	
7:37	3	1203	Gasoline	
7:40	5.1	NA	Oxidizer	
7:50	3	1203	Gasoline	
8:04	3	1203	Gasoline	
8:10	3	1203	Gasoline	
8:18	3	1203	Gasoline	
8:22	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:44	3	1203	Gasoline	
9:15	3	1203	Gasoline	
9:15	3	1203	Gasoline	
9:30	5.1, 2.2	1073	Oxygen	
9:43	3	1993	Flammable liquid, n.o.s.	
9:48	3	1993	Flammable liquid, n.o.s.	
10:04	3	1203	Gasoline	
10:22	3	1203	Gasoline	
10:26	3	1203	Gasoline	
10:47	3	1203	Gasoline	
11:12	D	NA	Mixed hazardous material	
11:31	3	1203	Gasoline	
11:40	3	1203	Gasoline	
11:51	3	1993	Flammable liquid, n.o.s.	
12:25	2.1	1075	Propane	
12:33	3	1203	Gasoline	
12:52	D	NA	Mixed hazardous material	
13:34	5.1	NA	Oxidizer	
13:49	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
13:57	3	1203	Gasoline	

14:01	3	1999	Asphalt	
14:03	3	1999	Asphalt	
14:38	3	1993	Flammable liquid, n.o.s.	
15:09	5.1, 2.2	1073	Oxygen	
15:13	2.1	1075	Propane	
15:37	3	1203	Gasoline	
15:54	3	1999	Asphalt	
16:03	2.2	3318	Ammonia solution, with > 50% ammonia	
16:31	3	1993	Flammable liquid, n.o.s.	
16:35	2.2	NA	Compressed gas (non-flammable)	
16:58	3	1993	Flammable liquids, n.o.s	
17:05	2.2	1006	Argon, compressed	
17:11	2.1	1075	Propane	
17:39	5.1, 2.2	1073	Oxygen	
17:57	3	1203	Gasoline	
18:37	5.1, 2.2	1073	Oxygen	
18:38	3	1203	Gasoline	
18:54	3	1999	Asphalt	
18:56	3	1999	Asphalt	
19:24	3	1203	Gasoline	
19:36	3	1203	Gasoline	
19:39	8	NA	Corrosive	
19:59	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
20:36	3	1203	Gasoline	
20:43	5.1, 2.2	1073	Oxygen	
21:15	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
21:31	3	1203	Gasoline	
22:16	5.1	NA	Oxidizer	
23:03	3	1203	Gasoline	

### Road Side Survey Field Log

Location: HWY 321 at the Washington County/Carter				Date: 26SEP06
Time	Hazard Class	UN ID	Description	Notes
6:32	3	1203	Gasoline	
6:34	8	NA	Corrosive	
7:10	3	1203	Gasoline	
7:13	5.1, 2.2	1073	Oxygen	
8:47	3	1993	Flammable liquid, n.o.s.	

9:08	D	NA	Mixed hazardous material	
10:51	3	1203	Gasoline	
11:21	3	1999	Asphalt	
13:27	3	1999	Asphalt	
13:59	3	1203	Gasoline	
14:23	3	1993	Flammable	
15:40	D	NA	Mixed hazardous material	
16:13	3	1203	Gasoline	
16:59	3	1999	Asphalt	
17:36	5.1, 2.2	1073	Oxygen	
18:24	3	1203	Gasoline	
18:32	3	1993	Flammable liquid, n.o.s.	
19:30	2.2	1073	Oxygen	
19:40	3	1203	Gasoline	
20:35	3	1203	Gasoline	
20:48	3	1203	Gasoline	
22:13	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E near Jockey Creek				Date: 3OCT06
Time	Hazard Class	UN ID	Description	Notes
5:44	3	1203	Gasoline	
6:26	3	1203	Gasoline	
7:02	2.1	1075	Propane	
7:14	3	1203	Gasoline	
8:23	3	1203	Gasoline	
8:50	3, 8	NA	Flammable and combustible liquid, Corrosive	
9:14	8	NA	Corrosive	
9:20	3	NA	Flammable and combustible liquid	
10:15	3	1203	Gasoline	
11:36	3, 8	NA	Flammable and combustible liquid, Corrosive	
12:10	8	NA	Corrosive	
12:46	2.1	1075	Propane	
12:51	3	1203	Gasoline	
13:03	3	NA	Flammable	
13:25	3	1203	Gasoline	
13:36	3	1202	Heating oil, light	
14:15	3	1993	Flammable liquids, n.o.s	

14:26	3	1212	Isobutylene	
14:29	5.1, 2.2	1073	Oxygen	
15:00	3	1203	Gasoline	
15:42	3	1999	Tars, liquid	
16:36	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
16:40	2.1	1966	Hydrogen, refrigerated liquid	
17:03	3	1202	Heating oil, light	
17:25	8	NA	Corrosive	
17:55	2.2	1006	Argon, compressed	
18:29	5.1	N/A	Oxidizer	
18:42	2.1	1075	Propane	
19:05	D	NA	Mixed hazardous materials	

### Road Side Survey Field Log

Location: HWY 321 at the Washington County/Carter

Date: 7OCT06

Time	Hazard Class	UN ID	Description	Notes
7:13	3	1203	Gasoline	
8:22	D	NA	Mixed hazardous materials	
9:04	3	1203	Gasoline	
10:24	5.1, 2.2	1073	Oxygen	
11:19	5.1	2427	Potassium chlorate, solution	
11:51	3	1203	Gasoline	
12:01	3	1203	Gasoline	
12:36	5.1, 2.2	1073	Oxygen	
13:27	D	NA	Mixed hazardous material	
13:50	3	1202	Heating oil, light	
14:22	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
14:29	3	1993	Flammable	
14:45	3	1203	Gasoline	
15:09	5.1, 2.2	1073	Oxygen	
15:54	2.2	1073	Oxygen	
16:00	3	1203	Gasoline	
17:17	3	1993	Flammable liquid, n.o.s.	
18:20	3	1203	Gasoline	
19:12	3	1203	Gasoline	
20:33	3	1203	Gasoline	
21:52	5.1	NA	Oxidizer	
22:03	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-81 near Fall Branch			Date: 11OCT06	
Time	Hazard Class	UN ID	Description	Notes
0:25	3	1203	Gasoline	
1:13	3	1203	Gasoline	
1:26	2	1072	Oxygen	
1:37	3	1203	Gasoline	
1:55	3	1203	Gasoline	
2:06	8	2794	Batteries, wet, filled with acid	
2:26	3	1203	Gasoline	
2:33	3	1203	Gasoline	
2:52	3	1203	Gasoline	
3:10	3	1203	Gasoline	
3:19	3	1202	Heating oil, light	
3:21	3	1203	Gasoline	
3:26	3	1203	Gasoline	
3:32	5.1	2984	Hydrogen peroxide, aqueous solution 8-20%	
3:47	3	1203	Gasoline	
3:55	8	NA	Corrosive	
4:01	3	1268	Petroleum distillates, n.o.s.	
4:11	2.1	1075	Petroleum Gases, Liquefied (Propane)	
4:15	3	1203	Gasoline	
4:22	3	1203	Gasoline	
4:23	8, 3	NA	Corrosive, Flammable and combustible liquid	
4:30	3	1203	Gasoline	
4:37	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
4:58	3	1203	Gasoline	
5:02	3	1203	Gasoline	
5:09	3, 2	N/A	Flammable and Non-Flammable Gas	
5:11	8	2218	Acrylic acid, inhibited	
5:21	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
5:22	3	1203	Gasoline	
5:27	3	1203	Gasoline	
5:36	3	1203	Gasoline	
5:44	D	NA	Mixed hazardous materials	
5:52	3	1202	Heating oil, light	
6:02	6.1	2649	1,3-Dichloroacetone	
6:16	2.2	1073	Oxygen	

