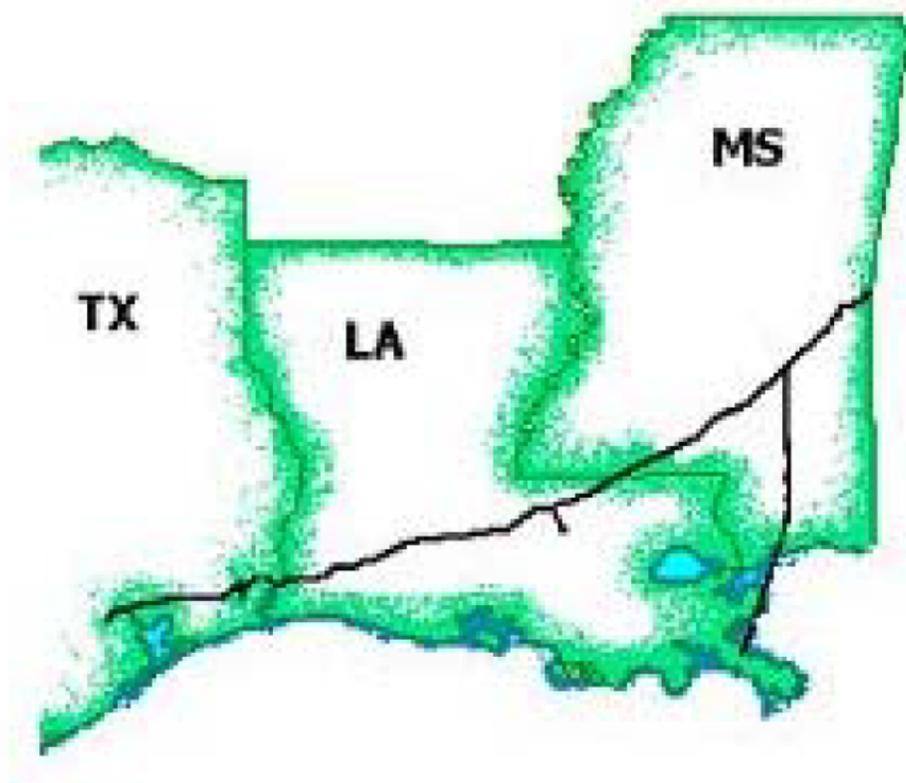




Colonial Pipeline Company
Emergency Response Plans

Gulf Coast Response Zone



Colonial Pipeline Company
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Colonial Pipeline Company

CONSISTENCY WITH CONTINGENCY PLANS

Consistency with the National Contingency Plan

The Emergency Response Plans submitted by Colonial Pipeline Company for each of its three response zones will be reviewed and revised periodically to maintain consistency with applicable parts of the National Contingency Plan.

Consistency with the Applicable Area Contingency Plans

The Emergency Response Plans submitted by Colonial Pipeline Company for each of its three response zones will be reviewed and revised periodically to maintain consistency with the Area Contingency Plans applicable to Colonial's pipeline system.

Applicable Area Contingency Plans administered by the U. S. Coast Guard and EPA as well as their corresponding Colonial/PHMSA response zones are identified below:

Colonial Pipeline Company

CONSISTENCY WITH CONTINGENCY PLANS

CPC District	PHMSA Response Zone	Applicable ACP's, GRP's, & IACP's
GULF COAST DISTRICT	801	<p>One Gulf Plan MSU Houston/Galveston MSU Port Arthur MSU Morgan City MSU New Orleans</p> <p>EPA Region VI Regional IACP</p>
SOUTHEAST DISTRICT	802	<p>EPA Region IV Oil & Hazardous Substances Pollution Regional and Area Contingency Plan</p> <p>EPA Region III Inland Area Committee Plan</p>
NORTHEAST DISTRICT	803	<p>EPA Region II</p> <p>EPA Region III Inland Area Committee Plan</p> <p>USCG Sector Delaware Bay ACP</p> <p>USCG New York/New Jersey ACP</p> <p>USCG Upper Chesapeake ACP</p> <p>USCG Philadelphia ACP</p> <p>USCG Hampton Roads ACP</p>

Colonial Pipeline Company

GULF COAST RESPONSE ZONE

INFORMATION SUMMARY

Name and address of Operator:

Colonial Pipeline Company
P. O. Box 1624
Alpharetta, GA 30009-9934

This Emergency Response Plan (ERP) has been developed by Colonial Pipeline Company (Colonial or Colonial Pipeline) for its Gulf Coast District operations area. This ERP meets the requirements of the U.S. Department of Transportation Pipeline and Hazardous Materials Administration (PHMSA), Office of Pipeline Safety (OPS), as established by regulations at 49 CFR §194. This ERP covers operation of line segments and breakout tank facilities for Colonial's pipeline system in the Gulf Coast District, including the Bengal Pipeline Company, LLC (Bengal) breakout tank farm facility in Baton Rouge, Louisiana. Bengal is a joint venture company formed through an agreement between Colonial and Shell Pipeline Company LP. As part of the agreements among parties, Colonial is responsible for operating Bengal's Baton Rouge breakout tank facility, including emergency response implementation and compliance.

SIGNIFICANT & SUBSTANTIAL HARM

The volume of petroleum products transported by the Colonial Pipeline system (and the criteria set forth in DOT49CFR§194.103) dictate that a release of oil at any point in any line segment could cause significant and substantial harm. Therefore, all Response Zones are identified as having the potential for causing significant and substantial harm.

DESCRIPTION OF RESPONSE ZONES

Colonial Pipeline Company has identified 3 response zones for its pipeline system. Currently, these response zones correspond with the 3 operating districts of Colonial's pipeline system. The response zones for the entire pipeline system are listed according to PHMSA zone numbers and name of the Colonial operating area, including states and counties.

QUALIFIED INDIVIDUAL

Gulf Coast Response Zone:

Greg Glaze
 7225 Wespark Dr.
 Beaumont, TX 77705

Office Phone: 409/291-5645

Cell Phone: (b) (6)

Home Phone: [REDACTED]

Alternate:

Darren Pruitt
 411 Gallimore Dairy Rd.
 Greensboro, NC 27409

Office Phone: 336/931-6025

Cell Phone (b) (6)

Home Phone: [REDACTED]

The Qualified Individual (QI) will generally also serve as the Incident Commander during an emergency response. Currently, the QI for each response zone is the Director of Operations of the pipeline operational area and as such has the authority to expend company resources in response to an oil spill event. The Qualified Individuals are available on a 24-hour basis, and

Colonial Pipeline Company

GULF COAST RESPONSE ZONE

their contact information can be found above and in Section 5.01 of this plan. Notification of response resources is conducted under the direction of the QI, which occurs following the initial notification process detailed in Section 2.03.

