Northeast Florida Regional Council

6850 Belfort Oaks Place
Jacksonville, Florida 32216
Wednesday, August 14, 2013 - 10:00a.m.

I. Call to Order

II. Introductions, Pledge of Allegiance, and Roll Call

III. Welcome Membership

IV. Approval of May, 2013 meeting minutes *

V. Old Business

A. Hazardous Materials Emergency Preparedness Grant
   i. Planning – Commodity Flow Study – Presentation by Sarrah Stanley
   ii. Training – Upcoming Opportunities

B. Hazards Analysis Update
   i. Program Updates

C. Biennial Exercise Committee

VI. New Business

A. Training Task Force Update
B. LEPC Chair/Staff Meeting
C. SERC Meeting

VII. Reports

A. Treasury Report
B. Training Committee
C. Hazardous Materials Release Report

VIII. Other

A. West, Texas Explosion – Presentation by Eric Anderson
B. Yatabe Award Nominations

IX. Public Comments

X. Adjournment*

*Denotes Action Required

TAB II

District 4 LEPC - Membership

Primary Name	Occupational Category	Alternate Name
Chief Michael Bazanos	*Firefighting*	
Henry Bonar	*Facility Owner*	Amy Pilgrim
Morrison Braren	*Non-Elected Local Official*	
Terry Carr	*Local Environmental*	Jean Richards
Sandi Courson	*Health*	
Paul Christ	*Transportation*	Michelle Sanders
Bill Decker	*Local Environmental*	
Sheriff Joey B. Dobson	*Law Enforcement*	Adam Faircloth
Brad Elias	*Health*	
Lenny Ensalaco	*Firefighting*	Rolf Preuss
George Faucher, Jr.	*Firefighting*	
Gerry Gividen	*Interested Citizen*	
Ben Huron	*Interested Citizen*	
Martha Ira	*Local Environmental*	Kari Reno
Gracie Kennedy	*Local Environmental*	Matthew Harris
Chief Richard Knoff *	*Firefighting*	Jonathan Lamm
William Lord	*Facility Operator*	
Steven Millican	*Emergency Management*	
James Murphy	*Community Group*	
Quin Romay	*Emergency Management*	Ryan Simpson
John Russell	*Local Environmental*	
John Scott, III	*Firefighting*	
Andy Sikes	*Hospital*	
Harvey Silcox	*Firefighting*	Danny Yeager
Chief Joel Sneed	*Firefighting*	John Contestabile
Roger Studenski	*Transportation*	David Dunkley
John Ward	*Emergency Management*	Maria Haney
Ken Wilkey **	*Facility Operator*	Mark Logue
Mike Williams	*Law Enforcement*	James Watford

Chairperson *

Vice-Chairperson **

as of 7-23-13

Quorum = 9 Members

TAB IV

Northeast Florida Regional Council

Northeast Florida
Local Emergency Planning Committee
Thursday, May 16, 2013

10:00 a.m.

LEPC DISTRICT 4

MINUTES

A meeting of the District IV Local Emergency Planning Committee was held on Thursday, May 16th, 2013, at 10:00 a.m., at the Flagler County Emergency Operations Center (EOC), 1769 E. Moody Boulevard, Bunnell, Florida 32110. Chair Richard Knoff called the meeting to order with the following members:

Present
Chief Michael Bazanos - Firefighting
Morrison Braren – Facility Owner
Terry Carr - Environmental
Sandi Courson – Health
Brad Elias – Health
Lenny Ensalaco – Firefighting
George Faucher, Jr. – Firefighting
Ben Huron – Interested Citizen
Gracie Kennedy – Environmental
Chief Richard Knoff – Firefighting
William Lord – Facility Owner
James Murphy – Community Group
Michelle Sanders – Transportation
Eric Vanes – Law Enforcement

Excused
Henry Bonar – Facility Owner
Bill Decker – Environmental
Gerry Givíden – Interested Citizen
Steven Millican – Emergency Management
John Russell – Environmental
Harvey Silcox – Firefighting
Chief Joel Sneed – Firefighting
Roger Studenski – Transportation
John Ward – Emergency Management
Ken Wilkey – Facility Owner

Absent
Andy Sikes – Hospital
Chief Mike Williams – Law Enforcement
Martha Ira – Environmental
Sheriff Joey Dobson – Law Enforcement
John Scott, III – Firefighting

Guests: Lt. Jonathan Lamm, Alternate for Chief Knoff
Jennifer Stagg, Planner, Flagler County
Ben Nelson, Meteorologist, National Weather Service

Staff Present: Eric Anderson

Chief Knoff called the meeting to order and asked everyone to introduce themselves. He extended a special welcome to Jack Pittman, who has been a long standing member of the LEPC and is from the Flagler County area.

The group pledged allegiance to the flag. Chief Knoff then reminded the group to make sure they have an alternate member appointed, so their agencies could be in attendance to fill a quorum.

*APPROVAL OF MINUTES

Chair Knoff called for a motion to approve the February 13, 2013 minutes. Mr. Terry Carr requested a correction to page 5 showing that the fuel spill leaked onto the "access road leading to the tarmac" and into the storm water "management" system. A motion to approve with the above corrections was made by Lt. Lamm, seconded by Mr. Terry Carr. The motion carried unanimously.

OLD BUSINESS

Hazardous Material Emergency Preparedness Grant: Mr. Anderson stated that in HMEP planning, we have officially begun the Commodity Flow Study. The Council intern, Ms. Sarrah Stanley, has been working on this and has identified several different corridors within the region. He briefly discussed the attachment regarding what is anticipated to be accomplished. Ms. Stanley will give a presentation at the August meeting regarding her findings. Mr. Carr asked why the study was being limited to interstate trucking and not rail systems. Mr. Anderson explained that the State is currently conducting a Commodity Flow Study of the ports and Jacksonville is one of the ports being surveyed. We can submit an advance request for the next grant to cover rail in the future. We do have a large quantity Ethanol train that comes north to south through our region on a weekly basis and we would like to concentrate on that in the future. Lt. Lamm explained that 96 cars come through our region twice a week heading from the Georgia area to the port of Tampa. Once the port has been expanded, they are anticipating up to 136 cars twice a week.

Regarding HMEP training, this is the end of the training cycle. Eight members will be attending the International Hazardous Materials Response Teams Conference at the beginning of June. He commented on other courses which were held during the month of May. The new contract will begin July 1 and he believes the contract will be renewed with funds for planning and training.

Discussion ensued regarding the class being held at the upcoming HazMat Conference dealing with Ethanol fires. TRANSCAER will also be conducting a course related to this during the month of September.

Hazards Analysis Update: Mr. Anderson explained that there was concern about whether the Hazards Analysis Program would continue into the future. There will be a working group that will be created to try to improve the program. Lt. John Scott will be the representative from our region. They are to come back within six months with any changes and recommendations. Next year's funding and program will remain the same, but Mr. Anderson felt there will most likely be changes in the following year.

Biennial Exercise Committee: The first meeting will be scheduled after July 1. Chief Knoff thanked all the members who volunteered to be on the exercise committee and feels that we should be able to come up with some worthwhile exercises. Mr. Anderson has been in contact with other LEPC's to see what types of exercises they have conducted. He said he hopes to provide this information to the committee when they meet, so we can develop our regional exercises.

NEW BUSINESS

Training Task Force Update: Lt. Lamm said that TRANSCAER will be doing classes at the State Fire College in Ocala focusing on chlorine, ethanol and anhydrous ammonia. He felt this was a great course and it is free. He said that Mr. Anderson will be providing further information when it becomes available. Lt. Lamm pointed out that these classes are open to anyone, not just firefighters. This will build a better relationship between organizations.

Lt. Lamm said they have already begun working on next year's HazMat Symposium. They have organized a committee to work on the types of classes to be held. They are working with the FFCA to firm up the dates and space available to do "hands on" training. He asked for suggestions and/or vendors. It will be at Fire/Rescue East in Daytona again.

LEPC Chair/Staff Meeting: Mr. Anderson said that we may see some changes in E-Plan. The State has decided to switch to E-Plan as a reporting tool. Now, with the sequester, E-Plan is on the chopping block. There has been information put out to either have the State step in and fund E-Plan or request the facilities to pay a $25.00 fee toward funding. Chair Knoff commented that as we were converting over to E-Plan, DEM considered E-Plan the up and coming format that would be the answer for industry for its ease of reporting. But there were still concerns from the First Responders about accessing correct data. It was then announced by the University managing E-Plan that there would no longer be funding for server maintenance and upkeep. We just have to stay tuned to see how this plays out. Mr. Anderson said that this year's reporting was 78% on E-Plan. Previous best reporting under the former system was 46%.

SERC Meeting: Mr. Anderson said the April SERC meeting in Tallahassee was pretty straight forward. There will be Risk Management Program site visits in June, which are listed in the attachment provided in the agenda packet.

REPORTS

Treasurer's Report – Chair Knoff said there is currently a balance of $3,878 in the LEPC account. No money was used over the last quarter.

Training Committee Report – Mr. Anderson said that we are using our remaining dollars for the upcoming training. After July 1, we will have a better idea of what we will have available for training. There is a general consensus that we are going to procure items as training props that can be checked out and used throughout the region. We are hoping to allocate $5,000 for this purpose.

Hazardous Materials Release Report – Mr. Anderson mentioned that under Table 1, there was a Coke Dust and Hydrogen Peroxide release. Under Table 2, we had one natural gas release at a hotel in the Orange Park area. Under Table 3, there were traffic accidents which resulted in 2 injuries.

OTHER

Chair Knoff introduced Ben Nelson of the National Weather Service, Jacksonville Office, who thanked the LEPC for the opportunity to speak with them.

He explained that he had an Emergency Preparedness background, working for the Division of Emergency Management. He discussed the operational paradigm. He discussed the Jacksonville Office and its function and mission to protect life and property. He said they are shifting from text products to graphical products, which are better for the public and first responders. They try to forecast all weather elements including the marine side for up to seven days. Focus will now be more on short term – getting the forecast out for first responders. He encouraged Emergency Managers to call the service to let them know their needs. Briefing packets for severe weather events will still be sent out. There is a daily weather briefing online by 7:00 am to update on weather conditions. He then discussed dispersion modeling that they have in place regarding wind speed and direction. The trajectory model is called HYSPLIT (Hybrid Single Particle Lagrangian Integrated Trajectory) which runs a lot of simulations to diagnose the conditions. If an EM contacts the Weather Service to report an event, they can use HYSPLIT to diagnose and simulate plume calculations. He informed the group what information needs to be provided so they can run a HYSPLIT within a ten minute time frame. Mr. Nelson provided a handout of his slide presentation. He also provided a website for a spot fire weather forecast. He then briefly discussed the upcoming hurricane season.

Chair Knoff thanked Mr. Nelson for his presentation.

An After Action Report overview on the Clay County Regional Exercise which was held on February 12, 2013 involving Clay and St. Johns County regional hazardous response teams plus local responders who went to the incident was presented by Chief Knoff. The incident focused on a leak at a water treatment plant which was being cleaned up by a contractor. One of the drums began leaking resulting in a driver being incapacitated. There were also drum leaks within the building and a tank leak outside the building. The event took place at an abandoned water treatment plant. There were three objectives:

1) evaluate capabilities of the hazmat response teams;
2) establish communication between Clay and St. Johns Counties;
3) mitigate the hazmat release.

Chief Knoff further discussed the exercise details and the ability to meet the State requirements. The teams worked very well together. The only difficulty was for the Incident Commander to reach the Forestry White Channel due to his having a new radio. All other radio communications went well. Chief Knoff served as the manager for exercise planning. The team leader, Captain Bronson served as the lead exercise planner and Lt. Lamm was also one of the planners to plan and coordinate the exercise. Chief Knoff offered copies of the AAR to anyone who wished to have it. Mr. Anderson asked if there was another exercise planned that might piggy-back off this one. Chief Knoff said none are planned, but it would be based on state funding.

Jennifer Stagg, the planner for Flagler County Emergency Management, thanked the group for coming and sharing their facility. She said it was helpful for her to get to meet everyone and "connect the dots". She provided some background on her experience. She then spoke to the Guardian Centers which opened its first center in Perry, Georgia and was profiled on First Coast News. She discussed the service that the center provided. Their plan is to bring in First Responders and Emergency personnel to be able to deal with more simulated disaster activities.

Gracie Kennedy wanted to make a clarification to a previous discussion. She said that a contractor was hired to clear up a spill. The fire department put some absorbent on the spill, but she requested additional absorbent, which the fire department refused to do. Ultimately, the responsibility fell to the DOT, who

has contractors under contract. She said they normally try to get the responsible party to hire a contractor and to clean up their mess. Chair Knoff asked the quantity of the spill, to which Ms. Kennedy said it was about 10 gallons. Discussion ensued about normal procedures in other areas for spill clean-up.

Chair Knoff discussed the Vigilant Guard exercise will be held at Camp Blanding beginning on May 17th through the following week. Clay and St. Johns teams will be participating, along with some State teams.

Next Meeting – Mr. Anderson said the next quarterly meeting is scheduled for August 14, 2013 at the Northeast Regional Planning Council, 6850 Belfort Oaks Place, Jacksonville, Florida. He plans to reach out to another county to possibly host the November meeting.

PUBLIC COMMENTS

No public comments were offered.

ADJOURNMENT

There being no further business to come before the board, Chair Knoff asked for a motion to adjourn, which was made by Lt. Lamm, seconded by Mr. Lord. The meeting was adjourned at 11:30 am.

DRAFT

TAB V-A

MEMORANDUM

DATE: July 23, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: Hazardous Materials Emergency Preparedness (HMEP) Planning and Training Grant

---

Grant agreements/contracts have not been received from the Florida Division of Emergency Management for the 2013/2014 fiscal year. It is believed that the total contract amount of $58,370 will be allocated for HMEP Planning and Training related activities. Refer to the sections below for more specific information regarding the grant.

HMEP Planning

- It is anticipated that HMEP Planning will be allocated $20,000 to implement one annual project. This money will be used to conduct a transportation and hazardous materials related exercise. This exercise will satisfy HMEP and LEPC exercise requirements for the fiscal year.

  An Exercise Sub-Committee has already been developed to prepare and implement the exercise over the upcoming winter months.

- Sarrah Stanley completed the 2012/2013 HMEP annual project. The project consisted of a Regional Commodity Flow Study for hazardous materials on our major roadway corridors. The results of the study are attached.

Attached - Commodity Flow Study *

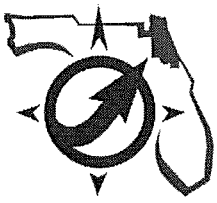
HMEP Training

- It is anticipated that HMEP Training will be allocated $38,370 for the 2013/2014 fiscal year. The Training Sub-Committee has discussed and provided guidance for upcoming training opportunities. Once contracts have been received from FDEM, procurement of courses will commence.

- Additionally, the group has recommended that we begin to purchase props for use in training responders on HazMat related incident response. Props with associated training classes are currently under review.

District 4
Local Emergency Planning Committee
2012-2013

Hazardous Materials Emergency Preparedness Grant
Commodity Flow Study



Prepared by:

Northeast Florida Regional Council

6850 Belfort Oaks Place

Jacksonville, Florida 32216

Table of Contents

Introduction

The District 4 ***Local Emergency Planning Committee*** (LEPC) is made up of seven counties in Northeast Florida—which are Baker, Clay, Duval, Flagler, Putnam, Nassau and St. Johns. For the 2012-2013 ***Hazardous Materials Emergency Preparedness Grant*** funding year, the LEPC has chosen to conduct a Commodity Flow Study. This study will assist in the efforts to prevent incidents involving hazardous materials and substances being transported, in and through the region.

Every day in the US, there are more than 800,000 shipments of hazardous materials (hazmat) via road shipping and hauling services, usually flammable liquids such as gasoline, or flammable gas. There are 5,000 trucks involved in fatal crashes annually, of which about 200 are hazmat related. Of the 400,000 trucks involved in nonfatal crashes each year, only 5,000 are hazmat related. Although these numbers are relatively small, the potential for human injury and property damage in hazmat crashes is much greater.

Transportation of hazardous materials, by one approach or another, is present in nearly every community. The vast majority of hazmat shipments move safely and securely along the nation's transportation system. However, the threat of a hazmat transportation incident remains significant due to the large impact on the environment. Incidents can occur in any jurisdiction at almost any time. Human behavior and technological failure cause many system failures or casualties. The consequences of hazmat incidents are potentially catastrophic to public safety, life and wellbeing, the environment, and infrastructure. This raises concern regarding the transportation of hazardous materials through populated or environmentally sensitive areas.

This report will first explain why and how this study is being conducted, as well as what knowledge can be gained for implementation in first response plans. This report will further examine the Florida Department of Transportation (FDOT) requirements for motor carriers, placarding, and current safety regulations and how effective they can be in reducing incidents.

Having a better understanding of this information provides the best insight into chemical risks posed to the area and it first responders. With this knowledge, that is specific to each county in District 4, officials can make better-informed decisions on allocating resources. Transportation, growth management, and emergency preparedness are the types of planning decisions that can be tailored to respond to the hazardous materials frequently being transported through the region.

Be aware that this information is a snapshot of hazmat transportation for specific times and locations. Transport patterns may vary widely by time of day, day of week, and season of year. There is a chart in the appendix that shows data of truck accidents occurring in the nation at various times in the day.

Scope of Work

Option 1: Commodity Flow Study

Funding is provided to perform eligible activities as identified in the Hazardous Materials Emergency Preparedness Planning Grant Program. The staff assigned to this program should conduct activities pursuant to this scope of work with the support of the Local Emergency Planning Committee (LEPC) and consistent with the direction of the Division. The work tasks include, but are not limited to the following activities.

- ***Task 1***—On behalf of the LEPC, develop a commodity flow study of hazardous materials and extremely hazardous substances transported over selected Interstate and U.S. Highway corridors within the LEPC District. At a minimum, this will include two (2) north/south corridors and two (2) east/west corridors.
  1. Carry out a placard survey of trucks carrying hazardous and extremely hazardous substances (EHSs). Record placard number, chemical name, carrier name, direction of travel, date and time of observation, and type of vehicle. Data will be collected from several locations along each corridor over a given period in two to three hour time increments.
  2. Generate a series of maps showing the most frequently recorded hazardous materials at each of the observation locations.
  3. Provide a report to all county emergency management directors in the LEPC District detailing the results of the study. Prior approval of the report format by the Division is required.

- ***Task 2***—Reporting requirements.
  1. Provide the Division with a project outline and timetable, which indicate the estimated time frames to complete individual tasks. Include a brief description of the methods that will be used to accomplish the work tasks.
  2. Prepare and submit to the Division a report of the findings and data collected, including any recommendations regarding the analysis.
  3. Provide a written report to the Division within ten (10) working days of identifying any significant impediments to the completion of the project tasks as outlined in this scope of work.
  4. Maintain accurate records of personnel hours spent performing the tasks outlined in this scope of work. Personnel participating in HMEP-sponsored planning projects are to be counted toward the state's 20 percent contribution to the HMEP grant for the hours spent on the project. This "soft-match" contribution must be documented by the Recipient and submitted on the year-end program summary. Personnel hours paid with HMEP grant funds are not eligible for soft-match.
  5. Incorporate the results of this planning project into the annual update of the LEPC's hazardous materials emergency response plan.

Methodology

One team member was responsible for conducting the placard survey of trucks carrying extremely hazardous substances (EHSs). They recorded the observation location, date and time, direction of travel, weather conditions, name of carrier, placard number, substance, and container type. This information was then entered electronically for further review and analysis.

Nine key Interstates, state roads and U.S. highways had been acknowledge as common routes that EHSs and hazardous materials are being transported on within the Local Emergency Planning Committee (LEPC) District 4. Of the nine routes, five are north-south bound (I-95, SR 16, US 1, US 301 & US 17), two are east-west (I-10 & US 90), one runs northwest- southeast (SR 100) and the last circles around the city of Jacksonville (I-295). Although most of the observations were done directly off of the subject highway, we had contact with an employee at the weigh stations in various counties who allowed us to observe from their facility.