6:18	3	1993	Flammable liquids, n.o.s	
6:26	3	1203	Gasoline	
6:26	3	1294	Toluene	
6:31	8	1783	Hexamethylenediamine solution	
6:39	3	1203	Gasoline	
6:41	D	NA	Mixed hazardous materials	
6:44	2.1, 2.2, 5.1	NA	Compressed gas (flam., non-flam., oxidizer)	
7:01	D	NA	Mixed hazardous materials	
7:17	3	1203	Gasoline	
7:23	3	1993	Flammable liquids, n.o.s.	
7:26	2.1	1075	Liquefied petroleum gas	
7:39	NA	3077	Hazardous waste, solid, n.o.s.	
7:41	8	NA	Corrosive	
7:45	3	1268	Petroleum distillates, n.o.s.	
7:53	8	1760	Corrosive liquids, n.o.s.	
7:56	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
8:09	3, 2	N/A	Flammable and Non-Flammable Gas	
8:13	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
8:21	3	1203	Gasoline	
8:28	3	1203	Gasoline	
8:31	3	1993	Flammable liquid, n.o.s.	
8:36	3	1202	Heating oil, light	
8:44	3	1203	Gasoline	
8:48	1.4	NA	Explosives (no significant blast hazard)	
8:52	3	1203	Gasoline	
8:57	3	1203	Gasoline	
9:08	2.2	1073	Oxygen	
9:10	3	1203	Gasoline	
9:24	2.1	1075	Propane	
9:27	3	1203	Gasoline	
9:38	D	NA	Mixed hazardous materials	
9:47	3	1203	Gasoline	
9:52	2.2	1073	Oxygen	
9:55	D	NA	Mixed hazardous materials	
10:00	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
10:01	2.1	1075	Petroleum Gases, Liquefied (Propane)	
10:16	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:22	3	1203	Gasoline	
10:25	3	1203	Gasoline	

10:26	D	NA	Mixed hazardous materials	
10:30	3	1173	Ethyl Acetate	
10:34	3	1203	Gasoline	
10:51	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
11:00	2.2	1977	Nitrogen, refrigerated liquid	
11:03	3	1203	Gasoline	
11:14	2.1	1075	Petroleum Gases, Liquefied (Propane)	
11:25	2	1072	Oxygen	
11:27	4.3	1400	Barium	
11:32	3	1203	Gasoline	
11:35	7	2908	Radioactive material, excepted packaging	
11:42	2.2	1977	Nitrogen, refrigerated liquid	
11:57	3	1203	Gasoline	
12:28	2.1	1075	Petroleum Gases, Liquefied (Propane)	
12:30	3	1203	Gasoline	
12:31	3	1202	Heating oil, light	
12:34	3	1146	Cyclopentane	
12:35	3	1203	Gasoline	
12:46	3	1133	Adhesives, containing a flammable liquid	
12:47	3	1203	Gasoline	
12:55	3	1203	Gasoline	
13:05	2.1	1075	Liquefied petroleum gas	
13:08	3	1307	Xylenes	
13:15	3	1203	Gasoline	
13:18	3	1203	Gasoline	
13:29	2.2	1951	Argon, refrigerated liquid (cryogenic liquid)	
13:33	8	2218	Acrylic acid, inhibited	
13:35	2.1	1075	Petroleum Gases, Liquefied (Propane)	
13:41	5.1	2067	Ammonium nitrate based fertilizer	
14:20	3	1203	Gasoline	
14:25	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:27	2.2	1073	Oxygen	
14:28	8	2031	Nitric acid, >60% acid	
14:31	8	1773	Ferric chloride, anhydrous	
14:40	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
14:48	3	1203	Gasoline	
14:49	2.1	1075	Petroleum Gases, Liquefied (Propane)	
14:57	3	1203	Gasoline	
15:05	8	2491	Ethanolamine, solution	

15:16	3	1203	Gasoline	
15:20	2.1	1075	Propane	
15:21	8	1848	Propionic acid	
15:34	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
15:43	3	1203	Gasoline	
15:46	3	1203	Gasoline	
15:55	3	1294	Toluene	
16:15	3	1203	Gasoline	
16:23	3	1203	Gasoline	
16:25	D	NA	Mixed hazardous materials	
16:37	3	1203	Gasoline	
16:39	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:41	D	NA	Mixed hazardous materials	
16:53	D	NA	Mixed hazardous materials	
17:01	3	1203	Gasoline	
17:10	2.1	1075	Petroleum Gases, Liquefied (Propane)	
17:14	3	1231	Methyl Acetate	
17:18	D	NA	Mixed hazardous materials	
17:20	3	1203	Gasoline	
17:39	8	2214	Phthalic anhydride	
17:49	3	1203	Gasoline	
18:06	3	1203	Gasoline	
18:12	3	1203	Gasoline	
18:23	3	1203	Gasoline	
18:45	3	1203	Gasoline	
18:46	D	NA	Mixed hazardous materials	
18:56	D	NA	Mixed hazardous materials	
19:22	3	1863	Fuel, aviation, turbine engine	
19:32	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
19:33	D	NA	Mixed hazardous materials	
19:39	8	1719	Caustic alkali liquids, n.o.s.	
19:40	3	1203	Gasoline	
20:03	3	1203	Gasoline	
20:05	9, HOT	3257	Elevated temperature liquid, n.o.s.	
20:34	3	1203	Gasoline	
20:48	3	1231	Methyl Acetate	
20:49	2.1	1075	Propane	
20:59	3	1202	Heating oil, light	
21:03	2.1	1075	Petroleum Gases, Liquefied (Propane)	



21:09	9	3257	Elevated temperature liquid, n.o.s.	
21:11	6	2078	Toluene diisocyanate	
21:35	8	1760	Corrosive liquids, n.o.s.	
21:37	8	1760	Corrosive liquids, n.o.s.	
21:49	6	2078	Toluene diisocyanate	
22:00	6.1	1710	Trichloroethylene	
22:11	8	2794	Batteries, wet, filled with acid,	
22:21	3	1203	Gasoline	
22:34	3, 2	N/A	Flammable and Non-Flammable Gas	
22:34	3	1203	Gasoline	
22:44	8	1744	Bromine	
23:03	2	1072	Oxygen	
23:05	3	1203	Gasoline	
23:27	3, 4.1, 6.1		NA	3 PLACARDS, NO UNID
23:40	2.1	1075	Propane	
23:57	5.1	2426	Ammonium nitrate, liquid	