WORST CASE DISCHARGE

(b) (7)(F), (b) (3)

PHMSA Response Zone 801 Colonial Response Zone: Gulf Coast

Texas Counties

Chambers
Harris
Jefferson
Liberty
Orange

Louisiana Counties (Parishes)

Acadia
Calcasieu
Cameron
East Feliciana
Jefferson Davis
Plaquemines
Pointe Coupee
St. Bernard
St. Helena
St. Landry
West Feliciana
St. Tammany

Alabama Counties

Sumter

Mississippi Counties

Amite
Clarke
Covington
Hancock
Jasper
Jefferson Davis
Jones
Kemper
Lamar
Lauderdale
Marion
Pearl River
Pike
Smith
Walthall

Colonial Pipeline Company

RESPONSE ZONE 801 – GULF COAST DISTRICT

Line Name	Line No.	Dia.	Miles
Pasadena to Houston	1	40"	1.7
	2	36"	1.9
Houston to Epes Station, AL	1	40"	260.4
	1	36"	234.4
	1	30"	0.0
	1	24"	0.0
	2	36"	495.6
Port Arthur to Hebert	1PA		7.4
	2PA		7.4
Beaumont To Hebert	8		7.4
	9		7.4
Alliance Refinery to Collins T.F.	7	20"	147.2
Baton Rouge T.F. to B.R. Barge Dock	48	16"	4.7
Baton Rouge T.F. to B.R. Barge Dock	49	16"	4.7
B.R. Barge Dock to Baton Rouge	50	16"	4.7
Stand-By Lines			
	11S	6"	15.2
	1S	40"	2.2
	2S	36"	2.5
	8S	16"	0.9
	11S	6"	0.1

Coverage:

Pasadena to Epes Station

Beaumont to Hebert

Port Arthur to Hebert

Baton Rouge T.F. to B.R. Barge Dock

Baton Rouge T.F. to B.R.D.F.

Alliance Refinery to Collins T.F.

Colonial Pipeline Company

STATEMENT OF SIGNIFICANT AND SUBSTANTIAL HARM

It has been determined that a pipeline rupture occurring in ***any line segment of the pipeline system*** could cause significant and substantial harm based on the criteria listed below.

- Pipeline Diameters comprising the line segments
- Volumes transported
- Products transported through the pipeline system
 - gasoline
 - kerosene
 - fuel oil
 - jet fuels
 - transmix
- Subpart B, 49 CFR §194.103

It is important to note that because any line segment could result in a high volume release with the potential for substantial harm, Colonial has strategically positioned company owned response equipment, which meets the requirements of §194.115 (b). Additionally, many of the contracted OSRO's, including their equipment and personnel, are capable of arriving well within the 6-hour Tier 1 time frame. Information related to contracted OSRO's can be found in Sections 5.05.

Colonial Pipeline Company

America's Energy Lifeline

GREG GLAZE
GULF COAST DIRECTOR OF OPERATIONS

PHONE: 409-291-5645
FAX: 409-842-6405

CERTIFICATION OF RESPONSE PREPAREDNESS

Colonial Pipeline Company hereby certifies to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration (PHMSA) that it has identified, and ensured by contract, or other means approved by PHMSA, the availability of private personnel and equipment to respond, in the maximum extent practicable to a worst case discharge or a substantial threat of such a discharges,

Colonial Pipeline Company

Date: 8/27/13

Greg Glaze
Greg Glaze
Gulf Coast District Leader

This Certification of Response Preparedness was acknowledged before me by Greg Glaze on behalf of said corporation.

August 27, 2013
Date

Belinda S. Smith #69589
Notary

upon my death
My Commission Expires

(Seal)

Colonial Pipeline Company

WORST CASE DISCHARGE

GULF COAST RESPONSE ZONE

RSPA Response Zone 801

Overview

This section presents the Worst Case Discharge (WCD) for Colonial's Gulf Coast Response Zone providing the methodology used to arrive at the volume, including calculations. The WCD for both system tankage and pipeline scenarios are provided below.

Worst Case Discharge – Tankage

The WCD from Colonial tankage is calculated based on the capacity of the single largest tank within a single secondary containment system adjusted for the capacity of the secondary containment system. The largest capacity tankage in Colonial's Gulf Coast Response Zone is summarized in Table 1, below.

Table 1

Largest Volume Tank Location(s):	Tank No.	Capacity (barrels)	70% Credit (See below)	Worst Case Discharge Volume
(b) (7)(F), (b) (3)				

In accordance with 49CFR 194.105(b)(4), operators may claim prevention credits for breakout tank secondary containment and other specific spill prevention measures. The maximum allowable percentage (credit) is 75 percent. Following these criteria, Colonial is entitled to claim a 70 percent credit on the WCD as outlined in Table 2.

Table 2

Prevention Measure	Standard	Credit (percent)
Secondary containment > 100 %	NFPA 30	50% (claimed)
Built / repaired to API standards	API STD 620/650/653	10% (claimed)
Overfill protection standards	API RP 2350	5% (claimed)
Testing / cathodic protection	API STD 620/650/653	5% (claimed)
Tertiary containment / drainage / treatment	NFPA 30	5% (not claimed)
Maximum allowable credit		75%
Total claimed credit		70%

Colonial Pipeline Company

WORST CASE DISCHARGE

Worst Case Discharge – Pipeline

Location

STATE:
 COUNTY
 LINE NUMBER:
 LOCATIONS NUMBER:
 ALIGNMENT MAP NUMBER:
 USGS MAP NUMBER:
 UPSTREAM ISOLATION LOCATION:
 LEAK STATION NUMBER:
 DOWNSTREAM ISOLATION LOCATION:

(b) (7)(F), (b) (3)



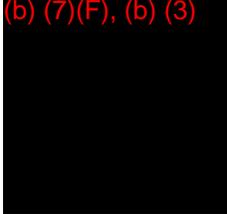
APPROXIMATE PHYSICAL LOCATION: (b) (7)(F), (b) (3)



Construction / Operating Parameters

PIPE DIAMETER:
 WALL THICKNESS:
 MAXIMUM FLOW RATE:
 VOLUME/FOOT:
 CONTRIBUTING FOOTAGE:

(b) (7)(F), (b) (3)



Colonial uses a proprietary Pipeline Simulation Software to calculate the WCD along the pipeline system. The model calculates the total discharge (Vt) at any given location along the pipeline following a line rupture accounting for the dynamic discharge (Vd) before the line segment is operationally isolated, the static or gravity drain (Vs), and the pipeline elevation profile.