The corridors of focus and the counties that were observed are:

- ***Primary North/South Corridors***
  - I-95—Flagler/ Nassau County
  - US 17—Clay/ Putnam County
  - US 1—St. Johns County
- ***Primary East/West Corridors***
  - I-10—Baker/ Duval County
  - US 90—Baker/Duval County

Surveys conducted on major interstates and highways were done for a minimum of two hour periods. In order to gather the most accurate data for the study, surveys were conducted during morning and afternoon business hours and at several locations of each of the subject roads.

Transportation

Requirements

There are three main components of hazmat transportation: (1) the shipper, (2) the carrier and the (3) driver. It is the shipper's duty to ensure that the products being transported are properly packaged, marked and labeled prior to the shipment leaving its original location. The carrier is then required to take the hazardous materials to the proper destination. If the shipment is not properly packaged, labeled or marked, it is the carrier's responsibility to refuse the shipment.

The driver is responsible to follow all of the regulations of the hazardous material in congruence with the government's requirements. If there are any issues or dangers involved in the transportation process, it is up to any of these people or entities to refuse shipment. Any of these three can be held liable in the event of a hazardous material transportation accident.

"Persons" who offer for transportation, or transport in foreign, interstate or intrastate commerce: (a) any highway route controlled quantity of a Class 7 (radioactive) material; (b) more than 25 kg (55 lbs.) of a Division 1.1, 1.2, or 1.3 (explosive) material in a motor vehicle, rail car or freight container; (c) more than 1 L per package of a material extremely poisonous by inhalation; (d) a hazardous material in a bulk packaging having a capacity of 3,500 gals. for liquids or gases, or more than 468 cubic feet for solids; (e) a shipment in other than bulk packaging of 5,000 lbs. gross weight or more of one class of hazardous material for which the transport vehicle requires placarding; (f) any quantity of materials requiring placarding.

Less than 454 kg (1,001 lbs.) aggregate gross weight may be placarded, but is not required

Visibility of each placard must be readily seen from the direction it faces. Placards must be on each side and each end of the container. If coupled to another motor vehicle or rail car, visibility is not required from the direction it faces.

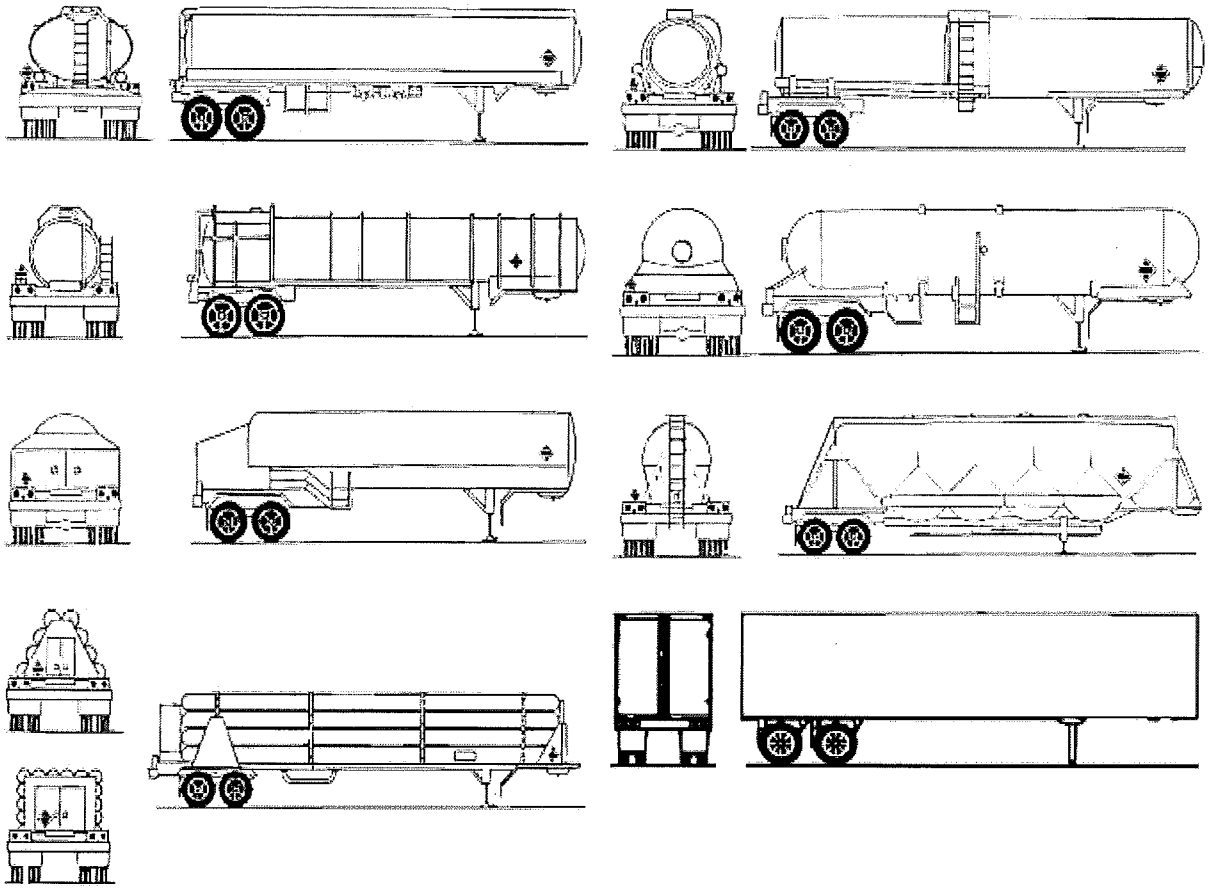
Transportation—Motor Carrier Design

Hazardous materials are stored and transported in many kinds of containers and vehicles. The field guide (below) shows the kinds of containers and vehicles typically used to transport or store hazardous materials. It describes the kinds of markings, labels, and placards used for particular kinds of containers, and how to interpret this information.

Emergency response personnel must be aware that there are many variations of road trailers, some not shown here, that are used for shipping chemical products. The suggested guides are for the most hazardous products that may be transported in these trailer types and should be considered as last resort if the material cannot be identified by any other means.

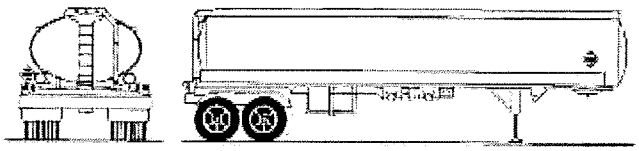
As outlined in the 2012 Emergency Response Guidebook, the following truck types are the most common means of storage and transportation used in over the road bulk transport.

Figure 1 – Motor Carrier Design



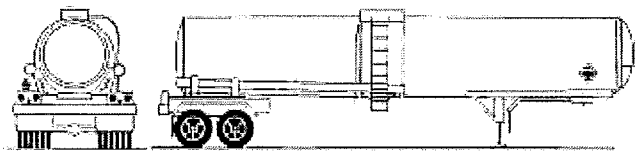
Source: 2012 Emergency Response Guidebook, pg. 9

Non-pressure liquid tank truck (DOT- 406 or MC-306):



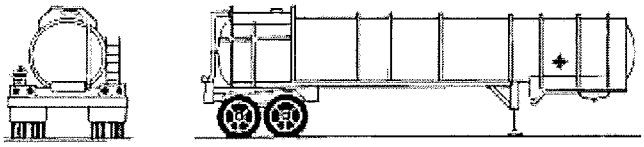
- Typically carries gasoline (UN/NA 1203), diesel fuel (fuel oil), liquid fuel products, alcohol, and almost any other kind of flammable or combustible liquids.
- May sometimes carry nonflammable liquids (e.g., milk or molasses). May contain mild corrosives, but not strong corrosives. Cannot contain pressurized gases.
- Oval in cross-section, with blunt ends.
- Newer tanks are aluminum; older can be steel. Tank is divided into two to five compartments (usually three to four); in some cases, different products may be in different compartments (in most states, mixed loads are not permitted). Typical maximum capacity: 9,000 gallons. Pressure can't exceed 3 psi.

Low-pressure chemical tank truck (DOT-407 or MC-307):



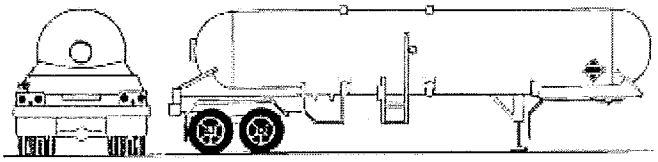
- Typically carries flammable or combustible liquids, acids, caustics, poisonous liquids.
- Maximum capacity is typically up to 6,000 gallons. Pressure can be up to 40 psi. Can be insulated or non-insulated:
- Non-insulated tanks are typically circular in cross-section. Typically, there are reinforcing rings around the tank. Tanks are aluminum or steel.
- Insulated tanks generally carry products that need to be kept either heated or cooled, or products that need to be heated to be off-loaded. They are characteristically horseshoe-shaped when viewed from behind. They are comprised of an outer jacket, generally aluminum or steel, and an inner tank that may be lined (e.g., with fiberglass).

Corrosive liquid tank truck (DOT-412 or MC-312):



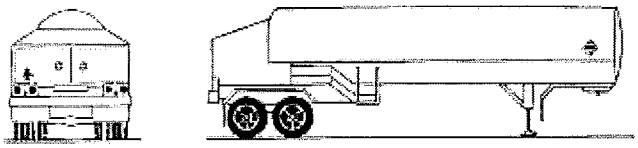
- Typically carries strong corrosives, such as sulfuric or nitric acid. Typically carries acids, also may carry bases. Sometimes may carry flammable liquids (e.g., grain alcohol), poison liquids, or oxidizing liquids. Cannot carry pressurized gases.
- Circular in cross-section, with up to 10 reinforcing rings around the tank. May be very long. Often there is black, tar-like, corrosion-protective coating around the manhole.
- Carries a single tank, generally with a single compartment, usually of steel and lined, with capacity up to 7,000 gallons. Tank pressures between 35 and 50 psi.

High-pressure tank truck (MC-331):



- Typically carries gases liquefied by pressure, such as anhydrous ammonia, LPG, propane, butane.
- Circular in cross-section, with blunt ends: tank looks like bullet. Surface is smooth; typically painted white or silver to reduce heating by sunlight.
- Tank can carry up to 11,500 gallons; tank pressure is generally above 100 psi.
- Shorter "bobtail" version of MC-311 tank can carry up to 3,500 gallons.
- High BLEVE potential.

Cryogenic liquid tank truck (MC-338):



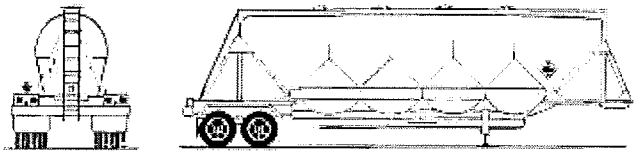
- Typically carries gases liquefied by refrigeration, such as liquid oxygen, nitrogen, argon, carbon dioxide, and hydrogen. Product likely to be corrosive or flammable gas, or

poisonous or oxidizing liquid. Temperature of product -150 degrees F or below.

- Outer shell surrounds insulated inner tank, with vacuum space between. Large compartment mounted at rear of tank. Capacity of inner tank up to 7,000 gallons.
- When sun heats tank and raises internal pressure, vapor may discharge from relief valves. Internal pressure up to 25 psi.
- Very high BLEVE potential.

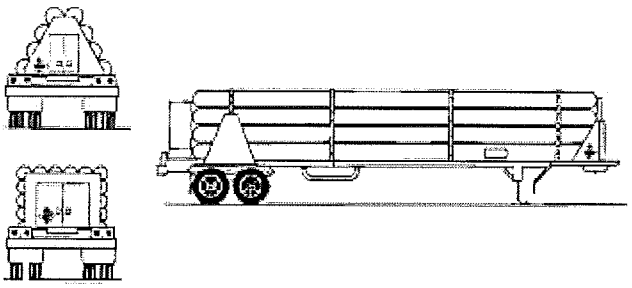
Dry bulk cargo tank truck:

- Typically carries dry bulk cargo such as calcium carbide, oxidizers, corrosive solids, cement, plastic pellets, or fertilizers.
- Shape can vary but always includes bottom hoppers.



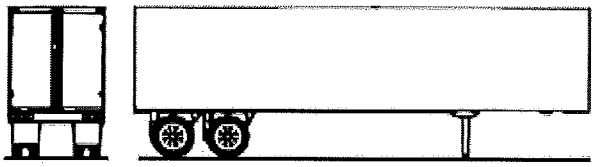
Tube trailer (compressed gas trailer):

- Typically carries pressurized gases such as air, helium, and oxygen, in pressurized tubes.
- Pressure may be up to 5,000 psi.



Box trailer (mixed cargo):

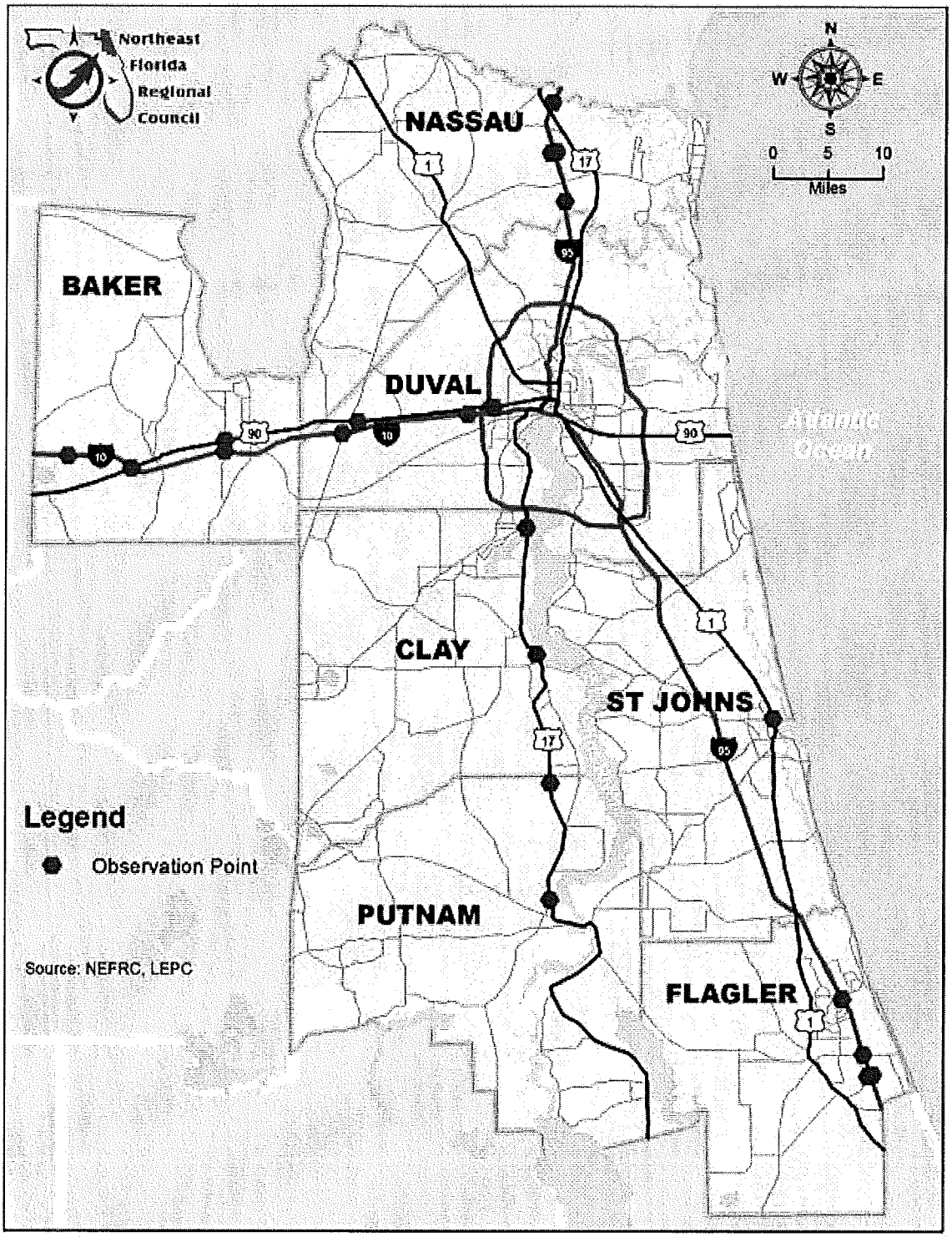
- Typically contains mixed cargo, which may be packed in bags, boxes, drums, tanks, cylinders, or other containers. Check labels and tags on individual containers to identify their contents.
- The presence of several placard holders on the truck indicates it may commonly carry hazardous materials.



Not depicted are DOT-412 Vacuum Loaded Tank and Intermodal Tank.

Roadway Descriptions and Observations

Per the requirements of the scope of work, points for data collection took place at the following three North/South corridors and two East/West corridors. There were 21 sites for data collection. Each of these points is on a key corridor in the region's seven counties and represents areas for high traffic.



Path: N:\Other projects\commodities flow\commodities flow map.mxd

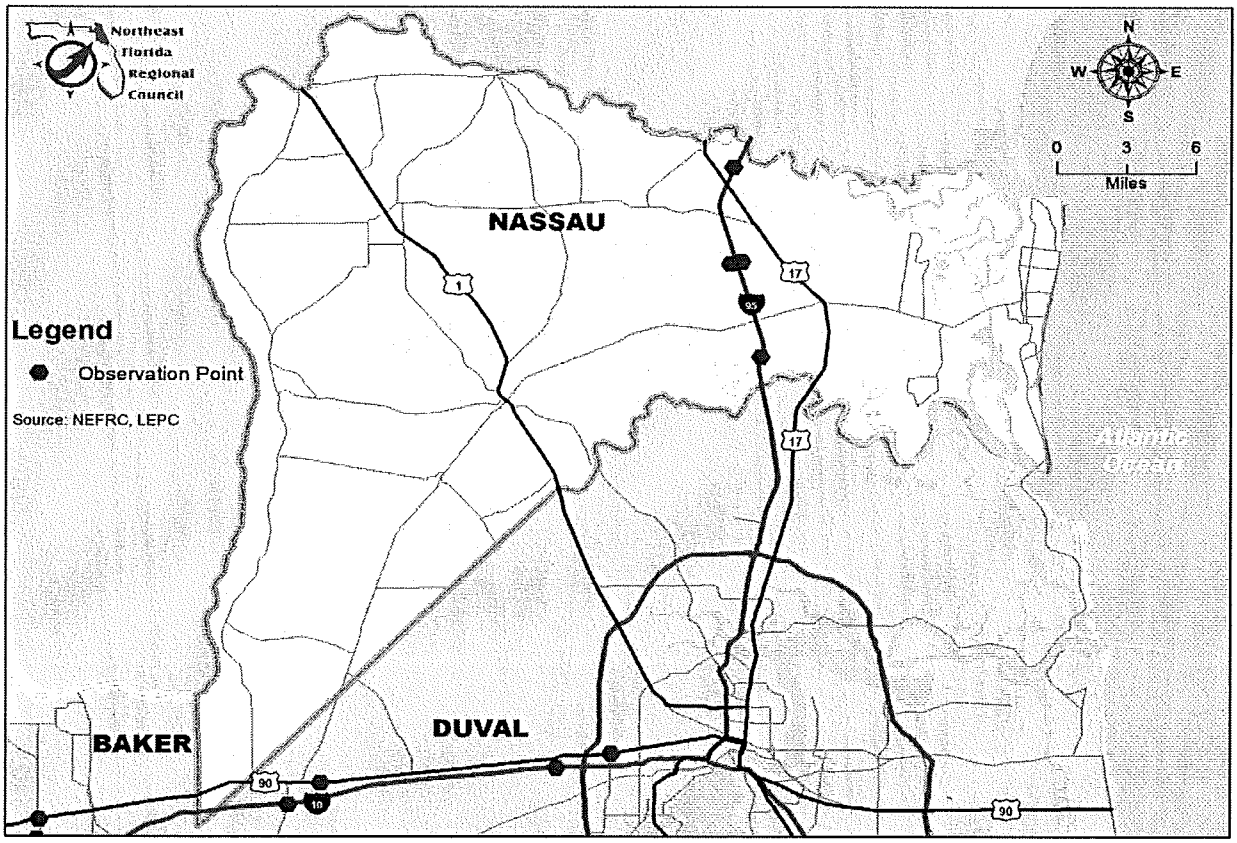
Date Produced: June 26, 2013

North/South Corridors

Interstate 95 (I-95)—I-95 in Florida is approximately 381 miles long and is the main north-south interstate highway and traffic corridor along the east coast. Observations were done at the north and south bound weigh stations in Nassau County and at mile markers 360 and 380. For Flagler County, observations were done from the north and south bound rest areas and at mile markers 284 and 289.