### Road Side Survey Field Log

Location: I-26 near Okolona Road				Date: 15OCT06
Time	Hazard Class	UN ID	Description	Notes
5:37	3	1203	Gasoline	
6:03	3	1203	Gasoline	
6:24	3	1203	Gasoline	
6:51	2.1	1075	Propane	
7:26	3	1203	Gasoline	
7:29	7	2982	Radioactive material, n.o.s.	
7:38	D	NA	Mixed hazardous material	
7:55	8	3093	Corrosive liquids, oxidizing, n.o.s.	
8:16	D	NA	Mixed hazardous material	
8:22	8	3093	Corrosive liquids, oxidizing, n.o.s.	
8:37	2.1	1075	Propane	
8:52	5.1	2428	Sodium chlorate, aqueous solution	
9:00	8	2209	Formaldehyde, solutions (Formalin)	
9:09	3	1202	Heating oil, light	
9:20	5.1, 2.2	NA	Oxygen	
9:33	8	1719	Caustic alkali liquids, n.o.s.	
9:43	3	1203	Gasoline	
9:50	8	1805	Phosphoric acid, liquid	

10:11	5.1, 2.2	NA	Oxygen	
10:20	8	1719	Caustic alkali liquids, n.o.s.	
10:22	3	1993	Flammable liquid, n.o.s.	
10:03	3	1189	Ethylene glycol monoethyl ether acetate	
10:39	3	1203	Gasoline	
10:50	3	1202	Heating oil, light	
11:02	8	NA	Corrosive	
11:22	9, HOT	3257	Elevated temperature liquid, n.o.s.	
11:23	8	1719	Caustic alkali liquids, n.o.s.	
11:39	3	1203	Gasoline	
11:40	3	1993	Flammable liquid, n.o.s.	
11:46	8	NA	Corrosive	
11:57	3	1203	Gasoline	
12:00	5.1	2428	Sodium chlorate, aqueous solution	
12:01	3	1203	Gasoline	
12:03	2.1	1075	Propane	
12:11	3	1203	Gasoline	
12:26	D	NA	Mixed hazardous materials	
12:39	3	3271	Ethers, n.o.s.	
12:50	3	1203	Gasoline	
12:55	2.2	1977	Nitrogen, refrigerated liquid	
13:15	5.1	2428	Sodium chlorate, aqueous solution	
13:34	8	2789	Acetic acid, glacial	
13:36	2.2	1977	Nitrogen, refrigerated liquid	
13:39	2.2	2187	Carbon dioxide, refrigerated liquid	
13:42	3	1993	Flammable liquid, n.o.s.	
13:47	2.1	1075	Propane	
13:49	8	NA	Corrosive	
13:55	8	NA	Corrosive	
14:00	3	1993	Flammable liquid, n.o.s.	
14:03	2.2	2187	Carbon dioxide, refrigerated liquid	
14:17	5.1	1942	Ammonium nitrate w/ NMT 0.2% comb. material	
14:19	2.1	1075	Propane	
14:20	3	1203	Gasoline	
14:28	D	NA	Mixed hazardous materials	
14:33	3	1203	Gasoline	
14:41	3	1220	Isopropyl acetate	
14:53	2.1	1075	Propane	
14:57	5.1, 2.2	1073	Oxygen	

15:01	D	NA	Mixed hazardous materials	
15:02	2.1	1075	Propane	
15:14	8, 3	1715	Acetic anhydride	
15:07	2.2	2187	Carbon dioxide, refrigerated liquid	
15:20	3	1999	Asphalt	
15:31	8	2789	Acetic acid, glacial	
15:33	8	NA	Corrosive	
15:35	2.1	1075	Propane	
15:47	8	NA	Corrosive	
15:48	3	1203	Gasoline	
15:57	8	NA	Corrosive	
16:19	2.1	1075	Propane	
16:21	8	NA	Corrosive	
16:27	D	NA	Mixed hazardous materials	
16:31	D	NA	Mixed hazardous materials	
16:37	3	1993	Flammable liquid, n.o.s.	
16:40	3	1198	Formaldehyde	
16:44	2.2	1977	Nitrogen, refrigerated liquid	
16:46	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
16:56	8	NA	Corrosive	
16:59	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
17:04	3	1203	Gasoline	
17:16	3	1268	Petroleum distillates, n.o.s.	
17:22	3	1224	Ketones, liquid, n.o.s.	
17:34	3	1993	Flammable liquid, n.o.s.	
17:37	2.1	1075	Propane	
17:42	3	1120	1-Butanol	
17:52	3	1993	Flammable liquid, n.o.s.	
17:54	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
18:12	3	1203	Gasoline	
18:20	8	1760	Corrosive liquids, n.o.s.	
18:22	3	1203	Gasoline	
18:32	D	NA	Mixed hazardous materials	
18:38	8	3265	Corrosive liquid, acidic, organic, n.o.s.	
18:56	8	1830	Sulfuric acid, >51% acid	
19:02	2.2	1073	Oxygen	
19:08	3	1202	Heating oil, light	
19:18	3	1129	Butyraldehyde	
19:36	8	NA	Corrosive	

19:46	2.1	1075	Propane	
19:59	3	1993	Flammable liquid, n.o.s.	
20:10	5.1	1486	Potassium nitrate	
20:34	5.1, 2.2	1073	Oxygen	
20:49	2.1	1075	Propane	
20:50	8	NA	Corrosive	
21:09	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
21:10	3	1203	Gasoline	
21:23	3	1203	Gasoline	
21:48	3	1203	Gasoline	
22:29	3	1203	Gasoline	
22:56	3	1203	Gasoline	
23:01	3	1224	Ketones, liquid, n.o.s.	
23:20	3	1203	Gasoline	

### Road Side Survey Field Log

Location: I-26 near Okolona Road			Date: 16OCT06	
Time	Hazard Class	UN ID	Description	Notes
1:57	3	1203	Gasoline	
2:23	2	N/A	Non-Flammable Gas	
3:09	D	NA	Mixed hazardous materials	
4:10	5.1, 2.2	NA	Oxygen	
4:18	8	1719	Caustic alkali liquids, n.o.s.	
5:10	5.1	NA	Oxidizer	
5:41	3	1203	Gasoline	
5:53	8	1719	Caustic alkali liquids, n.o.s.	
6:35	3	1203	Gasoline	
6:36	3	1203	Gasoline	
6:42	3	1203	Gasoline	
6:45	3	1203	Gasoline	
6:55	8	1760	Corrosive liquids, n.o.s.	
6:56	3	1203	Gasoline	
7:01	5.1, 2.2	1073	Oxygen	
7:06	3	1203	Gasoline	
7:42	3	1203	Gasoline	
7:43	3	1203	Gasoline	
7:48	3	1203	Gasoline	
7:56	8	NA	Corrosive	