Dynamic discharge is the total fluid outflow at the rupture before the pipeline is shut down and the line segment containing the rupture is operationally isolated. During this period, the pipeline flow rate could be much higher than its normal operating flow rate depending on the relative location of the rupture to the adjacent pumping stations. This transient flow rate, however, cannot exceed the maximum capacity of pump units upstream of the rupture due to the limitation of horsepower installed and to the characteristic of turbo machinery. Based on these parameters, an estimate of the dynamic discharge can be made by assuming the maximum capacity of the pumps being operated prior to the rupture, as the discharge flow rate for the period between rupture occurrence and pipeline shutdown.

Static drain discharge is considered to be the total fluid outflow at the rupture location due to the difference of elevations between the rupture and other high points on the pipeline except that isolated by either elevation or remote-controlled valves. The fluid momentum and the siphoning effect, for practical purposes, can be ignored.

Colonial Pipeline Company

WORST CASE DISCHARGE

The WCD for pipeline segments can be expressed as:

$$V_t = V_d + \Sigma V_s$$

Where:

V_t = total WCD volume, in barrels

V_d = dynamic discharge volume, in barrels

V_s = static discharge volume, comprised of the gravity drain from both upstream and downstream segments based on the elevation profile, in barrels

Assumptions:

- Scenario is a guillotine rupture (100% volume - out);
- Following a line rupture, the pipeline segment that contains the rupture will be remotely shut down and isolated within three (3) minutes;
- For the dynamic discharge calculation, the discharge flow rate will be the flow rate that the immediate upstream pump station is capable of; and
- Except for the installed check valves and remotely controlled block valves, no further segment isolation is assumed by closing the manual isolation valves.

The dynamic discharge component (V_d) is determined by multiplying the timeframe to operationally isolate the line segment by the design throughput:

(b) (7)(F), (b) (3)

The static/gravity discharge component (V_s) is the gravity drain volume from both upstream and downstream segments based on the elevation profile in the Pipeline Simulation Software. The volume excludes that which is isolated by either elevation or remote-controlled valves

(b) (7)(F), (b) (3)

Therefore:

(b) (7)(F), (b) (3)

(b) (7)(F), (b) (3)

Historical Discharge Comparison

A review of historical releases from the Colonial system shows that the largest release volume in the Gulf Coast Response Zone was 21,461 bbl which does not exceed either of the WCD estimates for the tankage or pipeline scenarios.

Colonial Pipeline Company

GULF COAST RESPONSE ZONE

WORST CASE DISCHARGE – SCENARIO

Bengal Pipeline Company, LLC - Baton Rouge Junction Breakout Tank Facility East Feliciana Parish, Louisiana

Purpose

This section provides a discussion of the worst case discharge scenario developed for the Gulf Coast District and describes the actions that Colonial Pipeline Company would undertake in response to a spill of this magnitude. The worst case discharge is from Tank 1518 at the Bengal Pipeline Company, LLC Baton Rouge Junction Tank Farm. Colonial Pipeline Company operates the Bengal Pipeline Baton Rouge breakout tank facility.

Objective

The objective of assessing the worst case discharge is to develop a plan to respond to the threat of an oil discharge and to contain, recover, and mitigate within the shortest feasible time. Developing the capability to prevent or mitigate adverse affects on natural resources, environmentally sensitive areas, municipal, industrial and other services is implied.

C. Worst Case Discharge Response Scenario

Scenario Development

- (a) A worst case discharge scenario involving breakout tanks uses the single largest volume tank for the response zone adjusted for containment measures. The largest breakout tank is Tank 1518 (fuel oil) located at Bengal Pipeline Company's Baton Rouge Junction facility. Tank 1518 is surrounded by an earthen secondary containment dike with sufficient capacity to contain the entire contents.

This scenario assumes a brittle fracture type failure similar to the Ashland Oil spill at Florette, PA on January 2, 1988. It is assumed that the spill would create a surge that would breach the tank dikes. For planning purposes it is assumed that 105,000 barrels of fuel oil would escape Tank 1518's secondary containment.

Located downstream of Tank 1518 is the retention pond that was designed to contain most spills depending upon the water level in the pond. It is assumed 25 (b) (7)(F), (b) (3) the spilled volume would escape from the retention pond.

Time of Year/Weather

- (a) This scenario takes place in the month of January. This month is chosen because it is when the ambient temperatures occur most frequently which are likely to allow a brittle fracture to occur. The scenario begins at dusk.
- (b) Scenario weather calls for a wet weather (steady rain) with temperatures in the mid-30's. The rain will provide additional means to transport spilled product into navigable waters (Little Sandy Creek).

Colonial Pipeline Company

GULF COAST RESPONSE ZONE

WORST CASE DISCHARGE – SCENARIO

Topography, Drainage and Resources at Risk

Topography of the area is graded flat within the breakout tank containment area. The surrounding land is relatively level grassy plain that is bisected by a stream valley that is 30 to 40 feet lower than the grassy plain. This stream valley area has been re-graded by Colonial and a manifold yard and retention pond has been constructed. Under normal conditions, this pond can retain greater than 100,000 barrels of product. This pond discharges into Little Sandy Creek (an intermittent stream) immediately downstream of the retention pond. The surrounding area is rural. While the drainage feature above would likely capture the bulk of the fuel oil that escapes the tank dike, other possible flow paths would be to the south to a second retention pond and also to the west/southwest across a neighboring field and pond and then on to Colonial's property and into a third retention pond. Each of these three ponds are somewhat smaller than the first but are of sufficient size to contain a significant volume of fuel oil.