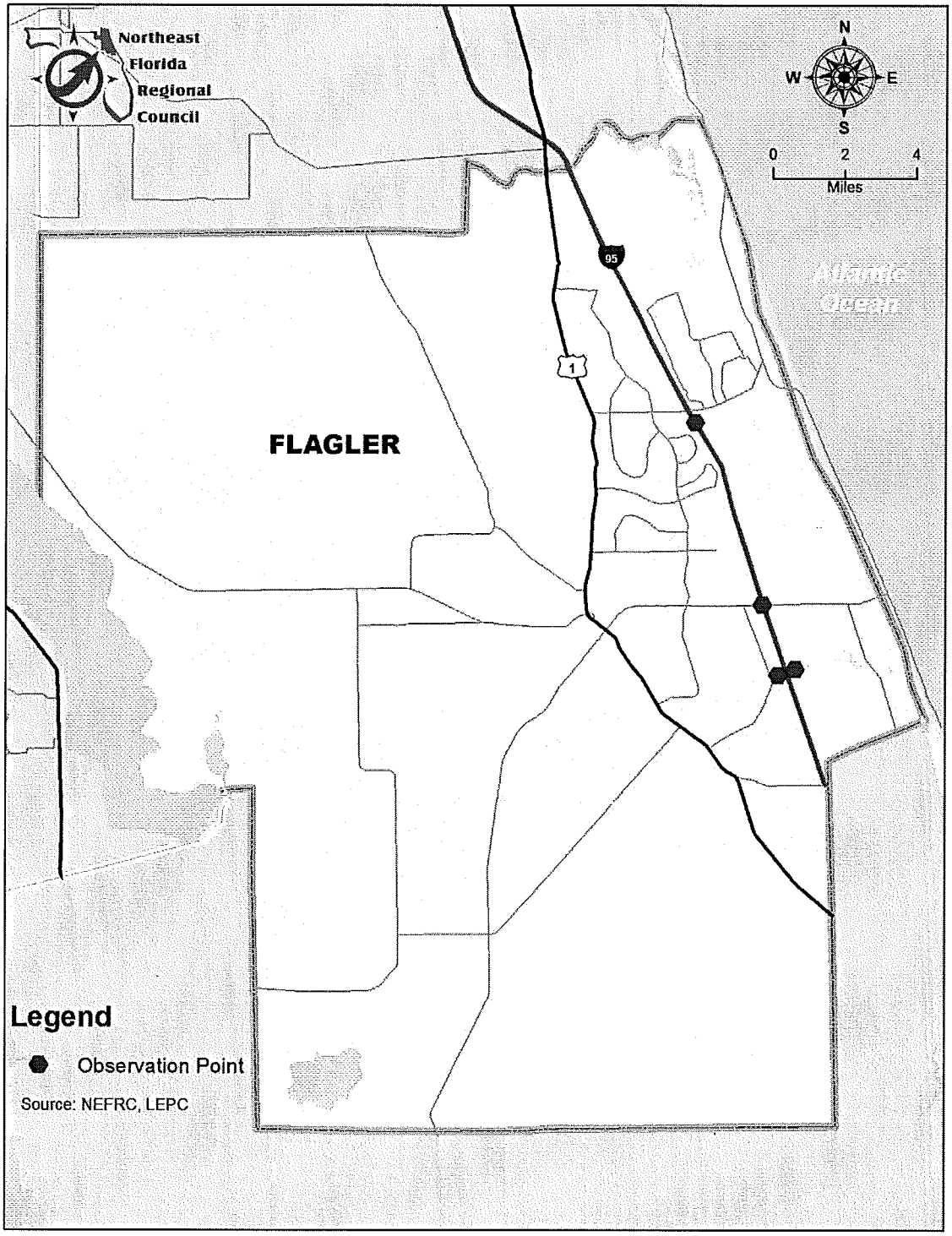
With I-95 being one of the nation's busiest corridors for traveling and transportation, there was a lot of traffic during the observations. There were trucks carrying hazardous materials every few minutes and some traveled in groups. Gasoline, ammonia, and elevated temperature liquids were the hazardous materials regularly being transported on this highway and many of the gasoline carrying trucks seemed to travel in groups. The major carriers were Florida Rock, Love's, and Flash Foods.

Percentage of Hazmat traveling North	49.5 %
Percentage of Hazmat traveling South	50.5%
Average time between hazmat trucks	4 minutes
Majority of product transported	Gasoline/Petrol, Ammonia, Elevated Temp. Liquids



Path: N:\Other projects\commodities flow\nassau commodities flow map.mxd

Date Produced: June 26, 2013



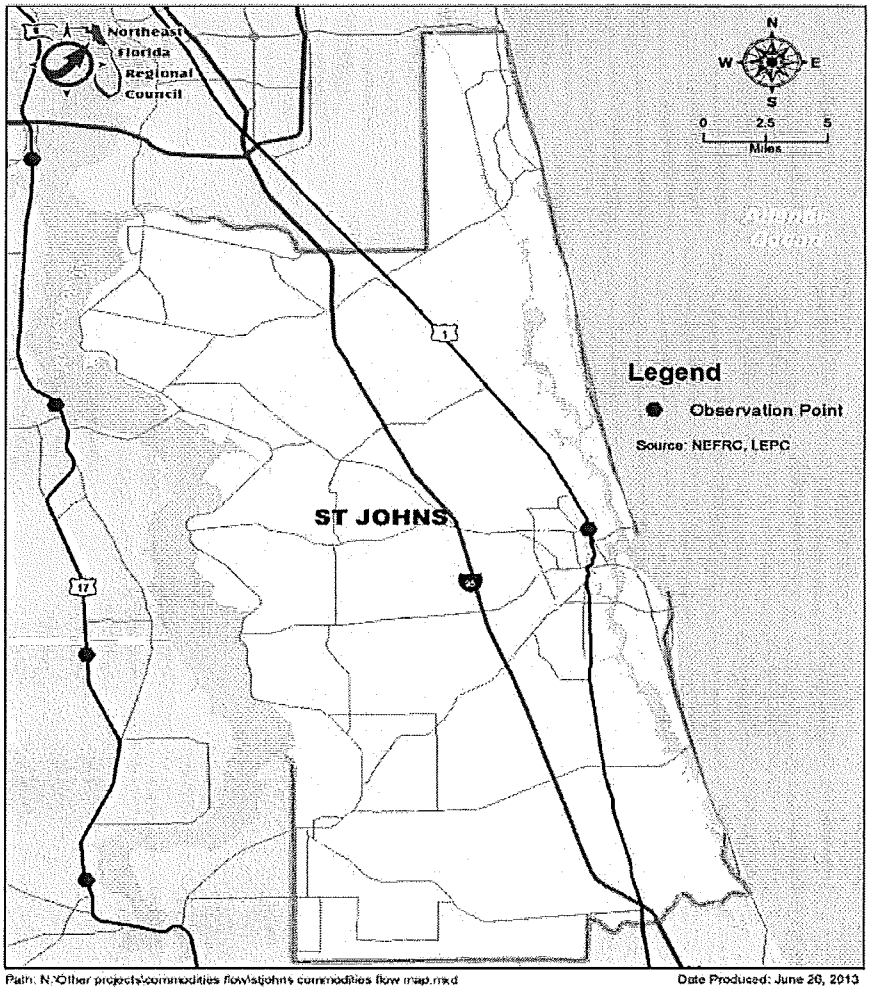
Path: N:\Other projects\commodities flow\flagler commodities flow map.mxd

Date Produced: June 26, 2013

- ***U.S. Route 1 (US-1)***—US 1 runs 547 miles (880 km) along the state's east coast from Key West to its crossing of the St. Mary's River into Georgia. US 1 was designated when the U.S. Highway System was established in 1926 and is a great scenic route along Florida's coast.

  Lastly, US 1 was chosen as a corridor due to the amount of traffic it receives, although it is a relatively small roadway in comparison to I-95. An observation was done on this corridor near SR 16, because it is one of the main highways in St. Johns County. Unfortunately, the traffic observed was mostly tourist and non-hazmat commercial trucks. During a two hour observation period only two hazmat trucks were observed. The trucks were transporting Gasoline and Diesel.

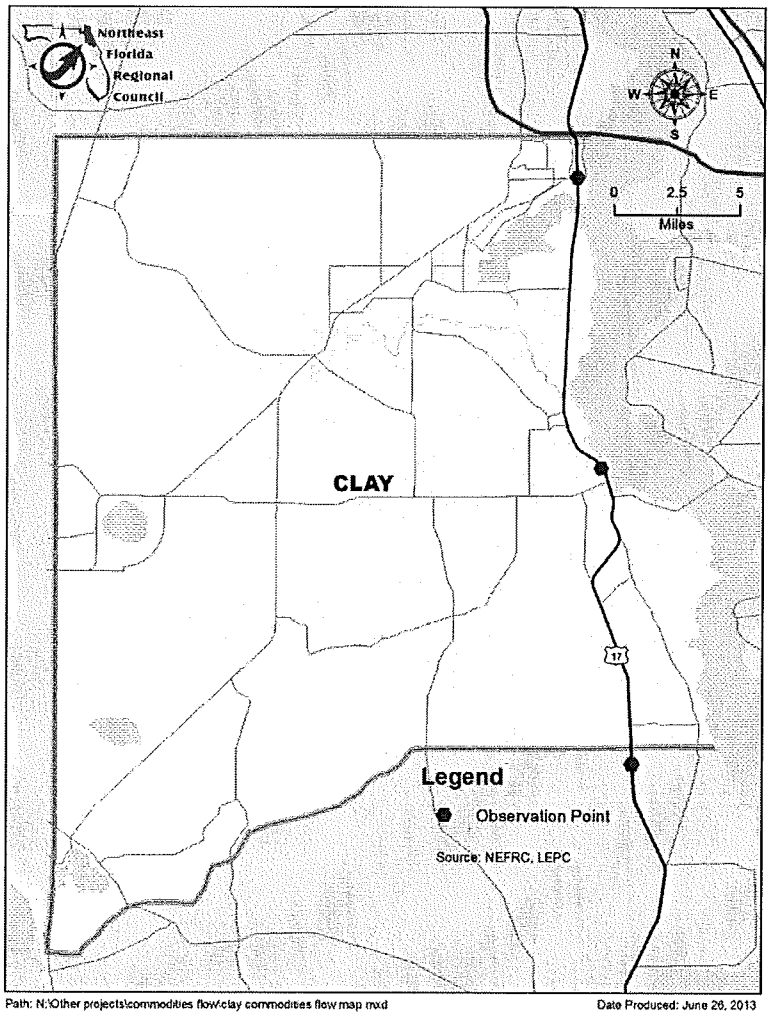
Percentage of Hazmat traveling East	40%
Percentage of Hazmat traveling West	60%
Average time between hazmat trucks	29 minutes
Majority of product transported	Gasoline/Petrol, Diesel

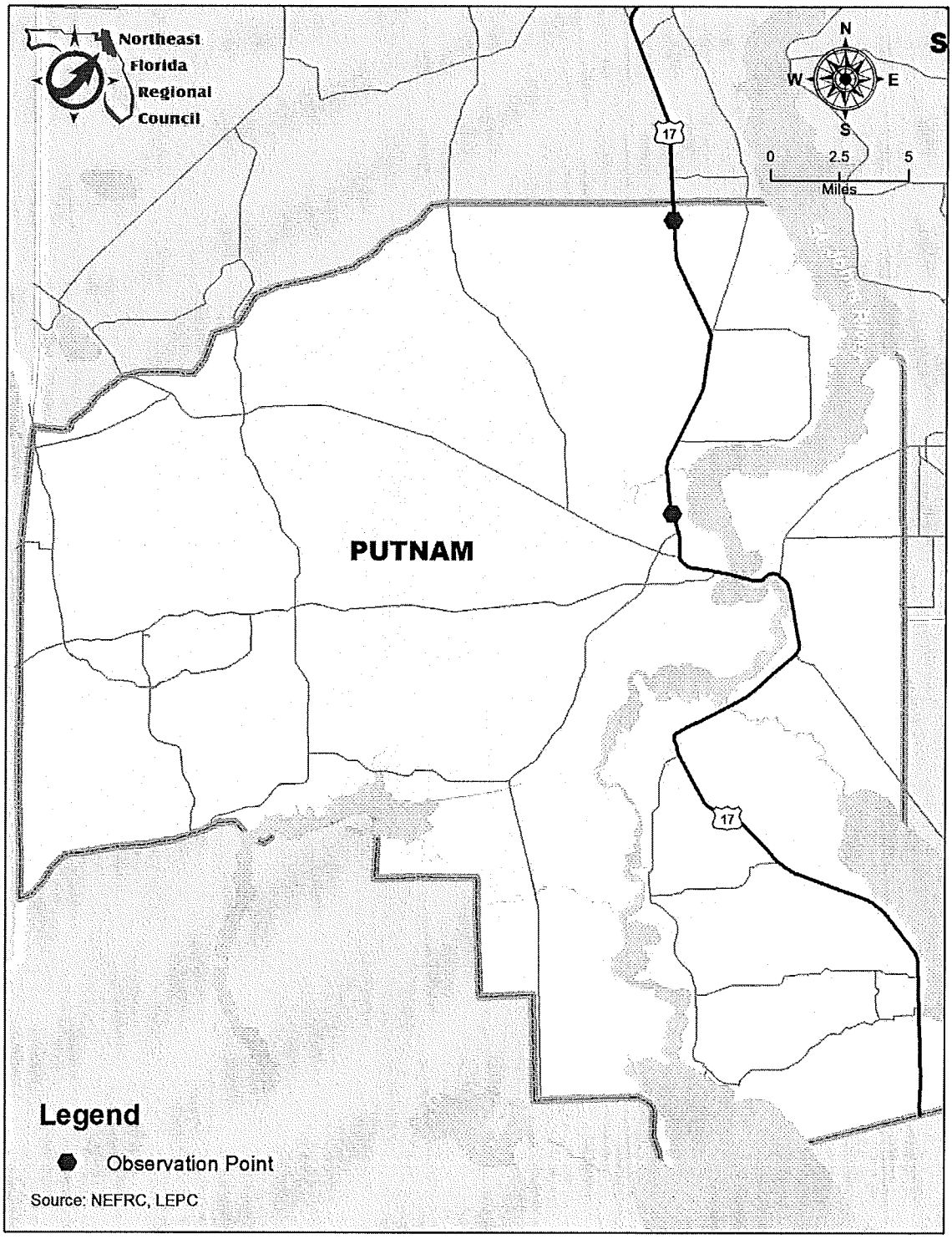


- ***U.S. Route 17 (US-17)***—This corridor runs 318 miles (512 km) from Punta Gorda, Florida northeast to Jacksonville. US 17 was observed in Clay County at two points, one north of SR 16 and the other at the intersection of Park Avenue and Kingsley Avenue. Observations were made in Putnam County off of US 17 north of SR 19 and about 10 miles south of SR 16.

  US 17 was a slow roadway where there were relatively few commercial trucks in the Putnam County area. In Clay County, the amount of commercial trucks increased, but was still slow for hazmat trucks. The dominant hazardous materials transported on this corridor were Gasoline and Propane. Observations were made at four sites to gather the most frequent hazmat transported.

Percentage of Hazmat traveling North	47%
Percentage of Hazmat traveling South	53%
Average time between hazmat trucks	27 minutes
Majority of product transported	Gasoline/Petrol, Propane, Ammonia