7:58	8	NA	Corrosive	
8:10	D	NA	Mixed hazardous material	
8:29	3	1203	Gasoline	
8:33	3	1203	Gasoline	
8:34	3	1993	Flammable liquid, n.o.s.	
8:39	2.1	1075	Propane	
8:39	3	1203	Gasoline	
8:43	3	1202	Heating oil, light	
8:55	2.3, 8	1017	Chlorine	
9:01	3	1999	Asphalt	
9:04	3	1203	Gasoline	
9:10	2.1	1075	Petroleum gases, liquefied	
9:16	3	1993	Flammable liquid, n.o.s.	
9:18	5.1, 2.2	1073	Oxygen	
9:20	2.1	1075	Propane	
9:29	9	3257	Elevated temperature liquid, n.o.s.	
9:40	2.1	1075	Propane	
10:17	6.1	NA	Poisonous material	
10:18	3	1203	Gasoline	
10:21	3	1993	Flammable liquid, n.o.s.	
10:27	3	1202	Diesel fuel	
10:29	3	1203	Gasoline	
10:31	3	1993	Flammable liquid, n.o.s.	
10:42	2.1	1075	Propane	
10:54	3	1203	Gasoline	
11:07	D	NA	Mixed hazardous material	
11:13	5.1, 2.2	1073	Oxygen	
11:19	8	NA	Corrosive	
11:42	3	1202	Diesel fuel	
11:44	5.1, 2.2	1073	Oxygen	
11:55	3	1203	Gasoline	
11:57	3	1203	Gasoline	
12:09	3	1203	Gasoline	
12:17	2.2	2187	Carbon dioxide, refrigerated liquid	
12:23	3	1203	Gasoline	
12:28	3	1993	Flammable liquids, n.o.s	
12:29	8	NA	Corrosive	
12:38	3	1203	Gasoline	
12:42	3	1202	Heating oil, light	

12:53	3	1987	Denatured alcohol	
13:05	8	NA	Corrosive	
13:06	3	1203	Gasoline	
13:10	3	1220	Isopropyl acetate	
13:26	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
13:28	3	1993	Flammable liquids, n.o.s	
13:31	3	1993	Flammable liquids, n.o.s	
13:35	2.1	1978	Propane	
13:38	D	NA	Mixed hazardous materials	
13:41	3	1203	Gasoline	
13:51	3	1203	Gasoline	
14:01	3	1203	Gasoline	
14:06	2.1	1075	Propane	
14:11	8	1791	Hypochlorite solutions	
14:12	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
14:17	3	1203	Gasoline	
14:22	3	1202	Heating oil, light	
14:25	3	NA	Flammable and combustible liquid	
14:28	3	1203	Gasoline	
14:41	3	1203	Gasoline	
14:42	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
14:44	3	1203	Gasoline	
15:02	2.1	1075	Propane	
15:03	8	1830	Sulfuric acid, >51% acid	
15:14	3	1203	Gasoline	
15:17	2.2	1073	Oxygen	
15:17	3	1220	Isopropyl acetate	
15:20	3	1993	Flammable liquid, n.o.s.	
15:23	8	2794	Batteries, wet, filled with acid,	
15:31	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:39	2.2	2187	Carbon dioxide, refrigerated liquid	
15:49	D	NA	Mixed hazardous materials	
15:53	2.1	1075	Petroleum gases, liquefied	
15:54	3	1203	Gasoline	
16:01	8	1760	Corrosive liquids, n.o.s.	
16:03	3	1203	Gasoline	
16:07	3	1203	Gasoline	
16:21	3	1993	Flammable liquid, n.o.s.	
16:24	D	NA	Mixed hazardous materials	

16:32	3	1203	Gasoline	
16:33	2.2	2187	Carbon dioxide, refrigerated liquid	
16:34	D	NA	Mixed hazardous materials	
16:39	2.2	1046	Helium, compressed	
16:48	8	3093	Corrosive liquids, oxidizing, n.o.s.	
16:51	2.2	2187	Carbon dioxide, refrigerated liquid	
17:16	3	1203	Gasoline	
17:18	3	1203	Gasoline	
17:21	8	1715	Acetic anhydride	
17:26	3	1203	Gasoline	
17:29	3	1203	Gasoline	
17:31	3	1203	Gasoline	
17:32	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
17:41	3	1203	Gasoline	
17:46	3	1203	Gasoline	
18:01	8	1805	Phosphoric acid, liquid	
18:08	2,3	NA	Flammable and combustible liquid	
18:13	3	1203	Gasoline	
18:37	5.1, 2.2	NA	Oxygen	
18:46	3	1993	Flammable liquid, n.o.s.	
18:48	3	1993	Flammable liquids, n.o.s	
18:51	3	1203	Gasoline	
18:55	8	1719	Caustic alkali liquids, n.o.s.	
19:16	5.1	2880	Calcium hypochlorite, hydrated	
19:25	2.1	1075	Propane	
19:26	3	1294	Toluene	
19:29	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
19:34	2.2	2187	Carbon dioxide, refrigerated liquid	
19:34	3	1220	Isopropyl acetate	
19:53	2.1	1075	Propane	
19:58	3	1203	Gasoline	
20:06	8	1760	Corrosive liquids, n.o.s.	
20:20	3	1993	Flammable liquid, n.o.s.	
20:22	8	2794	Batteries, wet, filled with acid,	
20:23	3	1203	Gasoline	
20:51	8	NA	Corrosive	
20:54	2.1	1075	Propane	
21:05	3	1203	Gasoline	
21:28	2.1	1075	Propane	

21:36	3	1993	Flammable liquid, n.o.s.	
21:36	3	1202	Heating oil, light	
22:02	3	1268	Petroleum distillates, n.o.s.	
22:19	2.2	2187	Carbon dioxide, refrigerated liquid	
23:17	3	1203	Gasoline	
23:54	8	NA	Corrosive	

### Road Side Survey Field Log

Location: I-26 near Eastern Star				Date: 19OCT06
Time	Hazard Class	UN ID	Description	Notes
3:22	3	1203	Gasoline	
4:03	3	1203	Gasoline	
4:47	3	1203	Gasoline	
5:22	3	1203	Gasoline	
5:27	3	1203	Gasoline	
5:40	3	1203	Gasoline	
5:45	2.2	1073	Oxygen	
6:01	8	NA	Corrosive	
6:07	3	1203	Gasoline	
6:39	3	1203	Gasoline	
6:49	3	1203	Gasoline	
6:59	3	1203	Gasoline	
7:10	3	1203	Gasoline	
7:13	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
7:20	3	1294	Toluene	
7:29	8	NA	Corrosive	
7:36	3	1203	Gasoline	
7:42	3	1203	Gasoline	
7:43	3	1993	Flammable liquid, n.o.s.	
7:57	3	1294	Toluene	
8:11	3	1178	2-Ethylbutyraldehyde	
8:37	3	1219	Isopropanol	
8:37	HOT	3257	Elevated temperature liquid, n.o.s.	
8:42	8	2209	Formaldehyde, solutions	
8:42	2.2	2187	Carbon dioxide, refrigerated liquid	
8:47	2.1	1075	Propane	
9:04	HOT	9259	Elevated temperature material, liquid, n.o.s.	
9:19	2.2	1977	Nitrogen, refrigerated liquid	