For purposes of this exercise it is assumed that the product would escape the tank dike and migrate in all three directions describe above.. If the retention ponds overflowed, the product would flow overland through a wooded area and into Little Sandy Creek. The distance of overland flow from each of the three retention ponds varies significantly from approximately 300 feet up to approximately 1 mile . Little Sandy Creek discharges to Thompson Creek approximately 4.5 miles from the tank farm, and Thompson then discharges into the Mississippi approximately 2 miles further downstream.

For this scenario the volume of product that has overflowed the retention ponds is 25% (26,250 barrels) of the spill volume. It is also assumed that impacts to Little Sandy Creek would be immediate and the time required for overland flow from the retention ponds to Little Sandy Creek is not considered. It is also assumed that enough rain has fallen for Little Sandy Creek to maintain a constant flow rate of 2 ft/sec. In actuality, it is difficult to estimate the volume of product that would overflow the retention ponds and reach Little Sandy Creek. It would also be difficult to estimate the volume of product that would reach the Thompson Creek, if any at all, due to the intermittent flow of Little Sandy Creek and the varying amounts of time for the fuel oil to travel overland and reach Little Sandy Creek.

B. Initial Incident Command Issues and Organization

The local Operations Manager would act as the Colonial OSC (On-Scene Commander) until relieved by either the District Leader (QI) or the Alternate QI as defined in Section 1.03 of this Plan. The state and local agencies would assist and provide input to the spill effort. Information that could be provided would include locations of rare and endangered species, historic sites, drinking water and industrial water intakes and other environmentally sensitive areas. Unless otherwise indicated by the Federal OSC, Colonial would follow the ICS for implementing the response effort. In addition to personnel and equipment responding from the Gulf Coast District, additional equipment and personnel would be immediately mobilized from throughout the Colonial system as needed.

Upon arrival onsite, Colonial would also work closely with officials from USCG New Orleans, US EPA Region VI, and the LADEQ to identify natural resources, historic sites, and archeological

Colonial Pipeline Company

GULF COAST RESPONSE ZONE

WORST CASE DISCHARGE – SCENARIO

sites threatened by the spill and which countermeasures would prove most effective in protecting these resources. This activity includes protection, if possible, of endangered species, wildlife areas and public recreation areas. The U. S. Fish and Wildlife Service office can provide information. There are no known endangered species in the immediate spill vicinity. Port Hudson Battlefield is located one mile south-southeast of the Tank Farm and would not be impacted by the spill.

For a tank failure occurring as described above, it would be clear from the outset that a prompt response from the entire area emergency response team would be appropriate. Response personnel from the Gulf Coast District and the Corporate Spill Management Team would be mobilized. This would result in an initial compliment of approximately 20-30 Colonial personnel onsite within the first five hours of the response with an additional 5-10 support personnel mobilized from Colonial's Corporate Headquarters. This compliment would be fully qualified to fulfill the various functions identified in the Incident Command System, as presented in Section 4.02 Plan. Colonial would also make back-up and relief personnel available from other districts for a spill of this magnitude. Colonial owned response equipment from locations outside the district would be mobilized as necessary.

Issues Confronting Local IC:

Difficulty in determining precise volumes released from tank, volumes retained within dikes and retention pond.

Weather

Lack of surface water flow data because of the intermittent nature of Little Sandy Creek. Downstream impacts, including Thompson Creek and the Mississippi River, would be difficult to predict.

Not all facility personnel will be immediately available.

Resources at Risk

Public and response worker safety would be the top priority concern for any spill scenario. Colonial would quickly establish communications with the appropriate local emergency responders in the area of the tank farm. The purpose of this communication would be to coordinate Colonial's response to this specific incident with these agencies to best utilize available resources to protect the general public as the spill event progresses. Specific actions will be discussed further under "countermeasures" below.

Sandy Creek flows westerly in an area that is primarily uninhabited and heavily wooded. Sandy Creek discharges into Thompson Creek and then ultimately into the Mississippi River. There are no residential neighborhoods that would be directly affected by the pathway of the spill

As indicated in Section 9 of this Plan, there are no public water supply intakes potentially at risk within ten miles of this scenario.

Colonial Pipeline Company

GULF COAST RESPONSE ZONE

WORST CASE DISCHARGE – SCENARIO

C. Countermeasures

Notification

Upon discovery of the release by operations personnel at the Bengal Pipeline Company Baton Rouge Breakout Tank Farm, the notification of Colonial personnel, contract responders and governmental agencies would proceed in accordance with Section 2 of this Plan. This would include immediately activating the Colonial Emergency Response Plan and designating an IC to mobilize sufficient resources and coordinate with governmental agencies including, as appropriate, the Federal On-Scene Coordinator (FOSC).

Strategies

Decisions that must be made are:

- (1) Evaluate the actions that have been taken within an ICS structure and ensure that all work is completed in a safe manner considering fire and explosion hazards associated with fuel oil and the current weather conditions.
- (2) Determine Colonial resource needs and availability within the Gulf Coast District, the adjacent Southeast District, and personnel from Corporate Headquarters in Atlanta, GA. Mobilize these resources in a timely manner to fulfill the 24 hour planning cycle.
- (3) Locate additional areas for containment/recovering besides those noted on Colonial response maps LA-25 and LA 25A-25C.
- (4) Determine the number of additional Colonial OSRO's and other spill response personnel needed for oversight, cleanup, containment, and countermeasures.
- (5) Determine how much equipment will be necessary for containment, countermeasures, and cleanup actions.
- (6) Decide who will provide the additional equipment.
- (7) Prioritize response efforts for environmentally sensitive areas.

Contractors:

As part of the initial Notification Procedure, key area spill response contractors would be notified within the first hour of the response. For the given scenario a number of OSRO and tanker truck contractors would be mobilized and asked to send trained personnel and equipment to the closest staging location in anticipation of a spill clean-up operation. For this scenario, it is assumed that contractors and OSROs would be capable of averaging 55 mph traveling from

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their facility to the tank farm. Allowing an additional hour for equipment loading, it is estimated that most of these resources would arrive within two to six hours of discovery.