Path: N:\Other projects\commodities flow\putnam commodities flow map.mxd

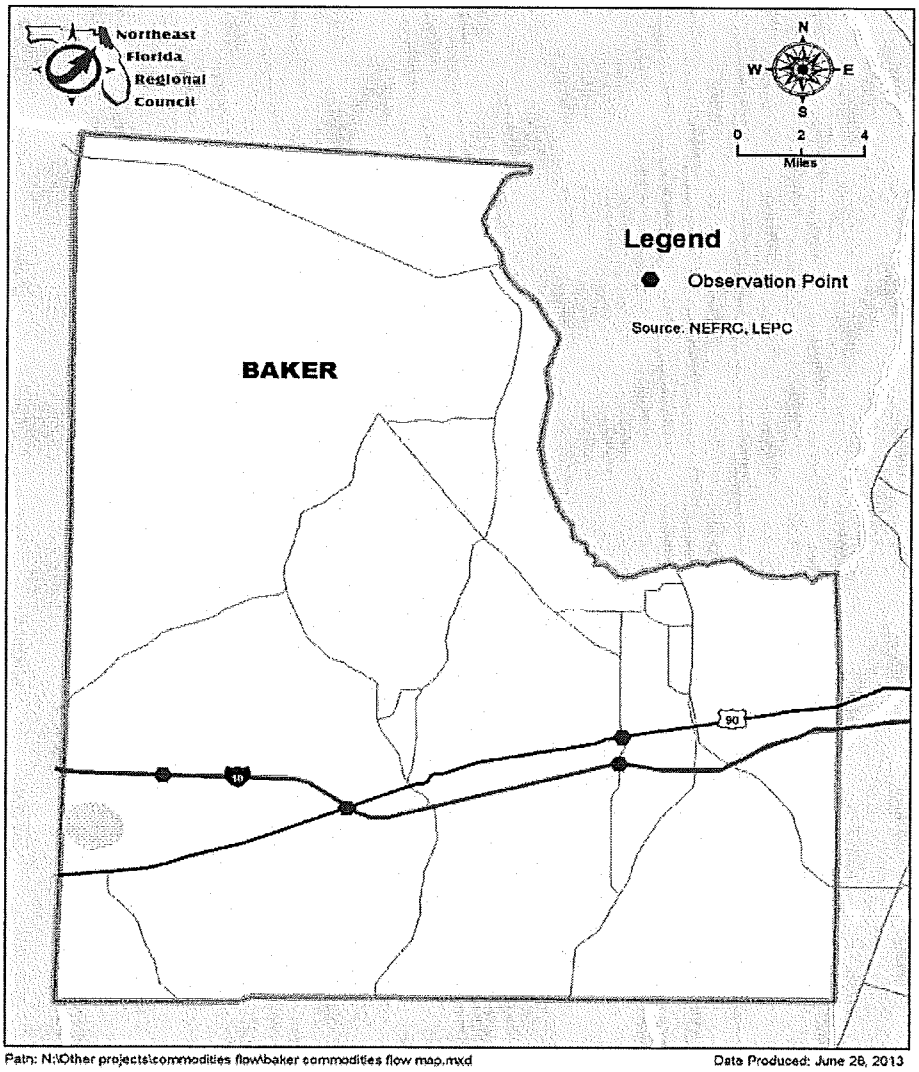
Date Produced: June 26, 2013

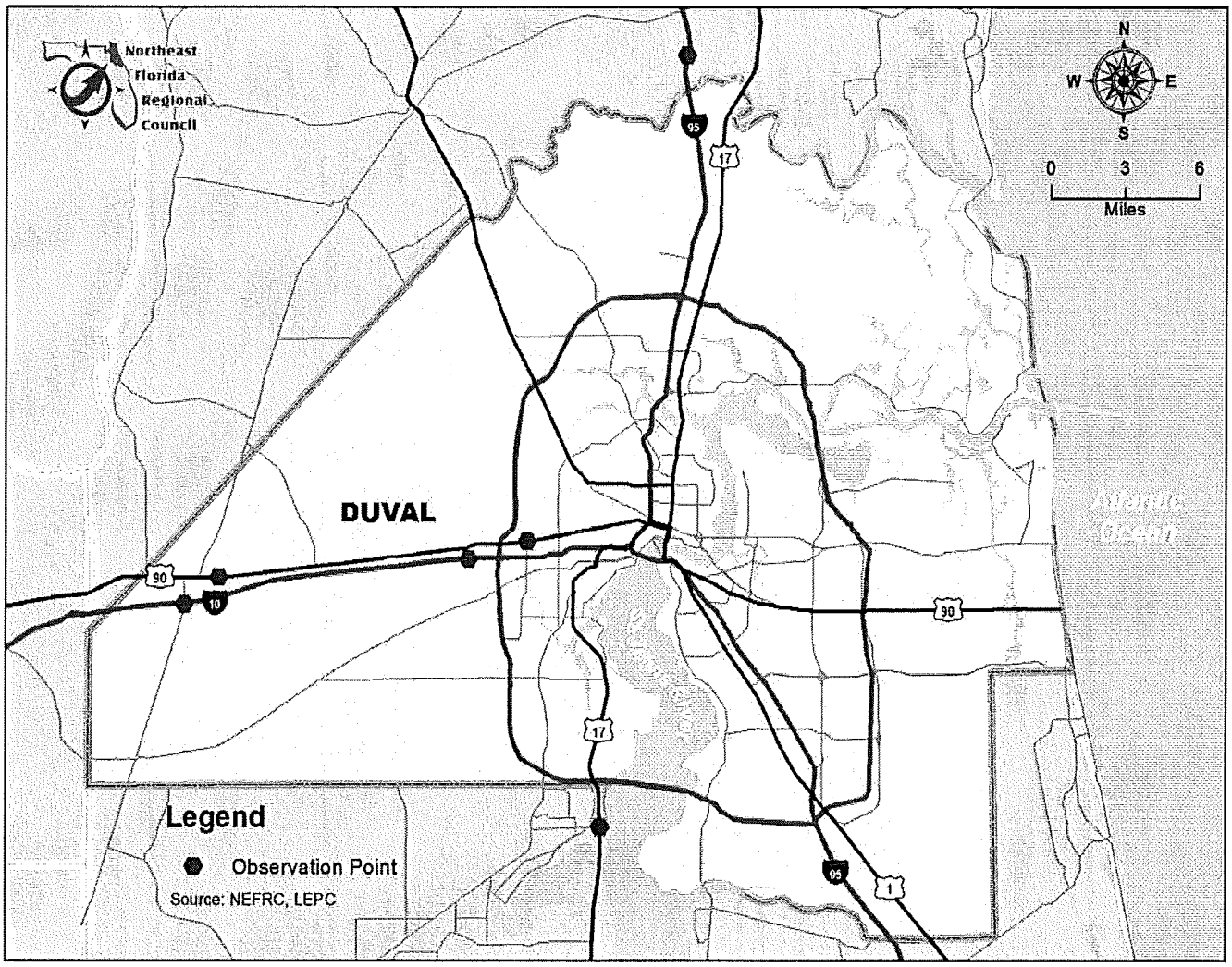
East/West Corridors

- ***Interstate 10 (I-10)***—The 362 miles (583 km) of Interstate 10 in Florida is the eastern most section of the east–west I-10 in the United States. It is also the eastern end of the Interstate Highway known as the Christopher Columbus Transcontinental Highway. This corridor was observed in both Baker and Duval County at mile markers 318, 324, 333, 343 and 355.

  Observations occurred at several sites along I-10. This corridor was observed four times in five locations within 100 yards of the roadway. The majority of commercial truck traffic on I-10 was non-hazardous materials such as concrete, water, and lumber. The most common hazmat carriers were McKenzie and Dillion.

Percentage of Hazmat traveling East	50.5 %
Percentage of Hazmat traveling West	49.5%
Average time between hazmat trucks	8 minutes
Majority of product transported	Gasoline/Petrol, Crude Oil, Ammonia





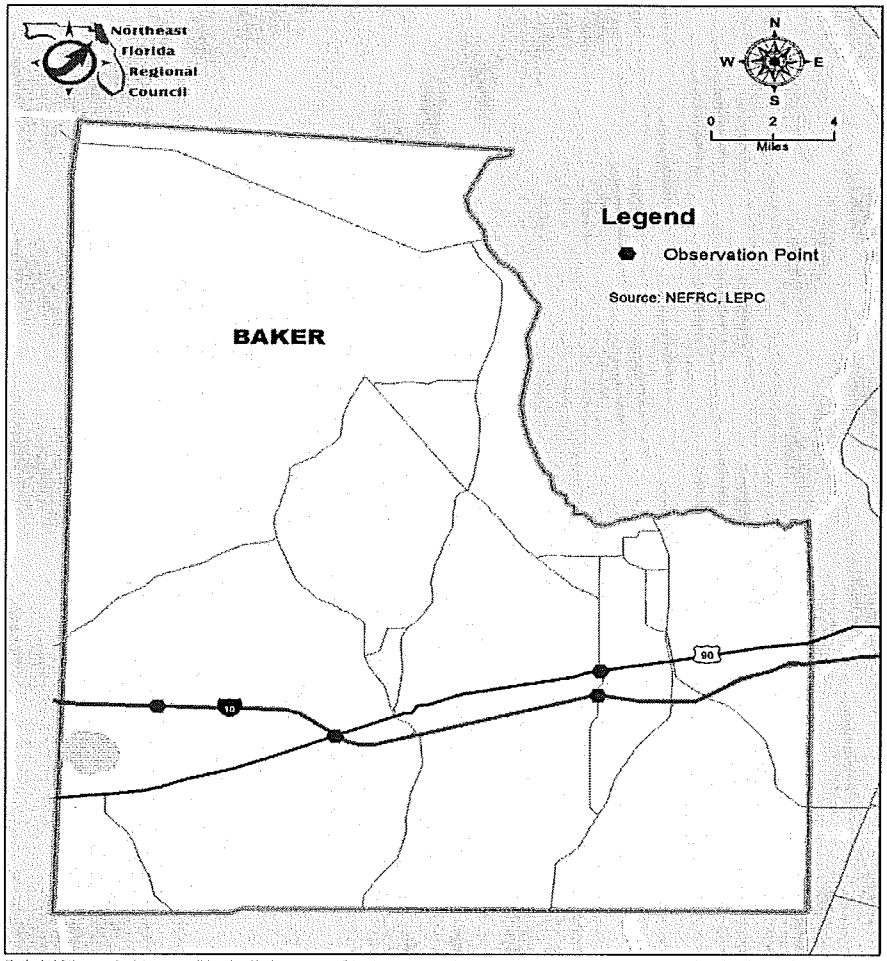
Path: N:\Other projects\commodities flow\duval commodities flow map.mxd

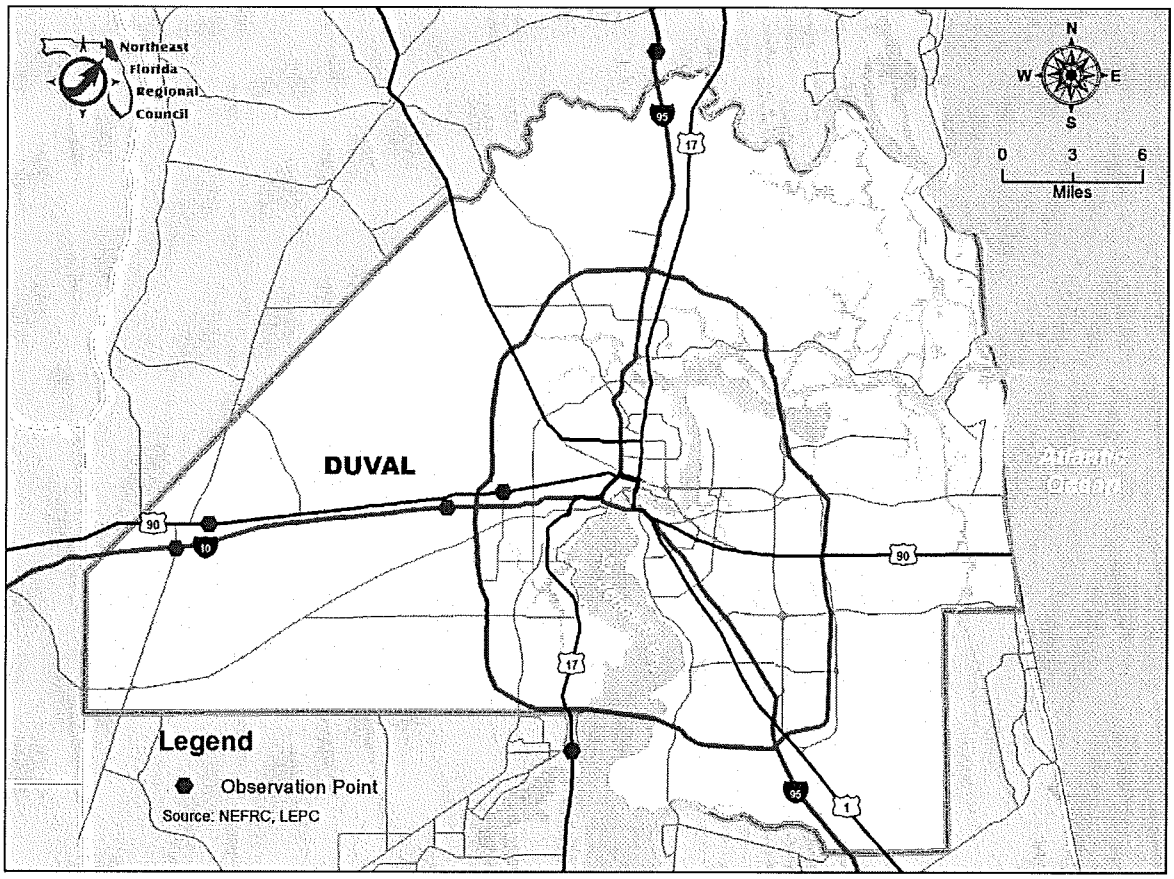
Date Produced: June 26, 2013

- ***U.S. Route 90 (US 90)***—US 90 is the northernmost west-to-east U.S. route in the state although it is one of the southern most U.S. west-to-east routes in the rest of the United States. US 90 passes through the county seats of all 15 counties on its course in Florida and is never more than six miles (10 km) from I-10 throughout the state. Both Duval and Baker counties were observed for this corridor. In Baker County, an observation was conducted at the corner of US 90 and South Glen Avenue, then in Duval County just east of US 301 and at the corner or US 90 and Lane Avenue.

  US 90 had a greatly reduced truck frequency when compared to the interstate roadway. Surprisingly, the most common commercial truck traffic was septic and lumber trucks. The small numbers of hazmat trucks observed were hauling propane, diesel, and gasoline. There is a PraxAir location off of US-90, so intuitively they were the predominate carrier observed. Surveys were conducted four times at three locations.

Percentage of Hazmat traveling East	40%
Percentage of Hazmat traveling West	60%
Average time between hazmat trucks	29 minutes
Majority of product transported	Gasoline/Petrol, Diesel, Propane





Path: N:\Other projects\commodities flow\duval commodities flow map.mxd

Date Produced: June 26, 2013

Summary

Hazmat incidents are potentially catastrophic to public safety, life and well-being, the environment, and infrastructure. This raises concern over transportation of hazardous materials through populated or environmentally sensitive areas. Based on this Commodity Flow Study, local planners, emergency managers, and emergency responders will have a better understanding of hazmat transportation patterns and can use the data to estimate the risks facing their jurisdiction. This information can help users better prevent hazmat incidents from occurring, and more effectively protect, respond, and recover when they do occur. The top hazardous materials being transported via roadway through the District 4 LEPC region are:

- Gasoline/Petrol
- Elevated temperature liquids
- Diesel Fuel
- Ammonia
- Propane Gas

The top three commonly transported hazardous materials in the region (gasoline/ petrol, elevated temperature liquids, and diesel fuel) fall in a non-polar/ water-immiscible for flammable liquids group. The 2012 Emergency Response Guidebook shares some information, about hazardous materials that are labeled in certain groups, such as evacuations and emergency responses. Based on this information, if a tank truck is involved in a fire, immediate isolation and consideration of evacuation should be done for 800 meters in all directions. If these materials were to come into contact with a person, it may burn or irritate eyes or cause dizziness or suffocation.

Ammonia is in a group called corrosive gases. This substance is toxic and may be fatal if inhaled, ingested or absorbed through the skin. Unlike the most commonly transported hazardous materials, if there is accident involving a tank carrying ammonia, an area of 1,600 meters in all directions must be isolated and initial evacuation should be considered.

Flammable gases, including refrigerated liquids, are commonly transported in the region. Propane is extremely flammable and can cause dizziness or asphyxiation without warning. It is imperative that all ignition sources are eliminated from the area if a truck transporting propane is involved. An area of 1,600 meters in all directions must be isolated and initial evacuation should be considered.

This study has focused on the major roadway corridors, which did not take into consideration rail corridors or port facilities. As seen in the appendix, there are many vehicle-related factors that can cause hazmat accidents on the highways as well.

Recommended Training for Hazmat Response

Based upon the substances found to be transported throughout the region, the following awareness or operational level training would be appropriate for the responders of the region.

Below are some recommended classes for responders to vehicle/traffic incidents. Though there are other courses to reinforce and enhance operational capabilities of the responder, individual departments can consider the need of additional training above and beyond these recommendations.

HazMat Teams Command Staff

- Hazmat On-Scene Incident Command Course
- Hazmat Safety Officers Course
- Documentation Of A Hazmat Incident

HazMat Team Members

- IAFF 160 Technician Course
- Air Monitoring Course
- Chemistry For Emergency Responders
- Awareness-Operations Train The Trainer

First Responders

- HazWoper 40hr
- Hazmat Operations
- Scene Safety At A Hazardous Materials Scene

Public Works Employees

- HazWoper 24hr
- Incident Reporting

Other Recommended Training

- IAFF 160 hour Hazardous Materials Technician course for all HazMat team members
- 24 hour First Responders Hazardous Materials Operations course for all EMS, Fire and Law Enforcement personnel
- 16 hour Hazardous Materials Awareness courses for all personnel that drive a government vehicle (Public Water Works, Solid Waste, Animal Control, Code Enforcement, FDOT, Traffic Management, etc.)
- 24 hour Hazardous Materials Incident Command course for all Command personnel
- 16 hour Emergency Response to Terrorism for all responders
  http://www.floridadisaster.org/hazmat/serc/training.htm

References—Text

- 2012 Emergency Response Guidebook by U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration
- Fatal Crashes: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS). Injury and Property Damage Only Crashes: National Highway Traffic Safety Administration, General Estimates System (GES).
- Fatal Crashes: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS). Nonfatal Crashes: Federal Motor Carrier Safety Administration, MCMIS Crash File.

References—Online

- http://phmsa.dot.gov/staticfiles/PHMSA/Hazmat/digipak/pdfs/presentation/Placarding_Requirements(04-07).pdf
- http://www.i95florida.com/
- http://commons.wikimedia.org/wiki/Category:Road_maps_of_Florida
- http://www.ntsb.gov/news/2004/040114.htmhttp://www.floridadisaster.org/hazmat/serc/training.htm
- http://www.nhtsa.gov/FARS

Acronyms/Definitions

- DOT—Department of Transportation
- EHS—Extremely Hazardous Substance
- HazMat— Hazardous material
- HazWoper—Hazardous Waste Operations and Emergency Response.
- HMEP—Hazardous Materials Emergency Preparedness
- LEO—Law Enforcement Officers
- LEPC—Local Emergency Planning Committee

Crashes Involving Large Trucks by Time of Day and Crash Severity, 2009

Time of Day	Fatal		Injury		Property Damage Only	
	Number	Percent	Number	Percent	Number	Percent
12am - 3am	245	8.2%	3,000	5.1%	10,000	4.3%
3am - 6am	270	9.0%	2,000	4.3%	7,000	3.2%
6am - 9am	438	14.7%	9,000	16.9%	37,000	15.8%
9am - 12pm	497	16.6%	11,000	20.7%	51,000	22.2%
12pm - 3pm	541	18.1%	11,000	21.9%	59,000	25.4%
3pm - 6pm	482	16.1%	9,000	18.2%	38,000	16.5%
6pm - 9pm	283	9.5%	4,000	8.5%	19,000	8.3%
9pm - 12am	223	7.5%	2,000	4.5%	10,000	4.4%
Unknown	8	0.3%	—	—	—	—
Daytime (6am - 6pm)	1,958	65.6%	40,000	77.7%	185,000	79.8%
Nighttime (6pm - 6am)	1,029	34.4%	11,000	22.3%	47,000	20.2%
Total	2,987	100.0%	51,000	100.0%	232,000	100.0%

All surveys were conducted between 9am-12pm and 12pm-3pm. Based on the information provided in this table, the timeframe the surveys were conducted are the most common times crashes involving trucks occur.

Fatal Crashes: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS). http://www.nhtsa.gov/FARS

Large Trucks in Crashes by Hazardous Materials (HM) Cargo Type and HM Release, 2009

HM Cargo Type	HM Release							
	Yes		No		Unknown		Total	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Fatal Crashes								
Explosives	3	9.1%	1	1.7%	0	0.0%	4	3.7%
Gases	6	18.2%	15	25.9%	0	0.0%	21	19.4%
Flammable Liquids	16	48.5%	26	44.8%	1	5.9%	43	39.8%
Flammable Solids	1	3.0%	0	0.0%	0	0.0%	1	0.9%
Oxidizing Substances	0	0.0%	1	1.7%	0	0.0%	1	0.9%
Poisonous and Infectious Substances	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Radioactive	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Corrosives	3	9.1%	2	3.4%	0	0.0%	5	4.6%
Miscellaneous Dangerous Goods	0	0.0%	2	3.4%	0	0.0%	2	1.9%
Unknown	4	12.1%	11	19.0%	16	94.1%	31	28.7%
Total	33	100.0%	58	100.0%	17	100.0%	108	100.0%

The top three commonly transported hazardous materials in the region are labeled as flammable liquids and are shown on the table above to have the most incidents of release after being involved in an accident.

Fatal Crashes: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS). http://www.nhtsa.gov/FARS

Crashes Involving Large Trucks
by Weather Conditions and Crash Severity, 2009

Weather Conditions	Fatal		Injury		Property Damage Only	
	Number	Percent	Number	Percent	Number	Percent
Normal	2,565	85.9%	43,000	84.2%	198,000	85.3%
Rain	231	7.7%	5,000	9.9%	20,000	8.6%
Sleet, Hail	18	0.6%	*	0.4%	2,000	0.7%
Snow, Blowing Snow	93	3.1%	2,000	3.3%	7,000	2.9%
Fog, Smog, Smoke, Wind, Blowing Sand, Soil, Dirt, Other	74	2.5%	1,000	2.2%	6,000	2.5%
Unknown	6	0.2%	*	*	*	*
Total	2,987	100.0%	51,000	100.0%	232,000	100.0%

**Less than 500 or less than 0.05 percent.*

This table shows that most crashes involving large trucks occur during normal weather conditions. This data refutes many held beliefs about frequency of wrecks during adverse weather conditions.

Fatal Crashes: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS). http://www.nhtsa.gov/FARS

Placards Surveys/Observation Data

The 2012 Emergency Response Guidebook was used to identify Placard number, substance, and container type.