9:23	3	1203	Gasoline	
9:39	3	1203	Gasoline	
10:09	5.1	1942	Ammonium nitrate, <0.2% combustible mat.	
10:24	4.3	3170	Aluminum processing by-products	
10:33	3	1993	Flammable liquid, n.o.s.	
10:34	2.2	2187	Carbon dioxide, refrigerated liquid	
10:45	2.2	1073	Oxygen, refrigerated liquid	
11:13	2.2	N/A	Non-Flammable Gas	
11:19	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:25	2.1	1075	Propane	
11:32	5.1	2880	Calcium hypochlorite, hydrated	
11:53	D, 3	1866	Resin solution, Mixed hazardous materials	
11:57	8	3259	Amines, solid, corrosive, n.o.s	
12:00	3	1090	Acetone	
12:11	3	1993	Flammable liquid, n.o.s.	
12:17	3	1203	Gasoline	
12:18	5.1, 2.2	1073	Oxygen	
12:22	2.3	3308	Liquefied gas, toxic, corrosive, n.o.s.	
12:28	1.1D	NA	Explosive (mass explosion hazard)	
12:58	3	1203	Gasoline	
13:06	3	1993	Flammable liquids, n.o.s.	
13:12	3	1203	Gasoline	
13:14	9	3082	Hazardous Waste, Liquid	
13:19	3	1203	Gasoline	
13:27	3	2152	Dipentene	
13:30	3, 6.1	1986	Alcohols, flammable, toxic, n.o.s.	
13:32	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
13:40	D	N/A	Mixed Shipment	
13:59	3	1203	Gasoline	
14:02	8	2794	Batteries, Wet, Acid	
14:02	3	1203	Gasoline	
14:06	D	N/A	Mixed Shipment	
14:09	2.1	1075	Propane	
14:11	2.2	1073	Oxygen, refrigerated liquid	
14:15	3	1203	Gasoline	
14:28	2.1	1075	Propane	
14:41	3	1203	Gasoline	
14:43	8	1791	Hypochlorite solutions	
14:44	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	

15:00	3	1203	Gasoline	
15:08	2.2	1977	Nitrogen, refrigerated liquid <i>cryogenic liquid</i>	
15:16	3	1993	Flammable liquids, n.o.s.	
15:17	3	1202	Heating oil, light	
15:18	2.2	1072	Oxygen, compressed	
15:20	9	3257	Elevated temperature liquid, n.o.s.	
15:23	6.1	2312	Phenol, molten	
15:27	2.1	1075	Petroleum Gases, Liquefied (Propane)	
15:34	3	1203	Gasoline	
15:35	3, 8	1993/3264	Flammable liquids, n.o.s./Corrosive liquid, acidic, inorganic, n.o.s.	
15:38	3	1203	Gasoline	
15:53	3	1202	Heating oil, light	
16:02	8	1760	Corrosive liquids, n.o.s.	
16:04	6.1	1092	Acrolein, stabilized	
16:04	2.1	1075	Petroleum Gases, Liquefied (Propane)	
16:12	6.1	1662	Nitrobenzene	
16:15	8	2198	Phosphorus	
16:15	3	1203	Gasoline	
16:35	3	2348	Butyl acrylates, stabilized	
16:40	3	1203	Gasoline	
16:44	3	1203	Gasoline	
16:52	3	1202	Heating oil, light	
16:54	2.2	1073	Oxygen	
16:58	3	1203	Gasoline	
17:03	7	3327	Radioactive material, Type A package, fissile	
17:12	3	1203	Gasoline	
17:16	D	NA	Mixed hazardous materials	
17:16	8	1830	Sulfuric acid with > 51% acid	
17:20	3	1993	Flammable liquid, n.o.s.	
17:31	8	2218	Acrylic acid, inhibited	
17:36	2.1	1075	Propane	
17:39	3	1203	Gasoline	
17:49	2.2	1072	Oxygen, compressed	
17:49	3	1203	Gasoline	
17:58	8	NA	Corrosive	
18:02	3	1993	Flammable liquids, n.o.s.	
18:04	3	1203	Gasoline	
18:14	8	1805	Phosphoric acid, liquid	
18:23	3	1203	Gasoline	

18:30	5.1	NA	Oxidizer	
18:34	3	1203	Gasoline	
18:38	2.2	1072	Oxygen, compressed	
18:47	3	1203	Gasoline	
18:59	8	NA	Corrosive	
19:00	3	1120	1-Butanol	
19:21	3	2348	Butyl acrylates, stabilized	
19:31	2.1	1075	Petroleum Gases, Liquefied (Propane)	
19:37	2.3	3308	Liquefied gas, toxic, corrosive, n.o.s.	
19:38	3	1224	Ketones, liquid, n.o.s.	
19:41	8	1760	Corrosive liquids, n.o.s.	
19:42	8	1760	Corrosive liquids, n.o.s.	
19:47	8	NA	Corrosive	
20:00	5.1, 2.2	1073	Oxygen	
20:01	3	1993	Flammable liquids, n.o.s.	
20:10	8	1833	Sulfurous acid	
20:15	6.1	1843	Ammonium dinitro-o-cresolate	
20:26	3	1203	Gasoline	
20:29	3	1203	Gasoline	
20:49	3	1202	Heating oil, light	
21:03	9	3082	Environmentally hazardous substances, liquid, n.o.s.	
21:17	3	1203	Gasoline	
21:21	3	2302	5-Methylhexan-2-one	
21:43	3	1993	Flammable liquids, n.o.s.	
21:46	3	1280	Propylene oxide	
22:05	3	1203	Gasoline	
22:26	2.2	1073	Oxygen, refrigerated liquid	
22:33	3	1203	Gasoline	
22:52	3	1203	Gasoline	
23:04	3	1203	Gasoline	
23:32	3	1993	Flammable liquids, n.o.s.	
23:57	3	1203	Gasoline	

### Road Side Survey Field Log

Location: US-11E at Washington County/Sullivan				Date: 27OCT06
Time	Hazard Class	UN ID	Description	Notes
6:43	3	1202	Heating oil, light	
7:18	3	1203	Gasoline	