The following Oil Spill Response Contractors and other responders would be mobilized (response time):

US Environmental Services – Baton Rouge, LA (2 hr)
 HY-VAC, INC - Lake Charles, LA (4 hrs)
 Allwaste - Jeanerette, LA (3 hrs)
 Oilmop - Baton Rouge, LA (2 hr)
 Lo-Vac Environmental (Tanker trucks) - Lottie, LA (2 hr)
 AMPOL – New Iberia, LA (4.5 hrs), Harvey, LA (3.5 hrs)
 ES&H Environmental Services – Houma, LA (3.5 hrs)

The following Preventative Maintenance Contractors would be mobilized to assist in response and recovery efforts and pipeline repair:

Benton Equipment and Const. – Baton Rouge, LA (2 hrs)
 L.E. Bell Construction – Heflin, AL (10 hrs)
 Sunland Construction - Eunice, LA (3 hrs)
 Duphil – Orange, TX (4 hrs)
 Sprint Pipeline – Beaumont, TX & Houston, TX (5-6 hrs)
 DDS Enterprises – Collins, MS (4.5 hrs)
 Bradford Brothers, Inc. – Oxford, AL (10 hrs)

This action could provide at least 100 additional HAZWOPER trained personnel as labor for the response operation, as well as several thousand additional feet of boom, skimmers, earth moving equipment, pipeline repair equipment and other appropriate equipment for response operations.

Governmental Agencies:

In accordance with the initial Notification Procedure the following Federal and State Agencies would be notified within one hour of discovery:

- National Response Center
- LA State Police Hotline
- East and West Feliciana Parish and East and West Baton Rouge Local Emergency Planning Committees
- Local Fire and Police

As the response progressed and additional information as to the specific location of the emergency was discovered and/or reporting requirements were met, the following agencies would be directly contacted:

- PHMSA, Office of Pipeline Safety

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Subsequent communications between specific Colonial response team members and these agencies would flow freely on an individual basis as is necessary.

D. Isolation

The affected tank would be isolated by Colonial's operations personnel by closing the manifold valve to Tank 1518 after residual product remaining in the tank has been transferred to another tank (if feasible). This action would minimize the volume of additional product that could be released into the environment. This action would isolate the tank and residual product to the greatest extent possible.

Access to the facility could be impaired depending upon the local Fire Marshall's decision to keep US Highway 61 open or closed. For the purpose of this scenario it is assumed that the road will remain open. Because of the distance of the spill from occupied buildings at Baton Rouge Junction and the direction of spill travel away from the property and Highway 61, it is unlikely that evacuation of the facility would be necessary.

E. Site Assessment

Upon arrival at the area affected by the release, the first action by Colonial's Emergency Response Team (employees and contractors) would be to assess the magnitude of the emergency in order to prioritize subsequent response actions and allocate available resources accordingly. As is clear from the information discussed thus far, the extent of travel of the spill upon arrival of the local response team would be dependent upon several variables.

Colonial employees or contractors would immediately begin monitoring explosive and oxygen concentrations in the atmosphere upwind and close to the spill site to establish appropriate exclusion zones in accordance with OSHA regulations. As the leading edge of the spill progresses away from the initial site, further air monitoring would be required at all points in the direction of flow where there is a potential for public contact with the spill. Access to these areas would be controlled accordingly.

Spread of the spill off Bengal's property would be towards the southeast into the retention pond and then towards Little Sandy Creek, and possibly southwest towards Colonial's Station #1 retention pond, Tank Farm #3 pond, and via drainage canals towards Little Sandy Creek. Due to the nature of the tank failure and adverse weather conditions, it is reasonable to assume that a significant amount of product would actually reach Little Sandy Creek. It is very difficult to accurately estimate the quantity of product that would reach the retention pond and be transported away from the facility. It is reasonable to assume that a significant portion of the spilled volume would not escape secondary containment of the tank and also the retention ponds.

For the purpose of this scenario and assuming adverse weather conditions, it is estimated that the average Little Sandy Creek channel velocity is approximately 2 ft/s, Thompson Creek is approximately 5 ft/s, and the Mississippi River is approximately 15 ft/s. The following landmarks have been identified downstream of the release entry point and the approximate time that fuel oil would reach these points during adverse weather conditions:

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Approximate distance downstream from previous segment (feet):	Minutes:	Item:
2,000	15 min	Entry point into Little Sandy Creek
20,000	167 min	Thompson Creek Confluence
10,000	33 min	Mississippi River Confluence
10,000	11 min	Recovery Pt LA25- 7 (River Mile 254)
105,600	117 min	Recovery Pt LA26A-1 (River Mile 234)
50,000	55 min	Six recovery points on LA26B
Totals: 197,000	398 min	River Mile 224

For the purposes of this discussion, it is assumed that assessment would begin approximately 20 minutes after the release occurred.

Initial site assessment would reveal that:

- a large volume of fuel oil was pooled inside the tank dike of Tank 1518, and the retention ponds located southeast, south, and southwest of the tank.
- a significant volume of fuel oil has infiltrated into the fine to medium grained sandy soils located along the drainage routes between the dike of Tank 1518 and the ponds and also offsite towards Little Sandy Creek.
- a large amount of fuel oil had escaped the retention ponds and was flowing into Little Sandy Creek.

The top priority activity would be to discuss with the FOSC and SOSC the need for an immediate evacuation of the public along Little Sandy Creek and Thompson Creek and the potential of Sector New Orleans restricting or closing the Mississippi River between Mile 260 and 250 to shipping and other marine activities. Local law enforcement, the US Coast Guard and local fire personnel would coordinate any necessary evacuations as needed.

Because the purpose of this exercise is to discuss a scenario where a large volume spill occurs, and a fire event would reduce the total volume of spilled product, it is assumed for the purposes of this discussion that no accidental ignition of the spill occurs.

In conjunction with assuring the protection of the public, efforts would begin to stem the spread of the release and to minimize the release volume. Response resources would be mobilized and positioned to deploy at pre-identified containment and recovery points downstream of the spill site. In addition, reconnaissance personnel would locate additional containment and recovery points and communicate these locations to the Incident Commander.

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F. Containment and Collection

Several factors would hamper efforts to collect and contain released fuel oil during the early stages of this release. The combined effects of adverse weather conditions (continued rainfall, darkness, and possible flooding conditions) would make spill reconnaissance, assessment of suitable collection points and deployment of equipment extremely hazardous and difficult. Containment and recovery operations will begin by establishing a “Last Stand” location and setting up additional containment and recovery sites upstream of the the “Last Stand” towards the source of the release to mitigate shoreline impacts to the extent possible while maintaining adequate containment resources.