Interstate 10 Baker County 4/29

Time	Direction	Temp.	Carrier	Placard #	Substance	Container Type
11:01 am	East	70 rainy		1267	Petroleum Crude Oil	DOT-406
11:01 am	East	70 rainy		1267	Petroleum Crude Oil	DOT-406
11:02 am	East	70 rainy		1267	Petroleum Crude Oil	DOT-406
11:42 am	East	73		1203	Gasoline/ Petrol	DOT-406
11:46 am	East	68	Mc	1203	Gasoline/ Petrol	DOT-406
11:56 am	East	68	Dana	1648	Acetonitrile	DOT-412
11:59 am	East	68	Sterling	3207	Organometallic compound	Box Truck
11:59 am	East	68	Praxair	1073	Oxygen, refrigerated	MC-338
12:21 pm	West	72		3257	Elevated Temperature Liquid, N.O.S.	DOT-407
12:22 pm	West	72	Parker	1203	Gasoline/ Petrol	DOT-406

Interstate 10 Duval County 4/29

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
1:04 pm	West	72	Southern	Black & red	Corrosive and Flammable	Box truck
1:16 pm	West	72	AmeriGas	1075	Propane	MC-331
1:30 pm	East	72	Landstar	1866	Resin solution	DOT-412
1:46 pm	West	72	Auto Zone	Black & red	Corrosive and Flammable	Box truck
1:48 pm	East	72	CTL	1993	Diesel Fuel	DOT-406
1:49 pm	West	72		Black 2880	Calcium Hypochlorite	DOT-407
1:52 pm	East	74	Florida Rock	1203	Gasoline/ Petrol	DOT-406
2:07 pm	West	74	Stone	1203	Gasoline/ Petrol	DOT-406
2:21 pm	East	75	RacTrac	1203	Gasoline/ Petrol	DOT-406
2:35 pm	West	76	McKenze	1203	Gasoline/	DOT-406

					Petrol	
2:48 pm	West	80	Love's	1203	Gasoline/ Petrol	DOT-406
2:56 pm	East	80	(Light blue)	1005	Ammonia	MC-331
2:58 pm	East	80	(green)	1005	Ammonia	MC-331
3:00 pm	East	81	Linde	2187	Carbon Dioxide, refrigerated liquid	MC-338
3:00 pm	East	81	Gate	1203	Gasoline/ Petrol	DOT-406

Interstate 10 Duval County 5/6

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
10:20 am	East	67	AC	1993	Diesel Fuel	DOT-406
10:20 am	West	67	Gate	1203	Gasoline/ Petrol	DOT-406
10:25 am	West	68	Hatcher	1203	Gasoline/ Petrol	DOT-406
10:31 am	West	68	Florida Rock	1203	Gasoline/ Petrol	DOT-406
10:36 am	West	68	Ken A	1203	Gasoline/ Petrol	DOT-406
10:51 am	West	68	Stone	1203	Gasoline/ Petrol	DOT-406
11:07 am	East	68	Dillion	3257	Elevated Temperatur e Liquid, N.O.S.	DOT-407
11:08 am	East	68	Eagle	1203	Gasoline/ Petrol	DOT-406
11:10 am	East	68	McKenze	1203	Gasoline/ Petrol	DOT-406
11:12 am	West	69	SAIA	Red	Flammable	Box truck
11:16 am	West	69	McKenze	1203	Gasoline/ Petrol	DOT-406
11:29 am	East	69	DTL	1203	Gasoline/ Petrol	DOT-406
11:32 am	West	69		1486	Potassium Nitrate	Intermodal tank
11:40 am	West	69	H&M	3077	Environmen tally hazardous substances	Box truck
11:58 am	East	69	Love's	1203	Gasoline/ Petrol	DOT-406

12:06 pm	East	71	McKenzie	1203	Gasoline/ Petrol	DOT-406

Interstate 10 Baker County 5/6

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
12:38 pm	East	75	Stericycle	3291	Medical Waste	Box truck
12:52 pm	East	75		1131	Carbon bisulfide	Intermodal tank
12:52 pm	East	75		1131	Carbon bisulfide	Intermodal Tank
1:11 pm	East	75	Florida Rock	1203	Gasoline/ Petrol	DOT-406
1:23 pm	West	75	DTL	1203	Gasoline/ Petrol	DOT-406
1:38 pm	West	75	Dillion	3257	Elevated Temperatur e Liquid, N.O.S.	DOT-407
1:40 pm	East	75	McKenzie	1791	Hypochlorit e solution	DOT-407
1:42 pm	East	75	Dillion	3257	Elevated Temperatur e Liquid, N.O.S.	DOT-407
1:53 pm	West	75	Parker	1203	Gasoline/ Petrol	DOT-406
1:59 pm	East	75	Dillion	3257	Elevated Temperatur e Liquid, N.O.S.	DOT-407
2:10 pm	East	75	McKenze	1203	Gasoline/ Petrol	DOT-406
2:13 pm	West	74	Love's	1203	Gasoline/ Petrol	DOT-406
2:15 pm	East	74	Southern Propane	1105	Amyl alcohols/ Pentanols	DOT-412

US 90 Duval County 5/8

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
10:37 am	East	68	Praxair	Yellow	Oxygen	N/A
11:07 am	West	66	Coast 2 Coast	2211	Polymeric/ polystyrene beads	Mixed Cargo
11:35 am	East	70	Ferrel Gas	1203	Gasoline/ Petrol	DOT-406

12:10 pm	West	72	Praxair	1046	Helium	Compressed Gas/Tube Trailer
12:21 pm	West	72	Praxair	1073	Oxygen, refrigerated liquid	MC-338
12:30 pm	West	70	AC	1993	Diesel Fuel	DOT-406

US 90 Baker County 5/8

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
1:15 pm	East	75	Davis & Davis	1203	Gasoline/ Petrol	DOT-406
2:20 pm	West	75	Southern Propane	1075	Propane	MC-331

Interstate 95 Nassau County 5/20

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
10:47 am	South	73	TWT	1830	Sulfuric acid	DOT-412
11:07 am	South	73		1203	Gasoline/ Petrol	DOT-406
11:24 am	North	73	Florida Rock	1830	Sulfuric acid	DOT-412
11:29 am	North	73	Flash Foods	1203	Gasoline/ Petrol	DOT-406
11:30 am	South	73	CTL	1203	Gasoline/ Petrol	DOT-406
11:32 am	North	73		1791	Hypochlorite solution	DOT-407
11:42 am	South	73		1203	Gasoline/ Petrol	DOT-406
11:48 am	South	73	Love's	1203	Gasoline/ Petrol	DOT-406
11:50 am	South	73	Florida Rock	1203	Gasoline/ Petrol	DOT-406
11: 51 am	North	73		1203	Gasoline/ Petrol	DOT-406
11:53 am	North	73	WILCO	1203	Gasoline/ Petrol	DOT-406
11:59 am	North	73	R&L	1203	Gasoline/ Petrol	DOT-406
11:59 am	South	73	Lake star	1203	Gasoline/ Petrol	DOT-406
12:02 pm	South	74	SFT	1203	Gasoline/ Petrol	DOT-406
12:04 pm	North	74	Transwood	1203	Gasoline/ Petrol	DOT-406
12:07 pm	South	74	CTL	3256	Elevated	DOT-407

					temperature liquid	
12:09 pm	North	74		1203	Gasoline/ Petrol	DOT-406
12:12 pm	South	74		3257	Elevated Temperature Liquid, N.O.S.	DOT-407
12:18 pm	North	73	Fluid Recycling	1993	Diesel Fuel	DOT-406
12:19 pm	North	73	CTL	1993	Diesel Fuel	DOT-406
12:30 pm	North	73	Port Con	1203	Gasoline/ Petrol	DOT-406

US 90 Duval County 5/20

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
1:31 pm	West	72	JEA	1203	Gasoline/ Petrol	DOT-406
1:54 pm	East	72	Ryder	1993	Diesel Fuel	DOT-406

Interstate 95 Flagler 5/21

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
10:05 am	South	72		1866	Resin solution	DOT-412
10:07 am	South	72	Florida Rock	1863	Fuel, Aviation	DOT-406
10:07 am	South	72	Florida Rock	1863	Fuel, Aviation	DOT-406
10:10 am	South	72	Eagle	1203	Gasoline/ Petrol	DOT-406
10:17 am	North	72		Red	Flammable	Compressed Gas/ Tube Trailer
10:24 am	South	72		1791	Hypochlorite solution	DOT-407
10:25 am	North	72	Florida Rock	1863	Fuel, Aviation	DOT-406
10:27 am	South	72		1791	Hypochlorite solution	DOT-407
10:38 am	North	72	Florida Rock	1863	Fuel, Aviation	DOT-406
10:40 am	South	72	TI	2672	Ammonium hydroxide	MC-331
10:43 am	South	72	CTL	3264	Corrosive liquid	MC-338
10:48 am	North	73	Air Liquide	1073	Oxygen, refrigerated liquid	MC-338

10:53 am	South	73	Dillion	3257	Elevated Temperatur e Liquid, N.O.S.	DOT-407
11:00 am	South	73	Air products	1966	Hydrogen, refrigerated liquid	MC-338
11:04 am	North	73	Florida Rock	1863	Fuel, Aviation	DOT-406
11:06 am	North	73	Praxair	1963	Helium, refrigerated liquid	MC-338
11:39 am	North	75	Flying J	1993	Diesel Fuel	DOT-406
11:48 am	South	75		Red	Flammable	Compressed Gas/ Tube Trailer

US 1 St. Johns County 5/21

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
12:36 pm	North	74	Lewis	1203	Gasoline/ Petrol	DOT-406
2:00 pm	North	71	Southern	1993	Diesel Fuel	Box Truck

US 17 Putnam County 5/22

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
10:07 am	South	70	Eagle	1203	Gasoline/ Petrol	DOT-406
10:35 am	North	72	Praxair	Red	Flammable	Compressed Gas/ Tube Trailer
11:56 am	North	74	JC	1791	Hypochlorit e solution	DOT-407
12:12 pm	South	75		1075	Propane	MC-331

Interstate 95 Nassau County 5/31

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
1:10 pm	South	80	Flash Foods	1203	Gasoline/ Petrol	DOT-406
1:16 pm	North	80		2068	Ammonium nitrate fertilizers w/ calcium carbonate	Intermodal Tank
1:16 pm	North	80		1719	Caustic alkali liquid	DOT-412
1:20 pm	South	80	Florida Rock	1830	Sulfuric acid	DOT-412

1:21 pm	South	80	Granderland	1005	Ammonia	MC-331
1:22 pm	South	80	SFT	1203	Gasoline/ Petrol	DOT-406
1:24 pm	North	81	CTL	2014	Hydrogen peroxide, aqueous solution	MC-338
1:30 pm	North	81	Action	3246	Methanesulfonyl Chloride	DOT-407
1:33 pm	North	81	Lewis Lumberton	1203	Gasoline/ Petrol	DOT-406
1:39 pm	South	81		1719	Caustic alkali liquid	DOT-412
1:39 pm	South	81		1993	Diesel Fuel	DOT-406
1:44 pm	South	82	Linde		Nonflammable	Box truck
1:46 pm	South	82	Conway	1760	Compound	Box Truck
1:48 pm	North	82	Cowan	Striped	Miscellaneous	Bow truck
1:51 pm	North	82	Florida Rock	1203	Gasoline/ Petrol	DOT-406
1:55 pm	North	82	Lewis Lumberton	1203	Gasoline/ Petrol	DOT-406
2:14 pm	South	84		1079	Sulfur dioxide	DOT-412
2:17 pm	South	84	Florida Rock	1203	Gasoline/ Petrol	DOT-406
2:19 pm	North	84	Wilco	1203	Gasoline/ Petrol	DOT-406
2:21 pm	North	83		1203	Gasoline/ Petrol	DOT-406
2:26 pm	South	83	KC Industry	1005	Ammonia	MC-331
2:29 pm	North	83		1197 & 2031	Extracts and Nitric Acid	Box truck
2:31pm	South	83	Dillion	3257	Elevated temperature liquid	DOT-407
2:32 pm	South	83	Conway	Black	Flammable	Box truck
2:36 pm	South	82		1203	Gasoline/ Petrol	DOT-406
2:37 pm	North	82	CTL	1993	Diesel Fuel	DOT-406
2:44 pm	North	82	Dillion	3257	Elevated temperature	DOT-407
2:45 pm	North	82	Eagle	1203	Gasoline/ Petrol	DOT-406

2:51 pm	North	83		1005	Ammonia	MC-331
2:52 pm	North	83	Flash Foods	1203	Gasoline/ Petrol	DOT-406
2:58 pm	South	83		1075	Propane	MC-331

US 17 Putnam County 6/3

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
10:48 am	North	77	Great Lakes	1203	Gasoline/ Petrol	DOT-406
11:10 am	South	77		Red & Black	Flammable & Corrosive	Box truck
11:55 am	North	79	JCI	3388	Toxic by inhalation liquid	DOT-407

US 17 Clay County 6/3

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
12:04 pm	South	80	Florida Rock	1203	Gasoline/ Petrol	DOT-406
12:06 pm	North	80	AA Propane	1075	Propane	MC-331
12:26 pm	South	80	Hatcher	1203	Gasoline/ Petrol	DOT-406
1:18 pm	South	80	Griffin Gas	1203	Gasoline/ Petrol	DOT-406
1:35 pm	South	82	Responsible Care	2014	Hydrogen peroxide, aqueous solution	MC-338
1:48 pm	North	82		Black, Red, Oxygen	Nonflammable, Flammable, and Oxygen	Compressed Gas/Tube Trailer
2:06 pm	South	82		1791	Hypochlorite solution	DOT-407

US 17 Clay County 6/4

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
9:17 am	North	76		3257	Elevated temperature liquid	DOT-407
9:44 am	North	76	Ferrell Gas	1005	Ammonia	Box Truck
10:01 am	North	76	JCI	1791	Hypochlorite solution	DOT-407
10:28 am	South	75		1049	Hydrogen	MC-338

10:56 am	South	75		1075	Propane	MC-331

Interstate 95 Flagler 6/4

Time	Direction	Temp	Carrier	Placard #	Substance	Container Type
12:17 pm	North	74	TWT	1824	Sodium Hydroxide	DOT-407
12:23pm	North	74	Florida Rock	1863	Fuel, Aviation	DOT- 406
12:24 pm	North	74	TWT	1824	Sodium Hydroxide	DOT-407
12:26 pm	North	75	Florida Rock	1203	Gasoline/ Petrol	DOT-406
12:33 pm	South	76	Airgas	2187	Carbon dioxide, refrigerated liquid	MC-338
12:36 pm	North	76		1719	Caustic alkali liquid	DOT-412
12:37 pm	North	76	Eagle	1203	Gasoline/ Petrol	DOT-406
12:44 pm	North	78		1718	Butyl acid phosphate	DOT-412
12:46 pm	South	78	Airgas	2187	Carbon dioxide, refrigerated liquid	MC-338
12:48 pm	North	78	Flying J	1203	Gasoline/ Petrol	DOT-406
12:48 pm	North	78	Flying J	1203	Gasoline/ Petrol	DOT-406
1:09 pm	North	80	Eagle	1203	Gasoline/ Petrol	DOT-406
1:09 pm	North	80	Flying J	1203	Gasoline/ Petrol	DOT-406
1:13 pm	South	80		Black	Corrosive	Box truck
1:14 pm	North	80	Florida Rock	1863	Fuel, Aviation	DOT-406
1:21 pm	South	82		Red	Flammable	Intermodal Tank
1:26 pm	South	82	CTL	2920	Corrosive liquid	DOT-412
1:27 pm	South	82	Eagle	1203	Gasoline/ Petrol	DOT-406
1:30 pm	North	82		1203	Gasoline/ Petrol	DOT-406
1:31 pm	South	82	Love's	1203	Gasoline/ Petrol	DOT-406
1:31 pm	South	82	Love's	1203	Gasoline/ Petrol	DOT-406
1:31 pm	South	82		Red & Green	Flammable & Non flammable	Compressed Gas Tube/ Trailer
1:43 pm	South	82	Florida Rock	1863	Fuel, Aviation	DOT-406
1:57 pm	North	80 rainy	Eagle	1203	Gasoline/ Petrol	DOT-406

TAB V-B

MEMORANDUM

DATE: July 23, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: Hazards Analysis Update

---

i) A meeting was conducted in Tallahassee regarding the future of the Hazards Analysis program. Various concerned citizens, county emergency management, LEPC Chairs and Staff, and SERC members were in attendance or on the webinar/conference call.

The following key decision were made, they are:

a) A Hazards Analysis working group was developed to review and provide recommendations to the SERC.

The following people have been selected to serve on the HA Working Group. Those that were chosen have a good working knowledge of the existing hazard analysis process and represent several disciplines (LEPC, EM, and contractors) involved:

Name	Entity
Lt. John Scott	Jacksonville Fire and Rescue
Dwayne Mundy	North Central Florida RPC
Chris Rietow	Apalachee RPC
Ken Wolfe	Okaloosa County EM/SERC
Paul Womble	Polk County EM
Steve Mewborn	Santa Rosa County EM
Preston Cook	Hillsborough County EM
Louetta Muller	Contractor
John Scott	Brevard County EM
Lou Ritter	DEM

b) Hazards Analysis money for counties will remain intact for the coming year. All agency personnel completing Hazards Analysis is the region have participated in mandatory FDEM training over the last month. Contracts should be distributed in the coming month.

TAB V-C

MEMORANDUM

DATE: July 23, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: LEPC Biennial Exercise Committee

The LEPC Biennial Exercise Committee has been developed. The following members of the district have agreed to develop and implement a hazardous materials related incident in the coming year.

LEPC Exercise Committee Members and Email

Gracie Kennedy	gracie.kennedy@dep.state.fl.us
Michelle Sanders	michelle.sanders@dot.state.fl.us
Gerry Gividen	gdg27@hotmail.com
Meaghan Smalley	meaghan.smalley@flyjax.com
Ben Huron	benhuron@hotmail.com
Bill Decker	bdecker@ebpartners.us
Chief Joel Sneed	jsneed@sjcfl.us
Lt. John Scott	jscott3@coj.net
Chief Knoff	richard.knoff@claycountygov.com

The group will meet once contracts have been received from FDEM. They will be tasked with developing an exercise which will involve a transportation related HazMat scenario that will test the LEPC Plan. This can be a Tabletop Exercise or a Functional Exercise involving players in mock situations.

TAB VI-A

MEMORANDUM

DATE: July 23, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: Training Task Force Meeting

Summary

The TTF met July 11th in St. Pete Beach, Florida. The following were points of discussion at the meeting:

- ***TRANSCAER*** – Dates for this training are September 10-13, 2013 at the Ocala Fire College. The training will focus on chlorine, ethanol and anhydrous ammonia. All of the training is FREE.

  Other free training is also available through TRANSCAER. Refer to the following link to see what training may be available.

  http://www.transcaer.com/

  If you have an interest in any of the free training resources, please contact:

  Paul Wotherspoon, Chief, Technological Hazards Section
  Florida Division of Emergency Management
  850-413-9913
  paul.wotherspoon@em.myflorida.com

- **Lt. Lamm** – Update on 2nd Annual HazMat Symposium Planning

- The next scheduled meeting of the Training Task Force is October 3, 2013 in Tallahassee, Florida.

Attached - TTF Agenda *

AGENDA

STATE EMERGENCY RESPONSE COMMISSION
TRAINING TASK FORCE

Guy Harvey Outpost
Sandpiper East/West Room
6000 Gulf Boulevard
St. Petersburg Beach, Florida 33706

July 11, 2013 – 9:30 AM

I. **Call to Order**

II. **Introductions**

III. **Approval of Minutes from April 4, 2013 Meeting**

IV. **Update on Conference Call**
1. May 22, 2013
2. June 19, 2013

V. **Current Business**
1. Operating Protocols for Revision
2. Project Tracking Chart
3. 2014 Hazmat Symposium
4. USCG Oil Spill Response

VI. **New Business**
1. Update on DSOG Funding for Hazmat Teams

VII. **Update from Agencies and Organizations**
1. Florida Fire Chief's Association (FFCA)
2. Florida Association of Hazardous Materials Responders (FLAHR)
3. Florida State Fire College/State Fire Marshal
4. Florida Department of Environmental Protection
5. Florida Department of Health
6. Other Agencies and Organizations

VIII. Upcoming Events

1. **Schedule Next Conference Call(s)**

2. **Next face-to-face Meeting(s)**
   - October 3, 2013 – Tallahassee. Florida

IX. Adjourn

TAB VI-B

MEMORANDUM

DATE: July 23, 2013

TO: Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: LEPC Chairperson/Staff Meeting

Summary

The LEPC Chairperson/Staff meeting was held on July 11, 2013 in St. Pete Beach, Florida. The following were points of discussion at the meeting:

- E-Plan and Tier II Reporting – E-Plan will remain the primary reporting tool for facilities, and as a responder resource for chemical information.