7:47	3	1203	Gasoline	
8:10	3	1203	Gasoline	
8:33	3	1203	Gasoline	
9:00	3	1203	Gasoline	
9:17	3	1223	Kerosene	
9:30	3	1203	Gasoline	
9:54	D	NA	Mixed hazardous materials	
10:05	2.1	1075	Propane	
10:29	3	1203	Gasoline	
10:58	3	1203	Gasoline	
11:33	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
11:36	2.1	1075	Propane	
11:50	3	1203	Gasoline	
12:34	3	1202	Heating oil, light	
12:40	3	1203	Gasoline	
12:40	5.1, 2.2	1073	Oxygen	
12:54	3	1203	Gasoline	
13:01	2.1	1075	Propane	
13:19	3	1203	Gasoline	
13:34	8	1719	Caustic alkali liquids, n.o.s.	
13:44	2.1	1075	Propane	
14:20	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
14:36	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
14:41	2.1	1075	Propane	
14:56	2.1	1075	Propane	
15:28	5.1, 2.2	1073	Oxygen	
15:38	2.1	1075	Propane	
15:48	2.1, 2.2	NA	Compressed gas (flam., and non-flam.)	
15:56	8	NA	Corrosive	
16:02	3	1203	Gasoline	
16:14	3	1223	Kerosene	
16:26	3	1203	Gasoline	
16:47	8	3264	Corrosive liquid, acidic, inorganic, n.o.s.	
17:24	3	1203	Gasoline	
17:37	2.1	1075	Propane	
17:52	3	1203	Gasoline	
18:10	3	1203	Gasoline	
18:48	2.1	1075	Propane	
19:44	3	NA	Flammable and combustible liquid	

19:46	4.1	3178	Flammable solid, inorganic, n.o.s.	
20:46	3	1203	Gasoline	
21:48	3	1203	Gasoline	

Appendix F: Rail Data

<b>Railway HAZMAT Shipments: Norfolk-Southern, Eastbound</b>			
<b>Substance</b>	<b>Class</b>	<b>UNID</b>	<b>Shipments</b>
Combustible liquid, n.o.s.	3	1993	1523
Xylenes	3	1307	1046
Other regulated material	9	3082	870
Ammonium nitrate	5.1	1942	799
Acetic anhydride	8	1715	752
Acetone	3	1090	573
Sodium hydroxide solution	8	1824	479
Butyraldehyde	3	1129	378
Environmentally hazardous material	9	3082	374
Elevated temperature material	9	3257	363
Butyl acetates	3	1123	360
Acetic acid, glacial	8	2789	348
Propionaldehyde	3	1275	340
Denatured alcohol	3	1987	320
Butanols	3	1120	290
Ethanol	3	1170	250
Octyl aldehydes	3	1191	231
Acetaldehyde	3	1089	225
Flammable liquid, n.o.s.	3	1993	208
n-Propanol	3	1274	175
Propanol	3	1219	139
Methyl amyl ketone	3	1110	131
Ethyl acetate	3	1173	120
Isobutyl acetate	3	1213	120
1-Methoxy-2-propanol	3	3092	98

<b>Railway HAZMAT Shipments: Norfolk-Southern Westbound</b>			
<b>Substance</b>	<b>Class</b>	<b>UNID</b>	<b>Shipments</b>
Elevated temperature material	9	3257	2673
Alcoholic beverages	3	1824	2016
Sodium hydroxide	8	2218	1925
Environmentally hazardous material	9	3077	1640
Acrylic acid, inhibited	8	2280	1362
Petroleum gases, liquefied	2.1	1075	976

Hexamethylenediamine	8	3065	925
Acetone	3	1090	629
Sulfuric acid	8	1830	569
Carbon dioxide	2.2	2187	492
Flammable liquid, n.o.s.	3	1993	433
Combustible liquid, n.o.s.	3	1993	390
Acetic anhydride	8	1715	383
Acetic acid, glacial	8	2789	362
Corrosive liquid, acidic	8	3265	354
Trichloroisocyanuric acid	5.1	2468	328
Hydrochloric acid	8	1789	291
Anhydrous ammonia	2.2	1005	288
Ethanol	3	1170	287
Sulfur, molten	9	2448	267
Hydrogen peroxide	5.1	2015	262
Chlorine	2.3	1017	231
Phosphoric acid	8	1805	221
Methyl methacrylate	3	1247	181
Ethylene oxide	2.3	1040	130

<b>Railway HAZMAT Shipments: CSX</b>			
<b>Substance</b>	<b>Class</b>	<b>UNID</b>	<b>Shipments</b>
Xylenes	3	1307	1786
Ammonium nitrate	5.1	1942	1707
Methanol	3	1230	602
Acetic acid, glacial	8	2789	388
Petroleum gases, liquefied	2.1	1075	278
Petroleum distillates	3	1268	267
Corrosive liquids, flammable, n.o.s.	8, 3	2920	240
Acetic anhydride	8	1715	236
Environmentally hazardous material	9	3082	210
Sodium hydroxide solution	8	1824	128
Acetic acid solution	8	2790	108
Sulfuric acid	8	1830	104
Waste (flammable)	3	1993	88
Propionic acid	8	1848	72
Petroleum crude oil	3	1267	70
Butyraldehyde	3	1129	69
Butanols	3	1120	67
Carbon dioxide	2.2	2187	61

Ethyl acetate	3	1173	60
Ketones, liquid, n.o.s.	3	1224	60
Combustible liquid, n.o.s.	3	1993	57
Phosphorus pentasulfide	4.3	1340	57
Alcoholic beverages	3	1824	55
Propyl acetate	3	1220	53
Other regulated material	9	3082	51



Appendix G: Storage Data

Facility / Substance	Max. Daily Amount (lbs.)	Avg. Daily Amount (lbs)	No. Days On-site
<b>AAA Cooper Transportation</b>			
Diesel Fuel Oil	99,999	50,000	365
<b>Aerojet Ordinance Tenn.</b>			
Depleted Uranium	999,999	800,000	365
Nitric Acid	9,999	18,000	365
Nitrogen	99,999	75,000	365
Propane	99,999	40,000	365
Sulfuric Acid	999,999	250,000	365
Tungsten Powder, Solid	999,999	500,000	365
Uranium Tetrafluoride	9,999,999	7,700,000	365
<i>From Workplace Chemical List</i>			
1,1,1,2,2,3,4,5,5-Decafluoropentane	99	20	365
1-Naphthalenamine	999	450	365
Acetone	999	250	365
Acetylene	999	170	365
Aliphatic Hydrocarbon	99	55	365
Aliphatic Polyisocyanate	99	85	365
Aluminum Oxide	9,999	1,250	365
Ammonia	99	70	365
Ammonium Chloride	99	66	365
Ammonium Fluoride	99	35	365
Argon, Liquid	9,999	6,550	365
Aromatic Hydrocarbons	99	45	365
Butyl Acetate	99	25	365
Butyl Alcohol	99	30	365
Butyl Glycol Ether	99	75	365
Calcium Hydroxide	999	750	365
Carbon	9,999	2,400	365
Carbon Dioxide	99	95	365
Carbon Monoxide	99	80	365
Chlorine	9,999	1,500	365
Cobalt	99	85	365
Dichlorofluoromethane, Freon 12	99	65	365
Diethylhydroxylamine	99	85	365