Containment boom and recovery equipment would be deployed just upstream of the confluence of Thompson Creek at the Mississippi River. This location would be set up as a “Last Stand” location to prevent fuel oil from reaching the Mississippi River. This location is accessible by road along the left descending bank of the Mississippi River and is also accessible by vessel from the Mississippi River. The road condition is suitable for heavy equipment and truck access during adverse weather conditions. If needed, barges and waterborne recovery vessels can access the site from the river. Secondary containment can also be set up down stream of the “Last Stand” on Thompson Creek if needed.

As the released fuel oil travels downstream along Little Sandy Creek, pockets of fuel oil will begin to collect in natural occurring collection areas. Underflow dams and recovery sites will be constructed at points along the creek where appropriate to slow the movement of the oil and to collect and recover it. Based on initial assessments, containment boom will be positioned at multiple recovery points along Little Sandy Creek and Thompson Creek. Shallow water skimming vessels will be used in the section of Thompson Creek from the confluence of Little Sandy Creek to the Mississippi River.

If fuel oil were to reach the Mississippi River, it would enter the river along the east bank and immediately be transported downstream towards Profit Island, located approximately 1 ½ miles downstream of the confluence of Thompson Creek with the Mississippi River. Potential impacts to the Faulkner Lake and surrounding wetlands located on the east bank and within one half mile south of the Thompson Creek confluence with the Mississippi River (Map LA25) should be determined and protective booming utilized as appropriate. An assessment should be made to determine if a suitable recovery point can be established at the Amoco Road location (LA25-14). Deflection boom could be deployed upstream of Profit Island to deflect the fuel oil into the Profit Island Chute on the east side of the river. The chute is narrow and the current should be reduced significantly through the area and will allow for containment and recovery of the fuel oil within the chute. Collection boom could be deployed on the shoreline within the chute to allow for additional collection and recovery operations from the shoreline and on water.

Mobile skimming barges complete with skimmer and storage could be used to recover oil within Profit Island Chute. As soon as containment is achieved, improvements to the small dirt road may allow access for tanker trucks. A small dozer could be used to pull loaded tankers into and out of this area until improvements can be made.

Booming across the Mississippi River is impractical and extremely difficult due to the width of the river, the strong currents (entrainment), vessel traffic, and debris. It is highly unlikely that blockage of this important navigable water way would be allowed under any circumstance.

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Notwithstanding this fact, it is possible to utilize a combination of shoreline features, river current, and other booming strategies to effectively contain the fuel oil.

In addition to the recovery operations in Profit Island Chute, two other recovery sites would be established at locations identified on Map LA25A-1 & LA25A-2 along the right descending bank of the Mississippi River to recover fuel oil that may bypass the chute and remain in the main channel of the river.

Contingency measures include installing shoreline and dock protection boom to prevent the accumulation of oil in inaccessible areas and to mitigate the spread of further contamination in low lying areas which pose difficulties for the implementation of recovery efforts. All water intakes for commercial and industrial use should also have boom protection. Marinas, docks, landings, etc. all represent a significant secondary risk to increasing cleanup efforts and should be protected. The concept that a little oil will go a long way in these last two areas should be considered.

Information should continue to be gathered throughout the incident for operational purposes.

Contained product would be collected and placed into tank trucks at or near the recovery points or docks. Arrangements would be made with the appropriate governmental agencies to transport the product to the Baton Rouge Tank Farm or another alternate tank farm nearby. In addition to collection of all detectable “free product”, Colonial would work with the FOSC to establish other suitable means of site mitigation.

G. Resources

Equipment: Initial response would be limited to equipment and supplies immediately available at the Colonial Pipeline Company Baton Rouge Junction breakout tank facility. The deployment of equipment would be hampered by darkness and high water levels. For the initial response, contracted OSROs would deploy all available personnel and equipment from their Louisiana offices/warehouses for initial containment measures on Sandy Creek and Thompson Creek. Containment boom would be used for containment of escaped petroleum, as well as protection of ecologically sensitive areas including local water intakes for drinking water treatment plants. In addition, the contracted OSROs would mobilize appropriate resources from their other regional offices in the Gulf Coast Area.

All resources would rally to the Staging Area at the Baton Rouge tank farm just north of Tank 1518. Below is a list of personnel and response resource equipment that would be deployed to the designated areas of operations:

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Baton Rouge Tank Farm and surrounding properties:

- Personnel – 110 (incl. Supervisor, Responders, Operators)
- Vacuum Trucks – 12
- Portable skimmers - 3
- Diaphragm pumps – 12
- Air compressors – 6
- Roll Off boxes – 30
- Frac Tanks – 24
- Backhoes – 2
- Bobcat – 1
- Light plants – 10
- Portable toilets – 10
- Sorbent boom and materials will be available as needed

Last Stand (Thompson Creek @ Mississippi River)

- Personnel – 37 (incl. Supervisor, Responders, Operators)
- Boom – 3600 feet (containment boom)
- Vacuum Trucks – 3
- Response vessels – 3
- Portable skimmers - 4
- Diaphragm pumps – 3
- Air compressors – 2
- Roll Off boxes – 4
- Frac Tanks – 3
- Backhoes – 2
- Tanker trucks – 3
- ATV - 2
- Light plants – 5
- Portable toilets – 3
- Sorbent boom and materials will be available as needed

5 Response sites along Little Sandy Creek [*Establishing all 5 sites may not be required for an effective sustained response*]

- Personnel – 36 (incl. Supervisor, Responders, Operators)
- Boom – 1500 feet (containment boom)
- Vacuum Trucks – 6
- Response vessels – 1
- Portable skimmers - 7
- Diaphragm pumps – 10
- Air compressors – 5
- Roll Off boxes – 8
- Frac Tanks – 7

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- Backhoes – 4
- Dozer – 2
- ATV - 5
- Light plants – 5
- Portable toilets – 5
- Sorbent boom and materials will be available as needed

3 Response sites along Thompson Creek [*Establishing all 3 sites may not be required for an effective sustained response*]

- Personnel – 33 (incl. Supervisor, Responders, Operators)
- Boom – 7000 feet (containment boom)
- Vacuum Trucks – 3
- Response vessels – 4
- Shallow water skimmer vessels - 3
- Portable skimmers - 4
- Diaphragm pumps – 3
- Air compressors – 3
- Roll Off boxes – 1
- Frac Tanks – 1
- Backhoes – 1
- Dozer – 1
- ATV - 1
- Light plants – 2
- Portable toilets – 3
- Sorbent boom and materials will be available as needed

Personnel – All Gulf Coast District personnel listed in the Gulf Coast District Emergency Response Plan would be notified and mobilization procedures would be activated. Additional personnel would be mobilized from the adjacent Southeast District, Alpharetta, GA Office and other Districts. Colonial's Strike Team would also be notified and activated accordingly to relieve and provide support for local responders and to augment the Incident Command for a sustained response.