- Hazards Analysis Working Group – The group has met and discussed initial recommendations for the hazards analysis program. Some of their recommendations will be implemented with this year's contract.

The next meeting of the LEPC Chair/Staff is scheduled for October 3, 2013 in Tallahassee, Florida.

Attached – LEPC Chairperson/ Staff Meeting Agenda*
Attached – E-Plan Data*

AGENDA

LOCAL EMERGENCY PLANNING COMMITTEE (LEPC) CHAIRPERSONS/STAFF CONTACTS MEETING

Guy Harvey Outpost
Sandpiper East/West Room
6000 Gulf Boulevard
Saint Pete Beach, Florida 33706

July 11, 2013 – 1:30 PM

I. INTRODUCTIONS

II. TRAINING TASK FORCE UPDATE

III. DISTRICT REPORTS

IV. OTHER BUSINESS

a. Hazards Analyses Contract Workgroup Report – Tim Date
b. E-Plan as a Tier II Reporting and First Responder Tool – Paul Wotherspoon
c. Expanding LEPC Membership Categories – Mark Tumlin

V. ISSUES FOR STATE EMERGENCY RESPONSE COMMISSION (SERC)

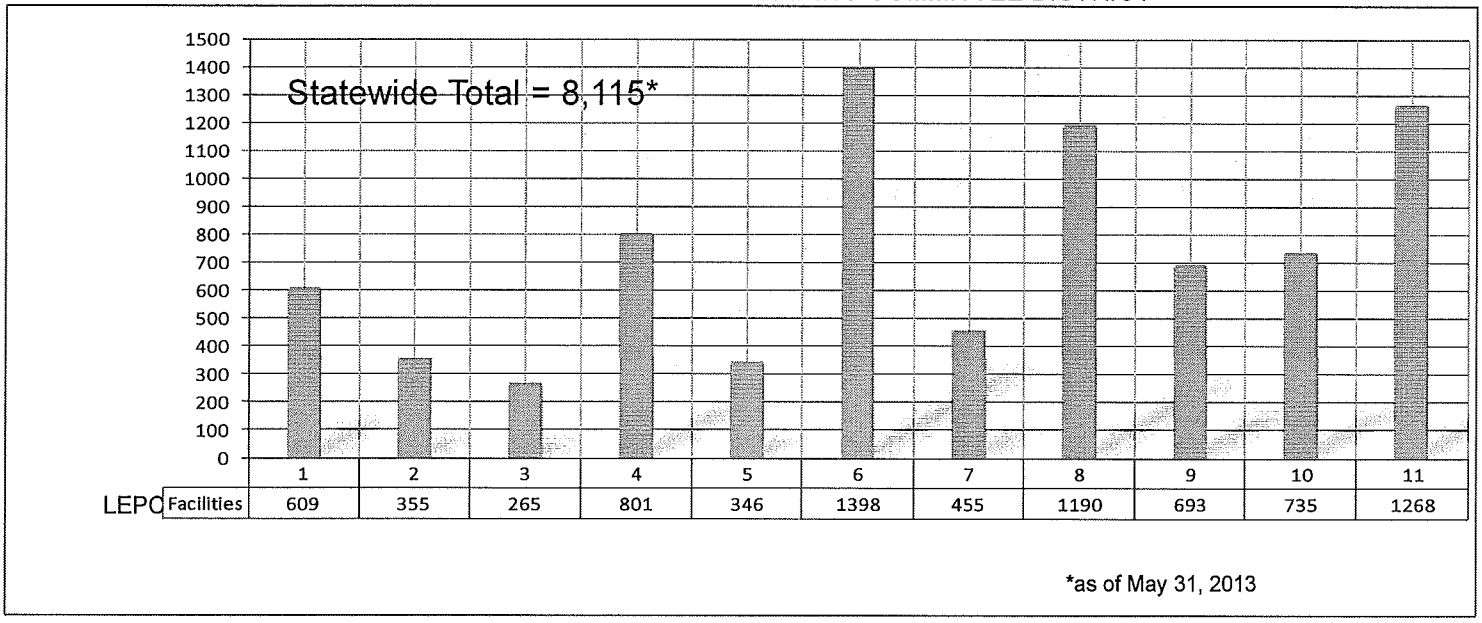
VI. SCHEDULE NEXT MEETING – October 3, 2013 – Tallahassee

VII. ADJOURNMENT

GRAPH I

E-PLAN FILING - TOTAL FACILITY COUNT

BY LOCAL EMERGENCY PLANNING COMMITTEE DISTRICT

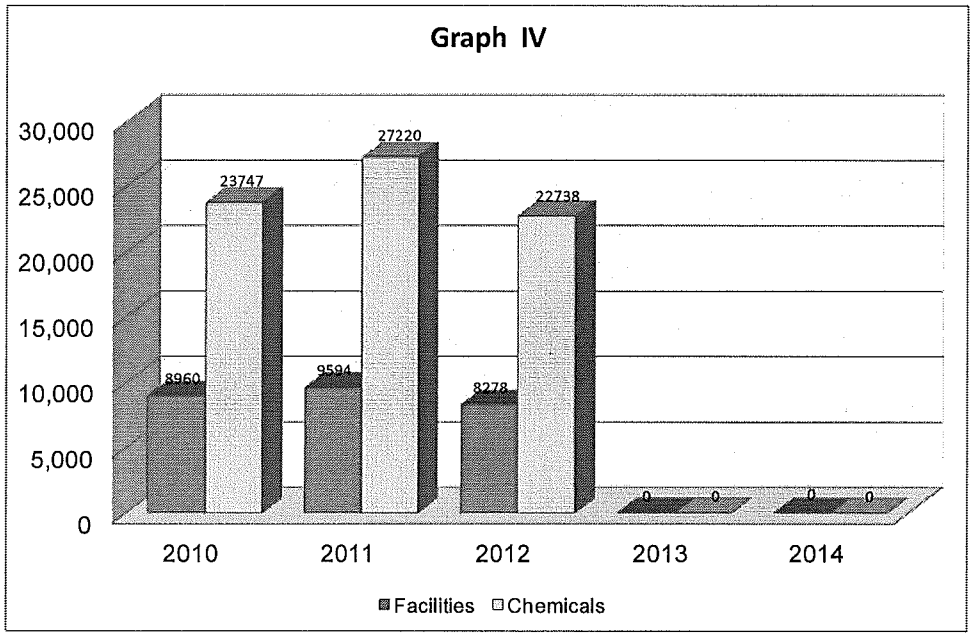


LEPC	1	2	3	4	5	6	7	8	9	10	11
Facilities	609	355	265	801	346	1398	455	1190	693	735	1268

*as of May 31, 2013

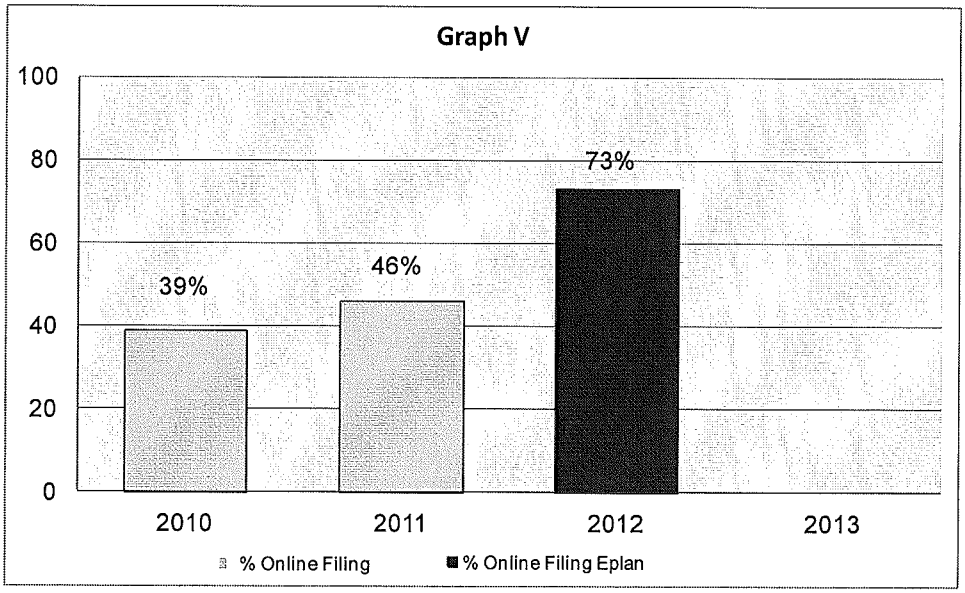
Florida Tier 2 Data in E-Plan

January 1, 2010 through June 11, 2013



Florida Tier 2 Online Filing by Facility Reps

Reporting Years 2010, 2011 & 2012



TAB VI-C

MEMORANDUM

DATE: July 23, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: State Emergency Response Commission (SERC) Meeting

The State Emergency Response Commission (SERC) met July 12, 2013 in St. Pete Beach, Florida. The following were points of discussion at the meeting:

SUMMARY

- There has been a lot of discussion regarding ammonium nitrate since the explosion at West, Texas. Representatives of the fertilizer industry provided an overview of how they are reviewing things in the state of Florida.

  The fertilizer industry would like to begin a dialogue with those LEPC's that have significant fertilizer and ammonium nitrate facilities in their districts. The industry will be reaching out, and in many cases asking to participate in future LEPC meetings throughout the state.

The next scheduled meeting of the SERC is October 4th in Tallahassee, Florida.

Attached - SERC Agenda*

Florida State Emergency Response Commission for Hazardous Materials

Vacant
Office of the Governor

Mr. Doug White
Florida Department of Environmental Protection

Maj. Dan Starling
Florida Highway Patrol

Vacant
Florida Department of Transportation

Vacant
Florida Chamber of Commerce

Mr. Larry Jerome McIntyre (Pending)
Florida Department of Economic Opportunity

Vacant
Transportation Industry

John Kohnke
State Fire Marshal

Mr. Bruce T. Haddock (Pending)
Florida League of Cities

Mr. Brian Teeple
Florida Regional Councils Association

Chief Michael D. Murphy
Florida Fire Chiefs Association

Ms. Nancy Stephens
Florida Minerals and Chemistry Council

Mr. Taylor Abel
Phosphate Industry

Vacant
Associated Industries of Florida

Mr. Gary Weiss
Environmental

Special Agent Dan Cerione
Florida Department of Law Enforcement

Mr. Ray Butts
Utility Industry

Mr. Ron Mills (Pending)
Florida Emergency Preparedness Association

Ms. Jennifer Hobbs
Local Emergency Planning Committees

Mr. Eugene "Ken" Wolfe
Florida Association of Counties

Mr. David Mica
Petroleum Industry

Mr. David Rogers
Liquefied Petroleum Gas Industry

Mr. James "Jim" Kuzma
Space Florida

Captain John Sherry
Florida Professional Firefighters

Mr. Bobby Bailey
Florida Department of Health

Mr. K. Mark Tumlin
Agriculture Industry

Mr. John Terry
Florida Department of Agriculture and Consumer Services

MEETING AGENDA

Date: July 12, 2013

Time: 10:00 a.m.

Location: Guy Harvey Outpost
Sandpiper East/West Room
6000 Gulf Boulevard
Saint Pete Beach, Florida 33706

Bryan W. Koon, Chair
Mike DeLorenzo, Alternate Chair

AGENDA

STATE EMERGENCY RESPONSE COMMISSION (SERC) FOR HAZARDOUS MATERIALS

Guy Harvey Outpost
Sandpiper East/West Room
6000 Gulf Boulevard
Saint Pete Beach, Florida 33706

July 12, 2013 – 10:00 AM

PLEDGE OF ALLEGIANCE

Roll Call and Verification of Quorum

APPROVAL OF MINUTES

1. **Approval of Minutes for April 5, 2013 SERC Meeting**
   ACTION: Motion for SERC Approval
   EXHIBIT: Minutes of April 5, 2013 SERC meeting

NEW BUSINESS

2. **Local Emergency Planning Committees (LEPCs) Appointments**
   ACTION: Approval of the list of recommended members and alternates
   EXHIBIT: Memo #10-13
   (Pages 1-6)

Reports

3. **SERC Training Task Force (TTF) Report**
   ACTION: Oral report on issues of the SERC TTF

4. **E-Plan as a Tier II Reporting and First Responder Tool Report**
   ACTION: Oral report by DEM Staff

5. **Hazard Analysis Contract Workgroup Report**
   ACTION: Oral report by DEM Staff

6. **Financial Status Report**
   ACTION: Report on revenues received and expenditures incurred for the fiscal year
   EXHIBIT: Memo #11-13
   (Pages 7-10)

7. **Hazardous Materials Incidents Report**
   ACTION: Report on recent hazardous materials incidents reported in the State of Florida
   EXHIBIT: Memo #12-13
   (Pages 11-23)

8. **Staff Activities and Reports by Section Update**
   ACTION: Update on the reports received by section; included is an update on staff presentations and information requests
   EXHIBIT: Memo #13-13
   (Pages 24-32)

9. **LEPC Activities Update**
   ACTION: An update of the meetings and activities conducted by each of the 11 LEPCs
   EXHIBIT: HazMatters

Other Business

Fertilizer Industry in Florida Presentation
Mary Hartney, President, Florida Fertilizer and Agrochemical Association

Transportation Community Awareness and Emergency Response (TRANSCAER) Update – Paul Wotherspoon

Comments

FUTURE SERC MEETING DATES

October 4, 2013 – Tallahassee

Adjourn

TAB VII-A

MEMORANDUM

DATE: July 23, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: LEPC CD Funds to Cover Training Costs

The LEPC CD was cashed out at the direction of the LEPC. The LEPC requested that the CD funds be used to cover training classes and costs that would otherwise not be covered by the HMEP Grant.

Funds from the CD were used this last quarter but are yet to be finalized. The new balance will be fully accounted for at the next meeting.

The current balance of the LEPC account is: **$3,878.77**

TAB VII-B

MEMORANDUM

DATE: July 24, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: LEPC District IV Training Committee Report

Quarterly Training Conducted

1) Eight (8) members of the regional HazMat Response Teams attended the International Hazardous Materials Response Teams Conference on June 6-9, 2013. The conference provided 30 hours of training for each individual attending.

2) Four (4) responders completed an Advanced HazMat Life Support Course on May 8-10, 2013.

3) 25 Members of Nassau County Fire/Rescue participated in a 16 hour course for Hazardous Materials Incident Command May 7-8, 2013.

TAB VII-C

MEMORANDUM

DATE: July 24, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: Hazardous Materials Incident Reports

SUMMARY

The attached tables and graphs provide information on all hazardous materials incident reports received by the State Watch Office. The incident reports are reviewed by Hazardous Materials Planning staff on a daily basis for compliance and verification purposes. The information helps identify potential Section 304 violators, as well as facilities which may have an obligation to report under other sections of EPCRA and the Risk Management Planning (RMP) programs.

Table 1 - lists incidents by LEPC District for the period of **March 1, 2013** through **May 31, 2013**. "Potential Section 304 Investigations" are incidents involving the release of Extremely Hazardous Substances (EHS) or Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) chemicals at fixed facilities and are investigated by State-level staff. In order for an incident to be covered under Section 304, the EHS or CERCLA chemical must meet or exceed its designated Reportable Quantity (RQ) and have potential for offsite exposure.

Table 2 - provides a breakdown for fixed facilities of all hazardous material incidents where evacuations, injuries or deaths were reported (where available).

Table 3 - covers transportation related incidents and differentiates between chemical-related and traffic accident-related deaths. Please note that official causes of death are determined by the medical examiner's office and may take up to 90 days for the final report. The reporting timeframe is **March 1, 2013** through **May 31, 2013**.

Graph I - depicts total incidents within the State from **January 1, 2000** through **May 31, 2013**.

Graph II - depicts total incidents within each LEPC District from **June 1, 2012** through **May 31, 2013**.

Attached - Tables and Graphs*

Hazardous Materials Incident Report - Table 1

3/1/2013 Thru 5/31/2013

Potential Section 304 Investigations

01 - West Florida Regional Planning Council — Release Count 3

ESCAMBIA COUNTY - 3 releases

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
03/28/2013	O-Xylene / Ethyl Benzene.	5351 / 1338	Acrylic Resin Mfg	04/01/2013	Closed	Private
04/26/2013	Anhydrous Ammonia	800-1500	Produce	04/29/2013	Site Closed due to fire.	Private
05/23/2013	Unknown Cleaning Solution	Unknown	Unknown	06/05/2013		Unknown

02 - Apalachee Regional Planning Council — Release Count 1

LEON COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
03/13/2013	Sulfuric Acid	1073	Electric Services	03/20/2013	Closed	Public

03 - North Central Florida Regional Planning Council — Release Count 1

SUWANNEE COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
04/30/2013	Sodium Hypochlorite	16	Correctional Facility	05/01/2013	Closed	Public

04 - Northeast Florida Regional Planning Council — Release Count 1

DUVAL COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
04/26/2013	Sulfuric Acid	99	Nat Security/ Military	05/08/2013	Closed	Public

05 - Withlacoochee Regional Planning Council

Release Count 1

CITRUS COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
03/15/2013	Sodium Hypochlorite	56	Unknown	03/25/2013	Closed/Transportation	Unknown

06 - East Central Florida Regional Planning Council

Release Count 4

ORANGE COUNTY - 2 releases

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/02/2013	Chlorine Gas	8	CL2 Repackaging	05/06/2013	Closed	Private
05/09/2013	Anhydrous Ammonia	24	Cold Storage	05/09/2013	Reported by Orange Co Hazmat	Private

SEMINOLE COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/18/2013	Unknown Chemicals	0	Cleaning Company	05/29/2013	Closed	Private

VOLUSIA COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/06/2013	Sodium Hypochlorite	534	Water Treatment Plant	05/08/2013	Closed	Public

07 - Central Florida Regional Planning Council

Release Count 3

POLK COUNTY - 3 releases

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
04/04/2013	Phosphoric Acid	10929	Mining	04/05/2013	Closed	Private
04/11/2013	Sulfuric Acid	2299	Mining	04/19/2013	Closed	Private
05/24/2013	Sulfuric Acid	1533	Mining	06/05/2013	Closed	Private

08 - Tampa Bay Regional Planning Council

Release Count 7

HILLSBOROUGH COUNTY - 6 releases

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
03/09/2013	Sulfuric Acid	998	Phosphate Mining	03/20/2013	Below RQ/Closed	Private
04/05/2013	Phosphoric Acid	4590	Mining	04/08/2013	Closed	Private
04/09/2013	Freon or Phosgene	Unknown	A/C Repair	04/10/2013	Closed- Industrial Accident	Private
04/11/2013	Hydrogen Sulfide	Unknown	Construction	04/18/2013	Closed	Private
05/06/2013	Sodium Hypochlorite	883	Wastewater Plant	05/07/2013	Closed	Public
05/30/2013	Sodium Hypochlorite	506	College	06/06/2013	Closed	Public

MANATEE COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/06/2013	Lead/Mercury	Unknown/4	Grow House	05/08/2013	Closed/EPA aiding with Clean up.	Private

09 - Southwest Florida Regional Planning Council

Release Count 3

HENDRY COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/22/2013	Mercury	1	Medical Center	06/05/2013	Closed	Private

LEE COUNTY - 2 releases

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
03/25/2013	Unknown Chemicals	Unknown	Meth Lab	03/27/2013	Closed	Private
04/15/2013	Sulfuric Acid	99	Nat Security/Military	04/23/2013	Closed	Public

10 - Treasure Coast Regional Planning Council

Release Count 2

MARTIN COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/01/2013	Sulfuric Acid	99	Nat Security/Military	05/06/2013	Closed/Under RQ	Private