Ferric Chloride	99	40	365
Ferrous Sulfate	999	670	365
Helium	999	475	365
Hydrochloric Acid	999	380	365
Hydrogen	9,999	4,900	365
Hydrogen Chloride	999	450	365
Iron Oxide	99	10	365
Iron, Powder	999	150	365
Isopropyl Alcohol	99	65	365
Lime	999	550	365
Magnesium	9,999	6,700	365
Magnesium Oxide	99	55	365
Magnesium Silicate	99	25	365
Mercury	99	85	365
Methane	99	60	365
Methanol	999	700	365
Methyl Ethyl Ketone	99	65	365
Methyl Isobutyl Ketone	999	235	365
Mineral Spirits	9,999	1,850	365
Molybdenum	999	250	365
Molybdenum Carbide	99	70	365
MPK	99	65	365
Muriatic Acid	99	85	365
Neon	99	45	365
Nickel Metal	99	90	365
Nitric Acid	9,999	8,000	365
Nitric Oxide	99	95	365
Nitrogen Dioxide	99	85	365
Nitrogen, Liquid	9,999	4,800	365
Oil, Mineral	9,999	5,700	365
Ozone	99	70	365
Petroleum	9,999	7,800	365
Phosgene	99	55	365
Phosphoric Acid	99	80	365
Potassium Ferricyanide	99	45	365
Potassium Hydroxide	9,999	4,350	365
Propane	99,999	33,000	365
Propylene Glycol	9,999	1,950	365
Rhenium	99	50	365
Sodium Bisulfite	99	20	365

Sodium Chloride	999	500	365
Sodium Hydroxide	999	630	365
Stoddard Solvent	999	175	365
Tin Powder	99,999	10,000	365
Titanium	999	845	365
Titanium Carbide	99	65	365
Titanium Nitride	99	55	365
Toluene	999	270	365
Trans 1,2-Dichloroethylene	99	75	365
Triethyleneteramine	99	45	365
Uranium	999,999	250,000	365
Vanadium	99	70	365
Xylene	99	85	365
Zinc	99	65	365
Zinc Phosphate	99	55	365
Zirconium Compounds	999	625	365
<b>Air Products Gray</b>			
Diesel Fuel	99,999	500	365
<b>American Water Heater Company</b>			
Sulfuric Acid	9,999	5,500	365
4-4 Diphenylmethane Diisocyanate	99,999	82,000	365
Polymeric MDI	99,999	75,000	365
Cyclopentane	99,999	75,000	365
Isopentane	99,999	8,000	365
Propane	999,999	650,500	365
Carbon Dioxide, Liquid	99,999	90,000	365
Argon, Liquid	99,999	90,000	365
Polyether Polyol	99,999	75,000	365
1,1-dichloro-1-fluoroethane	99,999	35,500	365
<b>AT&amp;T</b>			
Diesel Fuel	99,999	50,000	365
Sulfuric Acid	9,999	7,000	365
<b>AWHC Engineering Specialty Products</b>			
Polymethylene Polyphenyl	99,999	4,900	365
Propane	9,999	850	365
Argon, Liquid	99,999	7,500	365
Diisocyanates	9,999	2,000	365
<b>Banta Southeastern</b>			
Lead in Lead Acid Batteries	99,999	20,000	365
Sulfuric Acid	9,999	8,000	365

Ultra-Sheen UV-9091	99,999	85,000	365
<b>Boones Creek Concrete Plant</b>			
Diesel Fuel	99,999	55,000	365
Motor Oils	99	80	365
Fly Ash	99,999	80,000	365
Limestone	999,999	750,000	365
<b>Bosch</b>			
Sulfuric Acid	9,999	8,000	365
Propane	999,999	550,000	365
<b>Bush Hog, LLC</b>			
Propane	999,999	800,000	365
<b>Cantech Industries</b>			
Toluene	99,999	50,000	365
Naphthenic Petroleum Distillate (Oil)	99,999	85,000	365
<b>Coca-Cola Bottling Company</b>			
Carbon Dioxide, Liquid	99,999	50,000	365
Sulphuric Acid	9,999	6,500	365
<b>Douglas Dynamics, LLC</b>			
Argon, Cryogenic Liquid	15,800	10,456	365
Manganese Compounds	99,999	20,000	365
Nickel Compounds	99,999	20,000	365
<b>EPIC Technologies, LLC</b>			
Fuel Oil #2	99,999	10,000	365
Nitrogen, Liquid	99,999	15,000	365
Sulfuric Acid	9,999	7,000	365
<b>Excel-Polymers, LLC</b>			
Thiram	99,999	25,000	365
Lead Compounds	999,999	400,000	365
Antimony	99,999	8,500	365
Carbonic Acid Calcium Salt	99,999	11,000	365
Di(2-Ethylhexyl) Phthalate	99,999	35,000	365
Di-2-benzothiazolyl Disulfate	99,999	6,800	365
Extracts, Petroleum, Heavy Paraffinic Distillate Solvent	99,999	75,000	365
Petroleum Distillates, Hydrotreated Heavy Naphthenic	999,999	600,000	365
Petroleum Distillates, Hydrotreated Light Naphthenic	99,999	3,900	365
Petroleum Distillates, Solvent Dewaxed Heavy Paraffinic	99,999	15,000	365
Petroleum Distillates, Solvent-Refined Heavy Paraffinic	99,999	35,000	365
Silica, Amorphous, Precipitated and Gel	99,999	45,000	365

Waxes: Paraffin	99,999	70,500	365
Zinc Oxide	999,999	275,000	365
<b>General Shale Products</b>			
Brick Oil	99,999	35,000	365
Manganese Dioxide	99,999	15,000	365
Soda Ash	99,999	75,000	365
Lime	99,999	90,000	365
Hydraulic Oil	99,999	20,000	365
<b>Heritage Propane</b>			
Propane	999,999	650,000	365
<b>Home Depot</b>			
Sulfuric Acid	999	650	365
<b>Johnson City, City of, Treatment Facilities</b>			
<b>Brush Creek</b>			
Chlorine	99,999	800	365
Sulfur Dioxide	99,999	800	365
<b>Knob Creek</b>			
Chlorine	99,999	800	365
<b>Regional</b>			
Chlorine	99,999	800	365
<b>Unicoi</b>			
Chlorine	9,999	90	365
<b>Watauga</b>			
Chlorine	99,999	800	365
<b>Kennametal, Inc.</b>			
Nitrogen, Compressed Gas	99,999	15,000	365
Hydrogen, Compressed Gas	9,999	5,500	365
Argon, Compressed Gas	99,999	30,000	365
Methane, Cryogenic Liquid	999	500	365
Helium, Cryogenic Liquid	99	78	365
Aqua Ammonia, Cryogenic Liquid	999	450	365
Sulfuric Acid	999	700	365
Hydrite 4000 Electropolish Solution	999	800	365
Hydrogen Chloride, Gas	99	20	365
Colbalt, Fine Powder	9,999	5,000	365
Titanium Tetrachloride, Gas	999	300	365
Sodium Hydroxide, Liquid	999	650	365
Waste Oil	9,999	8,500	365
Kerosene	999	800	365
Hydrogen Sulfide, Gas	99	45	365