H. Resource and Procurement

In summary, sufficient contracted USCG-approved and HAZWOPER trained OSROs, Colonial Pipeline Company HAZWOPER trained maintenance contractors, and Colonial-owned containment and recovery equipment will be mobilized and operational within the required tiered response times. In addition, sufficient manpower will be available for a sustained response.

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Potential Shortfalls

Underestimation of surface water flow impact and adverse weather resulting in containment and recovery operations being ineffective.

Short-term shortage of HAZWOPER trained personnel.

Shortage of OSRO availability including equipment.

Potential vapor and health hazards preventing effective recovery of fuel oil.

Minimum Cleanup Time

One week for free product recovery.

Four to six weeks for stream and riverbank /critical areas.

Seven to twelve weeks for final cleanup.

Greater than eight weeks for NRDA related activities.

Disposal options are discussed in detailed Section 9.02 of this plan and will be followed accordingly.

Criteria for terminating the cleanup operation will vary for each incident. Consultation between the agencies involved or affected in the specific area is required prior to cleanup termination. Advice should be obtained from the FOSC and state environmental agency overseeing the response. One specific device to measure water cleanliness is the sheen test. However, this is not an all encompassing tool for measuring the cleanup. Another tool for determining termination is any shoreline assessment activity. After all involved parties have met and thoroughly assessed the area and determined the cleanup to be satisfactory, then the cleanup operation can be terminated.

I. Site Discontinuation

In general, response operations to contain, recover and mitigate would continue until both Colonial and the various appropriate governmental agencies are satisfied that further actions are unnecessary.

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MINIMUM RESPONSE RESOURCES

This section includes information on resources needed to respond to a release of product or an emergency.

Included are the resources available from within the District, Oil Spill Response Organizations (OSROS), other contractors, equipment and vendors.

The Project Leader is responsible to ensure that the OSROS included in the plan meet the U.S. Coast Guard qualification requirements and that the contact name, address and phone numbers are correct. This information will be reviewed on an annual basis. In addition, any non-US Coast Guard approved OSRO (non-OSRO) will be required to provide the Project Leader with semiannual certifications that their spill response equipment is properly maintained. The Project Leader will retain these certifications.

Minimum Resources for the Worst Case Discharge - Tank 1518

(b) (7)(F), (b) (3)

This is a Low Volume Area

Resource	Quantity Needed	Quantity Available By Source			Quantity Available on Site by Time		
		OSROs	Colonial	Others	Tier 1	Tier 2	Tier 3
Boom - 12" - 18" skirt	12100	>30000			20000	>25000	>25000
Boom - protective booming 6-12" skirt	5000	8500			8500	>10000	>20000
Skimmers – drum	6	45			6	20	19
Skimmers – other	12	54			15	20	19
diaphragm pumps 2-inch/3-inch (each w/50' suction and 200' discharge hose and air compressor)	28	45		10+	30	15	
centrifugal pumps 6-inch (each w/50' suction and 200' discharge hose)	0			2		1	
Frac tank - 20,000 gal	35	25		100+	35	25	>25
Personnel to deploy/manage equipment	141	75	50	25	150	200	
Tanker Trucks	7	1		30	10	15	13
Vac Trucks	24	16		45	25	15	>15
Skimmer barges	3	5			5		
Boats 16-18 foot 25 HP min	8	39			10	10	>10
Specified Tier Times							
On-scene arrival times:							
		High volume areas	Low volume areas				
Tier 1		6 hrs	12 hrs				
Tier 2		30 hrs	36 hrs				
Tier 3		54 hrs	60 hrs				

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Should an emergency occur, it becomes the responsibility of the employee who first becomes aware of an emergency is responsible for obtaining pertinent information and initiating the notifications as indicated on the "Emergency Notification Flowchart" found in Section 2.03 of this plan. The employee should continue to follow the notification flowchart until a supervisor or manager relieves them of that responsibility.

Definition of an Emergency

An emergency is an event that requires immediate response to mitigate the problem or conduct subsequent investigations. An emergency may involve:

- Injuries to an employee, contractor, or the general public
- Significant property damage
- Spilled product, a fire, or explosion
- Local media attention
- Required notification of local, state, and/or federal regulatory agencies

Information to Collect

It is important to obtain pertinent information regarding the emergency. The Initial Spill Information Report contained in Section 3.01 of this plan should be used to collect and document the desired initial information. Field operators who receive pertinent spill related information may also document such information in the narrative log.

Time Designation

Any time designation established during verbal communications, emails, text messages, documentation, etc. refers to local time for the location of the incident. This should be clearly noted in all documentation (i.e., 1:34 pm local time)

Initial Notification Procedures

Agency Notifications

It is imperative that timely and proper agency notifications are made. This includes notification of local police and fire departments. Personnel responsible for making the required agency notifications are identified in the Emergency Notification Flow Chart. An explanation of notification requirements of Federal, State and Local agencies in the event of a petroleum release and/or emergency is located in Corporate Procedure 30. A list of other Federal, State, and Local agencies that may be of assistance is located in Section 5.04 of this plan.

Immediate NRC Notification

Immediate notification to the National Response Center (NRC) is required for certain circumstances in accordance with 49CFR 195.52(a). These circumstances are if the event:

1. Caused a death or a personal injury requiring hospitalization;
2. Resulted in either a fire or explosion not intentionally set by the operator;
3. Caused estimated property damage, including cost of cleanup and recovery, value of lost product, and damage to the property of the operator or others, or both, exceeding \$50,000;
4. Resulted in pollution of any stream, river, lake, reservoir, or other similar body of water that violated applicable water quality standards, caused a discoloration of the surface of the water or adjoining shoreline, or deposited a sludge or emulsion beneath the surface of the water or upon adjoining shorelines; or

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NOTIFICATION & MOBILIZATION PROCEDURES

5. In the judgment of the operator was significant even though it did not meet the criteria of any other paragraph of this section.