PALM BEACH COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
04/04/2013	Sodium Hypochlorite	450	School	04/11/2013	Closed	Public

11 - South Florida Regional Planning Council

Release Count 3

BROWARD COUNTY - 1 release

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/16/2013	Lead and Cadmium	833	Waste Storage	05/17/2013	Closed	Private

DADE COUNTY – 2 releases

Release Date	Chemical Name	Release Amt	Business Type	Action Date	Comment	Sector
05/08/2013	Glycerin	82	Eye Glass Mfg	05/08/2013	Closed	Private
05/10/2013	Sodium Hypochlorite	5	Pool Supplies	05/13/2013	Closed	Private

Hazardous Materials Incident Report - Table 2

3/1/2013 Thru 5/31/2013

Hazardous Materials Incidents with Evacuations, Injuries, and Deaths

01 - West Florida Regional Planning Council

ESCAMBIA COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause of Death *
05/23/2013	Unknown Cleaning Solution	Unknown	Unknown	0	8	0	N/A

04 - Northeast Florida Regional Planning Council

CLAY COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
03/23/2013	Gasoline	64	Gas Station	0	3	0	N/A

06 - East Central Florida Regional Planning Council

ORANGE COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
04/13/2013	Natural Gas	Unknown	Private Residence	0	1	0	N/A

SEMINOLE COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/18/2013	Unknown Chemicals	0	Cleaning Company	1	0	0	

08 - Tampa Bay Regional Planning Council

HILLSBOROUGH COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injuries
04/09/2013	Freon or Phosgene	Unknown	A/C Repair	2	20	0	Freon or Phosgene
04/11/2013	Hydrogen Sulfide	Unknown	Construction	7	0	0	chemical leak
05/03/2013	Pepper Spray	Unknown	School	37	90	0	Pepper Spray

Hazardous Materials Incident Report - Table 3

3/1/2013 Thru 5/31/2013

Transportation Incidents with Evacuations, Injuries, and Deaths

01 - West Florida Regional Planning Council

ESCAMBIA COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
05/09/2013	Natural Gas	Unknown	Pipeline/Transportation	0	3	0	N/A

WASHINGTON COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/04/2013	Diesel Fuel	Unknown	Traffic Accident	1	0	0	Trauma

02 - Apalachee Regional Planning Council

JEFFERSON COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/22/2013	Diesel Fuel	Unknown	Traffic Accident	1	0	0	Trauma

LEON COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/26/2013	Diesel Fuel/OIL	Unknown	Traffic Accident	1	0	0	Minor Trauma

03 - North Central Florida Regional Planning Council

ALACHUA COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/20/2013	Diesel Fuel/OIL	Unknown	Traffic Accident	1	0	0	Trauma

DIXIE COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
03/15/2013	Diesel Fuel	740	Traffic Accident	1	0	0	Unknown

04 - Northeast Florida Regional Planning Council

BAKER COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
03/20/2013	Diesel Fuel	740	Traffic Accident	0	0	1	Unverified Per FDLE

DUVAL COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/23/2013	Diesel Fuel	444	Traffic Accident	1	0	0	Trauma
04/23/2013	Diesel Fuel	740	Traffic Accident	1	0	0	Trauma
05/03/2013	Hydrogen Sulfide Gas	Unknown	Transportation	1	0	0	Unknown

PUTNAM COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/08/2013	Gasoline or Diesel Fuel	Unknown	Traffic Accident	7	0	0	Trauma

ST. JOHNS COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
04/25/2013	Diesel Fuel	370	Traffic Accident	0	0	1	Per ME trauma.

05 - Withlacoochee Regional Planning Council

SUMTER COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/15/2013	Diesel Fuel	133	Traffic Accident	3	0	0	Trauma

06 - East Central Florida Regional Planning Council

BREVARD COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/05/2013	Natural Gas	Unknown	Pipeline/Construction	0	5	0	N/A
05/01/2013	Diesel Fuel	Unknown	Traffic Accident	1	0	0	Trauma
05/03/2013	Diesel Fuel	888	Traffic Accident	2	0	0	Trauma

LAKE COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/19/2013	Diesel Fuel	37	Traffic Accident	1	0	0	Trauma

ORANGE COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
05/22/2013	Natural Gas	Unknown	Pipeline	0	3	0	N/A

OSCEOLA COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/10/2013	Diesel Fuel	740	Traffic Accident	2	0	0	Trauma

VOLUSIA COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/04/2013	Diesel Fuel	Unknown	Traffic Accident	1	0	0	Trauma

08 - Tampa Bay Regional Planning Council

HILLSBOROUGH COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
03/15/2013	Natural Gas	Unknown	Pipeline/Construction	0	1	0	N/A
03/29/2013	Natural Gas	Unknown	Pipeline/Construction	0	1	0	N/A

MANATEE COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/04/2013	Gasoline or OIL or Diesel Fuel	Unknown	Traffic Accident	1	0	0	Trauma
04/26/2013	Diesel Fuel	740	Traffic Accident	1	0	0	Minor Trauma

PINELLAS COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Death *
04/30/2013	Natural Gas	Unknown	Pipeline	0	11	0	N/A

09 - Southwest Florida Regional Planning Council

COLLIER COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/26/2013	Gasoline	Unknown	Aircraft Accident	1	0	0	Unknown

10 - Treasure Coast Regional Planning Council

MARTIN COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/18/2013	Diesel Fuel	222	Traffic Accident	2	0	0	Trauma

PALM BEACH COUNTY

Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
05/03/2013	Gasoline or Diesel Fuel	Unknown	32 or 37	2	0	0	Trauma
05/29/2013	Diesel Fuel	740	Traffic Accident	1	0	0	Unknown

11 - South Florida Regional Planning Council

BROWARD COUNTY

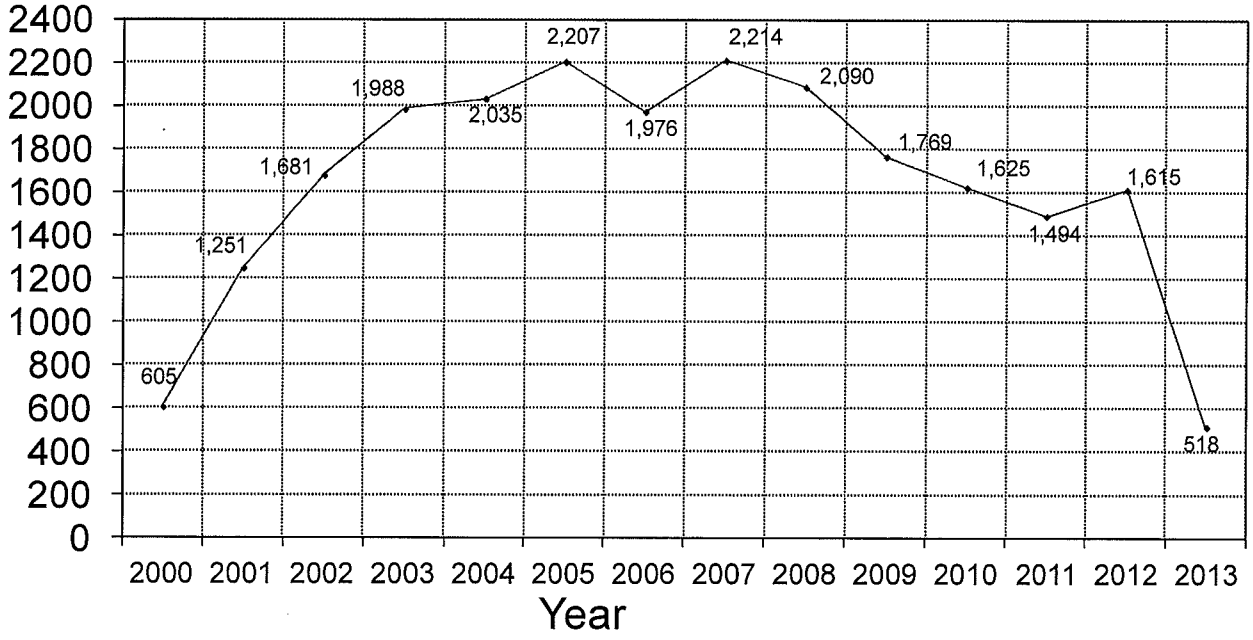
Release Date	Chemical Name	Release Amt	Business Type	Injured	Evacuated	Fatalities	Cause Of Injury
04/24/2013	Diesel Fuel	Unknown	Vessel Explosion	1	0	0	Trauma
04/24/2013	Diesel Fuel/OIL	Unknown	Private Vessel Explosion	1	0	0	Trauma
05/16/2013	OIL	188	Traffic Accident	2	0	0	Trauma
05/21/2013	Propane	Unknown	Medical Office/Pipeline	0	1	0	N/A

* May take FDLE 30-90 days to report cause of death

Graph I

HAZARDOUS MATERIALS INCIDENT REPORTS

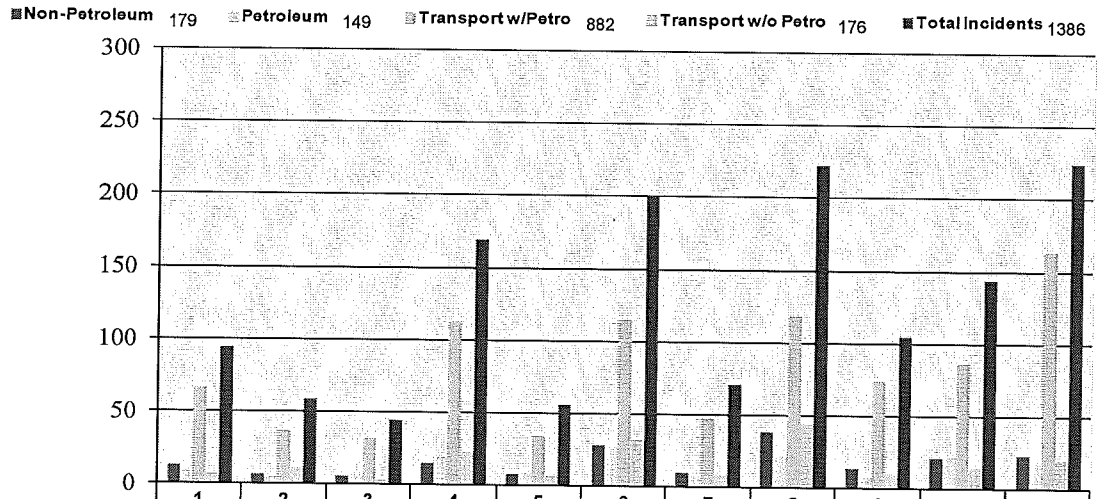
(January 1, 2000 through May 31, 2013)



GRAPH II

HAZARDOUS MATERIALS INCIDENT REPORTS

BY LOCAL EMERGENCY PLANNING COMMITTEE DISTRICT



	1	2	3	4	5	6	7	8	9	10	11
Non-Petroleum	13	6	5	15	7	28	9	38	14	21	23
Petroleum	9	4	6	19	8	27	7	22	7	22	18
Transport w/Petro	66	37	31	112	34	114	47	118	74	86	163
Transport w/o Petro	6	11	2	23	6	32	8	44	9	15	20
Total Incidents	94	58	44	169	55	201	71	222	104	144	224

June 1, 2012 through May 31, 2013

TAB VIII-A

MEMORANDUM

DATE: July 23, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: West, Texas Fertilizer Explosion

On April 17, 2013, an ammonium nitrate explosion occurred at the West Fertilizer Company storage and distribution facility in West, Texas, 18 miles north of Waco while emergency services personnel were responding to a fire at the facility. At least 15 people were killed, more than 160 were injured and more than 150 buildings were damaged or destroyed. Investigators have confirmed that ammonium nitrate was the trigger for the explosion, but the cause of the initial fire remains unknown.

Staff will provide the LEPC with an overview of the explosion, results of agency investigations to date, and local/nation reporting.

Attached – CSB Preliminary Findings from its Investigation*
Attached – The Fertilizer Institute Response to the Senate Committee on Environment and Public Works*

Preliminary Findings of the U.S. Chemical Safety Board
from its Investigation of the West Fertilizer Explosion and Fire

The CSB has made the following observations and preliminary findings to date, which are subject to further revision and development as the investigation unfolds:

1) The explosion at West Fertilizer resulted from an intense fire in a wooden warehouse building that led to the detonation of approximately 30 tons of AN stored inside in wooden bins. Not only were the warehouse and bins combustible, but the building also contained significant amounts of combustible seeds, which likely contributed to the intensity of the fire. According to available seismic data, the explosion was a very powerful event.

2) Whether additional factors such as material characteristics, shock, or contamination contributed to the incident remains to be determined. Company employees described a PVC plastic pipe that was located directly above the AN bin that detonated, and likely would have been melted by the fire. Additionally, large amounts of potentially flammable anhydrous ammonia were stored along the southern edge of the warehouse building.

3) The building lacked a sprinkler system or other systems to automatically detect or suppress fire, especially when the building was unoccupied after hours. By the time firefighters were able to reach the site, the fire was intense and out of control. Just 20 minutes after the first notification to the West Volunteer Fire Department, the detonation occurred.

4) Both National Fire Protection Association (NFPA) and the International Code Council (ICC), private organizations that develop fire codes that are widely applied across the U.S., have written code provisions for the safety of ammonium nitrate. Many of these safety provisions are quite old[1] and appear to be confusing or contradictory, even to code experts, and are in need of a comprehensive review in light of the West disaster and other recent accidents. For example the ICC's International Fire Code directs users to a defunct code for ammonium nitrate (NFPA 490, last issued in 2002) rather than the current code, known as NFPA 400.

5) The existing fire codes do contain some useful provisions; for example the codes do require a fire resistant barrier between AN and any stored flammable or combustible materials and have provisions to avoid AN confinement and promote ventilation during fire conditions. However, even the most current NFPA 400 standard *allows* AN to be stored in wooden buildings and in wooden bins, and does not mandate automatic sprinkler systems unless more than 2500 tons of AN is being stored – vastly more than the approximately 30 tons that was sufficient to devastate much of the town of West. In addition, the standard contains a "grandfathering" provision that allows existing buildings that were constructed prior to code adoption – and fail to meet all of its provisions – to continue in use.

[1] NFPA 400 refers users to a 1953 publication by the U.S. Bureau of Mines for information on the explosive properties of AN.

6) Texas has not adopted a statewide fire code, and state law actually prohibits most smaller rural counties from adopting a fire code. McLennan County, where the West facility was located, had not adopted a fire code, although it technically had the authority to do so because of its proximity to the more populous Bell County. The West Fertilizer facility was thus not required to follow any NFPA or ICC recommendations for the storage of AN.

7) Although some U.S. distributors have constructed fire-resistant concrete structures for storing AN, fertilizer industry officials have reported to the CSB that wooden buildings are still the norm for the distribution of AN fertilizer across the U.S.

8) Industry has developed other forms of ammonium nitrate that are reported to reduce or eliminate the risk of accidental detonation. For example, compounding the ammonium nitrate with calcium carbonate (limestone) "practically eliminates any risk of explosion in its storage, transportation, and handling," while preserving the AN's nutritive value.[2] Calcium ammonium nitrate fertilizers have been widely used in Europe. Ammonium sulfate nitrate also has been found to be non-explosive provided the percentage of AN is held below about 37%.[3]

9) The federal OSHA standard for "Explosives and Blasting Agents" (29 CFR 1910.109) does have requirements for ammonium nitrate fertilizer; its provisions are similar to the NFPA codes. Unlike the NFPA codes – which West was not legally required to follow under any fire code – the OSHA standard would have applied. Like NFPA, however, the OSHA standard does not prohibit wooden bins or wooden construction, and does not require sprinklers unless more than 2500 tons of AN is present. However, OSHA public records indicate that OSHA last inspected the facility in 1985, and no citations were issued under the "Explosives and Blasting Agents" standard.

10) OSHA's Process Safety Management standard (29 CFR 1910.119) or PSM was adopted in 1992 and is designed to prevent catastrophic workplace incidents involving highly hazardous chemicals. PSM requires companies to have a variety of management elements to prevent catastrophic incidents, such as conducting hazard analyses and developing emergency plans. Ammonium nitrate is not, however, one of the listed chemicals that triggers PSM coverage. The PSM standard also contains an exemption for retail facilities.

11) The EPA's Risk Management Program rule (40 CFR Part 68) or RMP was adopted in 1996 and is designed to prevent catastrophic offsite and environmental damage from extremely hazardous substances. As the name suggests, the rule requires covered facilities to develop a Risk Management Plan, implement various safety programs, and analyze offsite consequences from potential accidents. Once again, however, ammonium nitrate is not one of the listed chemicals that triggers RMP coverage. West Fertilizer was RMP-covered due to its stored ammonia, and the company's offsite consequence analysis considered only the possibility of an ammonia leak, not an explosion of ammonium nitrate.

---

[2] Calcium ammonium nitrate (CAN) must still be protected from contamination with other chemicals that can re-sensitize it to detonation. See Popovici Ipochim, N.N.; Icechim, M.M.; "Other Ammonium Nitrate Fertilizers;" In Keleti, C. (ed.); *Nitric Acid and Fertilizer Nitrates*; New York: Marcel Dekker Inc., 1985.

[3] *Ibid.*

12) OSHA considered adding ammonium nitrate along with other highly reactive chemicals to its list of PSM-covered substances in the late 1990's. However, this proposal was shelved in 2001. In developing the RMP regulation, the EPA did not explicitly include explosives or reactive chemicals in the list of covered chemicals. In 2002, the CSB issued a study on reactive hazards, identifying 167 prior reactive incidents (including a 1994 explosion at an ammonium nitrate manufacturer). The Board recommended that both OSHA and EPA expand their standards to include reactive chemicals and hazards. However, neither agency has yet acted upon the recommendations.

13) No federal, state, or local standards have been identified that restrict the siting of ammonium nitrate storage facilities in the vicinity of homes, schools, businesses, and health care facilities. In West, Texas, there were hundreds of such buildings within a mile radius, which were exposed to serious or life-threatening hazards when the explosion occurred on April 17.

14) West volunteer firefighters were not made aware of the explosion hazard from the AN stored at West Fertilizer, and were caught in harm's way when the blast occurred. NFPA recommends that firefighters evacuate from AN fires of "massive and uncontrollable proportions." Federal DOT guidance contained in the Emergency Response Guidebook, which is widely used by firefighters, suggests fighting even large ammonium nitrate fertilizer fires by "flood[ing] the area with water from a distance." However, the response guidance appears to be vague since terms such as "massive," "uncontrollable," "large," and "distance" are not clearly defined. All of these provisions should be reviewed and harmonized in light of the West disaster to ensure that firefighters are adequately protected and are not put into danger protecting property alone.

15) While U.S. standards for ammonium nitrate have apparently remained static for decades, other countries have more rigorous standards covering both storage and siting of nearby buildings. For example, the U.K.'s Health and Safety Executive states in guidance dating to 1996 that "ammonium nitrate should normally be stored in single storey, dedicated, well-ventilated buildings that are constructed from materials that will not burn, such as concrete, bricks or steel."[4] The U.K. guidance calls for storage bays "constructed of a material that does not burn, preferably concrete."

16) CF Industries, a principal manufacturer of AN that was one of the suppliers to West, also recommends more rigorous safeguards in its Material Safety Data Sheet (MSDS) for the chemical. In the section entitled "Handling and Storage," CF recommends that "Storage construction should be of non-combustible materials and preferably equipped with an automatic sprinkler system."[5] Although companies are required to issue MSDS's, the recipients of this information like West Fertilizer are not obligated to follow the recommended safety precautions. West lacked these safeguards.

17) The Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF) has regulations for ammonium nitrate used as an explosive but these do not apply to ammonium nitrate used as fertilizer. The U.S. Department of Homeland Security has reporting

---

[4] U.K. Health and Safety Executive; "Storing and Handling Ammonium Nitrate;" Available from http://www.hse.gov.uk/pubns/indg230.pdf

[5] http://www.cfindustries.com/pdf/Ammonium-Nitrate-Amtrate-MSDS.pdf

requirements for companies that have a threshold amount of fertilizer grade ammonium nitrate. However, the authority of DHS is to require security measures to protect against theft, diversion, or other intentional acts; DHS does not regulate the safety of ammonium nitrate to prevent conditions leading to accidental detonation.