Petroleum Based Lubricating Oils	9,999	5,500	365
Acetonitrile (Methyl Cyanide)	99	15	365
Methanol	99	75	365
2-Butanone	99	75	365
<b>National Guard</b>			
JP-8	99,999	75,000	365
<b>Rental Service Corp. #432</b>			
Sulfuric Acid	999	150	365
<b>Ryder</b>			
Diesel Fuel	99,999	90,000	365
Motor Oil	99,999	40,000	365
Waste Oil	99,999	65,000	365
<b>Ryder</b>			
Diesel Fuel	99,999	90,000	365
Motor Oil	99,999	40,000	365
Waste Oil	99,999	35,000	365
<b>Schwan Foods Inc.</b>			
Propane	99,999	17,000	365
<b>Snap-On Tools Corporation</b>			
Sulfuric Acid	9,999	6,400	365
Nitric Acid	9,999	6,400	365
Sodium Hydroxide	9,999	7,000	365
Nickel, Solid	9,999	8,000	365
Chromic Acid	999	550	365
Cellulose Acetate Pellets	99,999	30,000	365
Solvent Dewaxed Heavy Parafinic	99,999	15,000	365
Petroleum Based Lubricating Oils	9,999	4,500	365
<b>Sprint</b>			
<b>North Roan Street (1)</b>			
Lead Compounds	99,999	25,000	365
Sulfuric Acid	9,999	2,000	365
<b>North Roan Street (2)</b>			
Diesel	99,999	78,000	365
Lead Compounds	99,999	55,000	365
Sulfuric Acid	9,999	2,000	365
<b>West Main Street</b>			
Sulfuric Acid	9,999	2,000	365
<b>Old State Road</b>			
Sulfuric Acid	9,999	2,000	365
<b>SunCom</b>			

<b>Wesley Street</b>			
Lead Compounds	99,999	65,000	365
Sulfuric Acid	9,999	4,000	365
<b>SUNOCO #0988-5237</b>			
Hydroesulfized Kerosene	9,999	5,000	365
<b>SUNOCO #08128449</b>			
Hydroesulfized Kerosene	9,999	5,000	365
<b>Superior Industries International, Inc.</b>			
Lead Compounds	999,999	650,000	365
Aluminum Alloy	9,999,999	3,500,000	365
Houghton Coolant	99,999	85,000	365
Hydrochloric Acid	99,999	10,000	365
Metsafe Water Based Hydraulic Fluid	9,999	6,500	365
Nitrogen	99,999	25,000	365
Powder Paint	99,999	45,000	365
Propane	999,999	100,000	365
<b>Tarkett Wood, Inc.</b>			
Methyl Isobutyl Ketone	99,999	7,500	365
Isocet Aqueous Polymeric Emulsion	99,999	25,000	365
Isocet Polymeric MDI Diisocyanate	99,999	25,000	365
X390 Tap Tite Polyvinyl Acetate Adhesive	99,999	5,500	365
<b>Terra Mulch Products, LLC.</b>			
Cellulose, Paper	9,999,999	7,000,000	365
Galactomannan	999,999	65,000	365
<b>TPI Corporation</b>			
Copper, Compounds, Solution	99,999	6,550	365
Lead Compounds	999,999	23,000	365
Sulfuric Acid	99,999	1,500	365
Propane	2,550	1,000	365
<b>Transit Mix Concrete Company</b>			
Granulated Blast-Furnace Slag	99,999	35,000	365
Fly Ash	99,999	15,000	365
EDCI Inhibited Acid	99	75	365
Petroleum Lubricating Oils	99	50	365
Aluminum Brightener	99	80	365
Master Kur-N-Seal HS	9,999	500	365
Concessive STD LVI Resin	99	50	365
Cast Off	99,999	10,00	365
Topping 112	99	50	365
Concessive 1420	99	50	365

Master Kur-N-Seal VOC	9,999	500	365
Gel Patch	999	100	365
Epolith-P Part A	99	50	365
Epolith-P Part B	99	50	365
NP 1	99	50	365
Confilm	99	50	365
Concessive 1090 Resin	99	75	365
Concessive 1090 Hardener	99	75	365
Primer 100	99	75	365
Sonopatch TC	99	80	365
Gear Oil GX 80W-90	99	50	365
Motor Oil	99	75	365
Redi-Color Sealer	999	90	365
Eliminator Liquid Hammer	99	20	365
646 Supreme Gear Lube	99	90	365
Expandable Polystyrene	99	60	365
ZEP X-7185 Flocculant	99	60	365
Diesel Fuel	99,999	18,500	365
Universal Foam Sealant	99	20	365
Multi-Cleaner	999	350	365
MB Micro-Air	99	50	365
Rhodbuild 1000	999	150	365
Polyheed N	99	50	365
Polyheed 1025	99	50	365
<b>TVA</b>			
<b>Johnson City Customer Service Center</b>			
Diesel Fuel	9,999	8,000	365
<b>Jonesborough 161-Kv</b>			
Sulfuric Acid	999	450	365
<b>TVA-Northeast Johnson City 161-Kv Substation</b>			
Sulfuric Acid	999	800	365
<b>U.S. Post Office Johnson City</b>			
Gasoline	99,999	58,000	365
<b>Valley Equipment Company, Inc.</b>			
Carbon Dioxide, Refrigerated Liquid	99,999	19,000	365
Nitrogen, Refrigerated Liquid	99,999	19,000	365
Oxygen, Refrigerated Liquid	99,999	15,000	365
Propane	99,999	35,000	365
<b>Washington County Farmers Co-Op</b>			
S-Metolachlor/Atrazine	10,800	9,000	90



Endosulfan	200	200	120
Carbofuran	50	50	120
Paraquat	600	375	120
Maleic Hydrazide	10,050	8,500	90
<b>Waste Management</b>			
Diesel Fuel	99,999	7,500	365
Leachate	9,999,999	4,860,000	365

VITA

STEED K. STAGNOLIA

Personal Data:                   Date of Birth: February 7, 1971  
  Place of Birth: Manassas, Virginia  
  Marital Status: Married

Education:                        East Tennessee State University, Johnson City, Tennessee,  
  Environmental Health, M.S., August 2007  
  East Tennessee State University, Johnson City, Tennessee,  
  Environmental Health, B.S., August 2003  
  Austin Peay State University, Clarksville, Tennessee, 1997

Professional Experience:       Graduate Assistant, East Tennessee State University,  
  Environmental Health, 2004 - 2006  
  Hazardous Materials Consultant, 278<sup>th</sup> ACR, Tennessee  
  Army National Guard, Knoxville, Tennessee, 2004-  
  2005  
  Environmental Health Non-Commissioned Officer, U.S.  
  Army National Guard, 278<sup>th</sup> ACR, Tennessee Army  
  National Guard, Knoxville, Tennessee, 2001-2004  
  Environmental Health Non-Commissioned Officer, U.S.  
  Army, Within the U.S. and Overseas, 1991-2000

Organizations:                   American Society for Microbiology, February 2004 -  
  Present  
  National Environmental Health Association, August 1997 –  
  Present  
  ETSU Communicable Disease Team, Standing Committee,  
  Appointed Graduate Student Member, January 2004 –  
  May 2007

Certifications:                   Certified Environmental Health Technician, January 1999  
  Certified Food Safety Professional, June 2000  
  Hazardous Waste Operations and Emergency Response  
  (HAZWOPER), June 2004