18) The Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) contains an exemption from hazardous chemical reporting for "fertilizer held for sale by a retailer to the ultimate customer." The EPA has interpreted this provision as not applying to firms, like West, that make custom blends of bulk fertilizer for customers' use. In 2012, West Fertilizer filed an EPCRA Tier II report with the McLennan County Local Emergency Planning Committee (LEPC). West reported the presence of up to 270 tons of ammonium nitrate, as well as anhydrous ammonia, at the site. The company did not provide the LEPC or the West Fire Department with an ammonium nitrate MSDS indicating the material's hazards, nor does EPCRA automatically require that information to be provided. There is no indication that West's filing with local authorities resulted in an effort to plan for an ammonium nitrate emergency.

The Fertilizer Institute
Nourish, Replenish, Grow

AGRICULTURAL RETAILERS ASSOCIATION

STATEMENT OF
Agricultural Retailers Association and The Fertilizer Institute

BEFORE THE
Senate Committee on Environment and Public Works

REGARDING
"Oversight of Federal Risk Management and Emergency Planning Programs to Prevent and Address Chemical Threats, Including the Events Leading Up to the Explosions in West, TX and Geismar, LA."

Thursday, June 27, 2013

Chairman Boxer, Ranking Member Vitter and members of the Committee, thank you for the opportunity to comment on the "Oversight of Federal Risk Management and Emergency Planning Programs to Prevent and Address Chemical Disasters." In the statement below, we will address the following:

- Proactive Steps the Fertilizer Industry Has Taken On Fertilizer Safety and Security
- Safety Practices and Regulations Impacting Fertilizer Manufacturers and Retailers
- Facts about Ammonium Nitrate

The following statement is being submitted on behalf of Daren Coppock, President and CEO of the Agricultural Retailers Association (ARA) and Ford West, President of The Fertilizer Institute (TFI). ARA is a nonprofit trade association representing the interests of retailers on legislative and regulatory issues nationwide. TFI is the leading voice for the nation's fertilizer industry, including producers, importers, wholesalers and retailers. On behalf of both of our associations and our members, we continue to extend our thoughts and prayers to the families impacted by the West Fertilizer Company tragedy in West, Texas.

We appreciate the opportunity to provide the Committee with the fertilizer industry's perspective on the tragic incident that took place on April 17 at the West Fertilizer Company's fertilizer retail facility in West, Texas. We are an accountable and responsible industry committed to the safety of the communities in which we operate. Our employees live and work in communities small and large across the country, and nothing is more important than protecting our workers and their neighbors. We are committed to working with the investigators and regulators to understand the cause or causes of the West Fertilizer Company tragedy and taking appropriate action to prevent and/or mitigate future incidents from occurring.

The Fertilizer Institute
Capitol View
425 Third Street, S.W., Suite 950
Washington, DC 20024

202.962.0490
202.962.0577 fax
www.tfi.org

Agricultural Retailers Association
1156 15th Street NW, Suite 500
Washington, DC 20005

202.457.0825
202.457.0864 fax
www.aradc.org

About the Fertilizer Industry

Fertilizer nourishes plants and soils with necessary nitrogen, phosphorus, potassium and many micronutrients. Fertilizer is responsible for approximately 50 percent of the world's food production. The fertilizer industry consists of a wide variety of businesses that makeup the fertilizer supply chain, from manufacturers and importers to wholesalers, distributors and retailers.

Fertilizer manufacturers produce fertilizer products (e.g., Anhydrous Ammonia, Ammonium Nitrate, Phosphate, Potash) from raw materials through the use of sophisticated chemical processes. Once the product is manufactured it is distributed throughout a network that includes distributors, wholesalers and retailers. West Fertilizer Company was a fertilizer retailer. All of these entities work together to play a vital role in ensuring that critical crop nutrients reach farmers in a safe, timely, and efficient manner.

Proactive Steps the Fertilizer Industry Has Taken On Fertilizer Safety and Security

The fertilizer industry has taken many proactive steps relating to fertilizer safety and security. Here are a few:

- **Fertilizer Compliance Assistance** - TFI and ARA issued a fertilizer industry-wide memorandum on May 8, 2013 making available an on-line Compliance Assistance Tool for agriculture retail facilities to evaluate and control risk and support the continual improvement of a fertilizer retailer's compliance effort. This tool is free of charge to retailers. In making the tool available, TFI and ARA encouraged the entire fertilizer industry - from producers, importers, wholesalers, retailers and state associations - to help increase industry awareness of the availability of this tool and other potential regulatory compliance tools. As of this month, more than 29,000 hits were recorded on the website with more than 1,200 completed assessments.

  Additionally, we distributed information on the tool to the American Agronomic Stewardship Alliance (AASA), a voluntary organization with third-party auditors who inspect bulk pesticide storage at retail agricultural facilities. This year, AASA expects to audit more than 1,000 retail facilities and they will encourage those facilities to complete the compliance tool.

- **Fertilizer Code of Practice** - On May 30, 2013 ARA and TFI announced they would partner to develop a Fertilizer Code of Practice for agricultural retailers. An overview of this initiative is enclosed for the committee's convenience. The goal of the initiative is to help facilities establish basic environmental, health, safety and security performance practices and will lead to uniform guidelines that promote continuous performance improvement for all fertilizer storage facilities. To ensure compliance with these guidelines, a third-party inspection program will also be established.

- **National Fire Protection Association (NFPA)** - For many years the fertilizer industry has served on the NFPA's Technical Committee on Hazardous Chemicals (NFPA 400) which is

the committee of jurisdiction over the fire code for recommendations for storage and handling of ammonium nitrate. NFPA has had a code (NFPA 400) for the storage and handling of AN since 1965. NFPA 400 outlines recommended practices that include, but are not limited to; construction of buildings and building floors, ventilation requirements, a list of contaminates that should not be stored in the same building with ammonium nitrate, requirements for electrical installations, when sprinklers are required, signage, handling equipment and fire protection procedures. The fertilizer industry strongly supports and encourages compliance with NFPA 400 for ammonium nitrate.

- **EPA's Risk Management Program (RMP)** -In 2007, The Fertilizer Institute (TFI) partnered with the U.S. Environmental Protection Agency (EPA) and the Asmark Institute, a Kentucky-based regulatory compliance firm for retail fertilizer and agricultural chemical facilities, to develop a web-based compliance assistance program titled *my*RMP for retail fertilizer facilities covered under EPA's Clean Air Act, Section 112(r) Risk Management Program. EPA issued a letter of support for *my*RMP in August 2007.

  In June 2014, the five-year updates of RMP's are due. In an effort to ensure continued cooperation and support of the program, a meeting was held this month with EPA and the Asmark Institute to review the existing *my*RMP and make beneficial updates to the current program. The new edition of *my*RMP is expected to be available late summer 2013 with EPA's support.

- **Ammonium Nitrate Security Program** - The fertilizer industry approached Congress in 2005 to seek traceability regulations for ammonium nitrate. The *Secure Handling of Ammonium Nitrate Act* was signed into law in December 2007. The Act requires the U.S. Department of Homeland Security (DHS) to issue regulations for a tracking system which would require anyone selling or purchasing straight solid ammonium nitrate and any mixture in a percentage to be determined by DHS to register with DHS. An *Advanced Notice of Proposed Rulemaking (ANPR)* was issued in October 2008 and a *Notice of Proposed Rulemaking (NRPM)* was issued in August 2011.

  TFI and ARA strongly supported the Act and have been working with DHS to support development of final regulations. While we have some remaining concerns with the proposal pertaining to the registration verification process and the mixtures proposal, DHS continues to work with TFI and ARA to develop a workable final rule. We have encouraged DHS to issue the final regulations as soon as possible.

- **Outreach and Education Efforts with the FBI** - ARA and TFI have also worked closely with the Federal Bureau of Investigation (FBI) on security education and outreach efforts to help ensure agricultural retailers and suppliers are aware of necessary steps to properly secure essential crop inputs including fertilizers and agricultural chemicals. These efforts are designed to help prevent these products from getting in the hands of potential terrorists. FBI representatives have made presentations on these security measures at association meetings and also participated in the 2012 ARA Annual Conference. Recently, ARA collaborated with the FBI on a poster titled "Potential Indicators of Terrorist Activities," and this poster was mailed to all ARA members to display in their retail facilities. ARA also reviewed a FBI

video to accompany the poster.

- **Trans**portation **C**ommunity **A**wareness and **E**mergency **R**esponse (**TRANSCAER**) is a voluntary national outreach effort that focuses on assisting communities to prepare for and to respond to a possible hazardous materials transportation incident. TRANSCAER® members consist of volunteer representatives from the chemical manufacturing, transportation, distributor, and emergency response industries, as well as the government. TRANSCAER promotes safe transportation and handling of hazardous materials; educates and assists communities near major transportation routes about hazardous materials, and aids community emergency response planning for hazardous material transportation incidents

- **Voluntary Security Vulnerability Assessment (SVA)** – Following the tragedy of September 11, 2001, ARA and TFI worked with the Asmark Institute to develop a voluntary SVA program tailored to agricultural retail facilities which helps retailers identify and correct potential vulnerabilities in their site security. This plan has been submitted to DHS as a possible way to satisfy agency SVA requirements. In addition, the industry developed "Guidelines to Help Ensure a Secure Agribusiness" to help agricultural retailers, distributors, wholesalers and end-users begin the process of a security assessment for their facilities.

- **National Agronomic Environmental Health and Safety School** – The "Safety School" established in 1978, offers quality hands-on training for response to incidents involving fertilizer and crop protection chemicals used in the agricultural industry. Participants have come to rely on current and accurate training on the various environmental, health and safety issues associated with the operation of agribusiness. The spectrum of training offered covers timely information on transportation and security issues. TFI and ARA both serve on the Board for the safety school.

- ARA has developed a formal working relationship with the American Society of Agricultural and Biological Engineers (ASABE), which is an accredited standards developing organization recognized by the American National Standards Institute (ANSI). A current ASABE project underway involving ARA members includes updating the safety requirements for implements of husbandry used in the local transport and application of anhydrous ammonia for agricultural fertilizer.

Safety Practices and Regulations Impacting Fertilizer Manufacturers and Retailers

In general, the fertilizer industry is highly regulated, with myriad regulations covering risk management and emergency preparedness. In addition to the governmental oversight of the industry, the industry itself works voluntarily and cooperatively to share best practices and improve the safety performance of its members. Our two trade associations work constantly to provide regulatory assistance and knowledge to our members. We serve as an independent body for members to share their best practices in safety and operation. We host several seminars and webinars for our members to ensure that they receive up to date information with regard to safety practices and regulatory requirements. To ensure worker and community safety, product quality and efficacy, and protection of the environment, both fertilizer manufacturers and fertilizer

retailers employ a host of safety procedures and are regulated under many different federal and state programs.

Regulations for Fertilizer Manufacturers

The fertilizer manufacturing industry is highly regulated under many different federal and state programs. To manage these safety and compliance requirements, manufacturers employ people with varying expertise. These positions may include chemical, mechanical, electrical and metallurgic engineers, chemists, operators and EH&S professionals. Large manufacturers are also financially strong, maintaining adequate financial resources including solid balance sheets and substantial property damage and general liability insurance coverage. Enclosed for your convenience is a list which details many of the regulatory requirements for fertilizer manufacturers.

Employees are a fertilizer manufacturer's first and most important resource. Industry personnel and contract employees undergo extensive safety and process operations training on a routine basis, including training in hazardous materials (HAZMAT) emergency response and on-site emergency response simulation drills and table top emergency response exercises. Many such drills include first responders from the local community.

Mechanical integrity of operating equipment is inspected, tested and retested to make sure it meets certain specifications. Manufacturing facilities must adhere to comprehensive mechanical integrity programs that include scheduled inspections of pressure vessels, low-pressure storage tanks and safety-related instrumentation and controls. In addition, manufacturing facilities have sprinklers, deluge systems, or dry (inert gas) fire suppression systems to control fires in high-potential fire hazard areas such as compressor decks, wood structure storage buildings and cooling towers, and electrical control center buildings. These sites also have in place extensive fire water systems throughout operating and storage areas that include strategically placed fire hydrants, fire water monitors to apply a large fixed water spray on a fire or vapor release, and redundant fire water supply pumps. These areas are subject to stringent standards based upon insurance carrier requirements.

Monitoring and controls including computer controls, automatic shut-down systems, in plant electronic leak detectors, and automatic monitors for specific chemicals add another layer of protection for employees and neighboring communities.

Hazard reviews are an integral part of the industry's process safety and prevention programs and involve a wide range of checks performed by employee teams. During these reviews, employees investigate multiple "what if" scenarios and resolve any questions as part of the design and operation phases of a project. Process Hazard Analyses (PHA) are conducted prior to starting up a new process and revalidated for existing process areas every five years. PHAs involve a detailed review of all aspects of equipment design, operation, maintenance and history to identify potential hazards and ensure controls are in place to prevent accidents.

Emergency response involves the entire community. This includes alarm systems and highly trained employee responders, as well as off-site emergency responders such as local emergency

planning committees, HAZMAT responders and law enforcement. Together, these on- and off-site emergency responders develop emergency response plans that include evacuation routes, notification systems, and shelter-in-place information. Our members make it a priority to maintain good working relationships with local officials to plan and prepare for emergency situations, with an ultimate goal of keeping citizens safe.

Regulations for Fertilizer Retailers

Businesses such as West Fertilizer Company that sell fertilizer directly to farmers are called fertilizer retailers. Fertilizer retailers are also highly regulated under many federal and state programs. Attached is a copy of a May 14, 2013 report by the Congressional Research Service entitled "Regulations of Fertilizers: Ammonium Nitrate and Anhydrous Ammonia" that provides an overview of the extensive federal regulations overseeing the safe storage and handling and security for these fertilizer products.

Facts About Ammonium Nitrate

According to various reports, ammonium nitrate is suspected as the cause of the explosion at the West Fertilizer Company. The Office of the Texas State Fire Marshall and the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) have ruled the cause of the fire that led to the detonation of 28 to 34 tons of ammonium nitrate fertilizer is "undetermined". Three causes of the fire that could not be eliminated were a 120 volt electrical system, a faulty golf cart and an intentionally set fire. A recent report done by the Congressional Research Service (CRS) entitled "*Regulation of Fertilizers: Ammonium Nitrate and Anhydrous Ammonia*" states that "the vast majority of ammonium nitrate use occurs without incident. Most experts consider ammonium nitrate itself as a stable chemical with few handling restrictions, but, in combination with a fuel source, it can pose an explosion hazard. Ammonium nitrate requires certain conditions, such as added heat or shock, confinement, or contamination to explode." Ammonium nitrate (AN) is made from ammonia and nitric acid. It is a dry, solid material and represents approximately 2 percent of all directly applied nitrogen-based fertilizers consumed in the United States. It is a preferred nutrient for farmers because it is the most agronomic and environmentally beneficial source of nitrogen for pastureland, hay, fruit and vegetable crops in certain regions of the United States. The leading AN consuming states are Missouri (20 percent of total U.S. consumption), Tennessee (14 percent), Alabama (10 percent) and Texas (8 percent).

In closing, we would again like to thank you for the opportunity to present our perspectives and to share the actions we have taken before and since the West Fertilizer Company incident. These

efforts will continue as we await the results of the investigation. It is important to remember that fertilizer is essential to life and its use is responsible for 50 percent of the world's food production. We are proud of our role in helping to feed the world.

Sincerely,

Ford B. West
President
The Fertilizer Institute

W. Daren Coppock
President & CEO
Agricultural Retailers Association

TAB VIII-B

MEMORANDUM

DATE: July 24, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: Thomas Yatabe Award Nominations

The Thomas Yatabe Award signifies outstanding contribution(s) made in the implementation and support of the Emergency Planning and Community Right-to-Know Act through achievement(s), accomplishment(s) or superior participation in hazardous materials planning or response.

Annually, the State Emergency Response Commission (SERC) awards one individual, agency and/or organization the Thomas Yatabe Award for each LEPC District within the State.

The SERC also issues "Certificates of Appreciation" for other worthy nominations received.

All nominations should be sent to Staff. The nomination form has been attached for your convenience. Please submit all nominations no later than August 31st, 2013. Nominations will be collected and reviewed.

Attachment - Thomas Yatabe Nomination Form and Instructions

THOMAS YATABE - STATE EMERGENCY RESPONSE COMMISSION AWARDS PROGRAM PROCEDURES

The State Emergency Response Commission (SERC) has established the following procedures to guide the recommendations and review of nominations for the State of Florida Emergency Planning and Community Right-to-Know Act (EPCRA) Awards Program.

1. **Four categories of eligibility** are established for the awards program:

   a. Recognition of an outstanding achievement, accomplishment or superior participation in the hazardous materials planning program by a **member of the SERC**.

   b. Recognition of an outstanding achievement, accomplishment or superior participation in the hazardous materials planning program by a **member or alternate of a Local Emergency Planning Committee (LEPC)**.

   c. Recognition of an outstanding achievement, accomplishment or superior participation in the hazardous materials planning program by an **individual, agency or organization**.

   d. Recognition of an outstanding achievement, accomplishment or superior participation in the hazardous materials planning program by an **industry or business**.

   These categories may be expanded to address unique circumstances at the discretion of the SERC.

2. Each LEPC Chairperson shall submit the name of a single nominee, chosen from one of the four categories of eligibility, who has made an outstanding contribution to the hazardous materials planning program **as the LEPC's nomination for a Thomas Yatabe - SERC Award**. Multiple nominees may be recommended for Certificates of Appreciation for their contributions to the program.

3. The single Thomas Yatabe - SERC Award and/or Certificates of Appreciations nominations(s) from each District shall be reviewed by the SERC's Membership Committee. The committee shall forward it recommendations to the SERC.

4. Recommendations for awards will be acted upon by the SERC on an annual basis at its fall (October) meeting.

5. Nominations for awards in each category may be offered by members of any category. All nominations must be received by the SERC by August 15 to be considered for that year's awards. Nominations for recognition for outstanding contributions and certificates of appreciation, must be made in writing by the respective LEPC Chairperson, must be directed to the Chairman of the SERC, and must be accompanied by an Awards Nomination Form.

6. The SERC may elect to suspend or amend the time limitations of these procedures for good cause.

THOMAS YATABE - STATE EMERGENCY RESPONSE COMMISSION
AWARDS PROGRAM NOMINATION FORM

CATEGORY: (Choose One) SERC MEMBER ____ LEPC MEMBER ____ OTHER ____

NAME: _____

OCCUPATION: _____
(If Individual)

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

TELEPHONE NUMBER: _____

REASON FOR NOMINATION: (Circle #1 or #2)

1. **In recognition of outstanding achievement, accomplishment or superior Participation in hazardous materials planning or response by an individual, agency or organization. (OR)**

2. **For Certificate of Appreciation in recognition of outstanding achievement, accomplishment or superior participation in hazardous materials planning or response by an individual, agency or organization. (You can submit as many people for Appreciation Certificates as you desire - just copy the form as many times as you need - a separate nomination form is needed for each person).**

BRIEF DESCRIPTION OF ACCOMPLISHMENTS: _____

OTHER COMMENTS: _____

****

FOR STAFF USE ONLY:

DATE NOMINATION RECEIVED: _____

DATE ACTED UPON BY MEMBERSHIP COMMITTEE: _____

TAB X

MEMORANDUM

DATE: July 24, 2013

TO: District IV Local Emergency Planning Committee

FROM: Eric B. Anderson, LEPC Staff

RE: Next Meeting of the LEPC

The next meeting of the Local Emergency Planning Committee is scheduled to take place at the offices of the Northeast Florida Regional Council. The meeting will occur at 10am on November 13, 2013.

Northeast Florida Regional Council
6850 Belfort Oaks Place
Jacksonville, Florida 32216