Internal Notifications & Activation of Spill Management Team(s)

The “Emergency Notification Flowchart” posted at each Colonial facility contains emergency telephone numbers for key personnel to initially notify. It is the responsibility of the Incident Commander or his/her designee to decide whether or not to mobilize the District Spill Management Team and/or Strike Team. The Strike Team is activated for significant spills or emergencies. A roster listing the members of the Strike Team is contained in section 5.01 of this plan.

For significant events, the Incident Commander should discuss with the Crisis Management Team Leader the potential need to alert the Crisis Management Team. The Crisis Management Team Leader decides if the Crisis Management Team is to be activated.

Group Notification System

Personnel with emergency response roles are activated using a group notification system. The following two Group Notifications are used:

Group 4: Notifies Strike Team and other key personnel for significant spills/emergencies

Group 8: Notifies District personnel with emergency response responsibilities

The groups are initially notified using a simultaneous combination of:

- text messaging to cell phones and blackberries
- emails to PCs and blackberries

Group 4 notifications are issued by the Control Center (at least initially). Group 8 notifications are normally originated by district personnel. Initial group notifications may be short in content due to limited information being available at the time. They primarily serve as an alert. Follow-up group notifications should be made within an hour of the first alert to provide additional direction or the possibility of a stand-down.

Group 4 responders are split into two classifications: “Primary” and “Non-Primary”.

➤ Primary Responders

Primary responders consist of select Strike Team members and other key management and support personnel. Primary responders are identified in section 5.01 of this plan. **Primary responders are to telephone the Control Center (678-762-2263) within 15 minutes of receiving notification to advise of their availability.** The Control Center initiates follow-up telephone calls to Primary responders who do not contact the Control Center within 15 minutes. The Control Center provides the Strike Team Planning Section Chief with a report of Strike Team member availability within 45 minutes so the information is available for the 1 hr conference call.

➤ Non-Primary Responders

Non-Primary responders are not to contact the Control Center upon receiving a Group 4 notification (except for notification tests), They are simply be advised to the emergency situation and will be given further instructions for engagement as required.

Group 8 responders are to follow the instructions contained in the text message. Group 8 responders with designated ICS positions are to connect with their section leader for specific instructions on where and when to report. Section leaders will assemble their staffs.

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NOTIFICATION & MOBILIZATION PROCEDURES

Instructions for Sending Group Notifications

- Group notifications are sent using Microsoft Outlook and the following steps:
 1. From Outlook, click on the “New Mail Message” button in the upper left-hand corner
 2. In the “To” box type select the following combinations based on initiation of Group 4 or Group 8 Notification. **Initial Group 4 Notifications should only be performed by the Control Center. Group 8 Notifications should be initiated by designated District Personnel.**

For **Group 4 Notifications**, select ER_Group4_All from the Outlook address book. Alternatively select ER_Group4_Cell and ER_Group4_Email.

For **Group 8 Notifications**, Select ER_Group8_XXX_All from the Outlook address book (where XXX represents District – e.g. GCD, SED, or NED). Alternately, select ER_Group8_XXX_Cell and ER_Group8_XXX_Email

3. In the “Subject” box type **Group 4 Notification** or **Group 8 Notification**.
4. In the body of the message include pertinent information about the incident as described below.
5. Click on “Send”

- Message content

The initial message should provide the following information (if available):

- Indication of whether the release is suspected or confirmed
- General magnitude of release (no volume estimate should be included)
- Type of product involved
- Affected pipeline(s) and location of nearest city/airport

Note that there is a limit in the number of characters that can be included per text message. It may require multiple text messages to convey the required information.

Follow-up notifications may be used to provide more information as it becomes available, such as command post and staging locations.

Alternate Notification Method for Group Notifications

In the event Microsoft Outlook is unavailable for sending the Group Notification(s) as stated above, notification will be made by using the ICS phone tree. This phone tree follows the ICS structure outlined in Section 4.02.

The process of beginning this type of notification begins with the Incident Commander contacting the Documentation Unit Leader. The Documentation Unit Leader will then contact each identified Section Chief. The Documentation Unit Leader will confirm with the Incident Commander that all Section Chiefs have been notified.

After each Section Chief is contacted by the Documentation Unit Leader, it is the responsibility of the Section Chief to initiate the notification process in their line of command by contacting the first individual listed in their line of command on the ICS. The last individual in the line of command will contact their section chief to notify them the line of communication has been completed.

NOTE: If at any time during the notification process, an individual is unreachable, the person attempting to make contact, should skip this individual and contact the next individual in the IC structure in order to continue the notification process. The person who is responsible for

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contacting the unreachable individual should continue to make contact until successful or contact the Section Chief for guidance as to continue attempting notification or select another individual to fill the role.

If the Strike Team is to be notified, the Incident Commander will contact the CCOM on duty. The CCOM will coordinate contacting each Strike Team Member individually.

Communication via the phone the phone tree can be made by either text messaging or calling each individual. If text message is the chosen means for the notification, the recipient of the text notification shall confirm receipt of the text message to the sender. (Please note that if text messaging is chosen, text messages are limited to 100 characters and it may take several text messages to communicate the required information.)

It is the responsibility of the individuals identified in the IC structure to maintain current contact information for the individual(s) they are responsible for contacting.

Notification Documentation

All agency notifications must be documented. The time and date of such notifications shall be entered onto the Break & Leak Report (Form 3014) prepared for the spill. The Control Center typically notifies the National Response Center (NRC) when such notifications are necessary. This notification is normally made via the internet. A copy of the completed document shall be kept on file.

Records should be kept of internal notifications. Field operators may document initial notifications made per the Emergency Notification Flow Chart into the narrative log. The date/time that Group 4 and/or 8 notifications are sent, the content of the messages, and a listing of availability of responders are to be documented.

Strike Team Mobilization

Within 1 hour of the initial group notification, a conference call should be initiated by the Control Center and led by the Incident Commander with participation by select District and Strike Team members. Announcement of the time of the call, conference telephone number, and conference code information will be made via a separate text notification. The Strike Team Planning Section Chief will advise the Control Center of the specific participants to be sent the notification based on who is available for the given event. The conference call should last no longer than 20-30 minutes.

Participants

- All 4 Strike Team Incident Commanders plus local OM
- Day shift Strike Team Safety Officer plus local Safety Officer
- Day shift Strike Team Public Information Officer and Liaison Officers
- Current District and day shift Strike Team Section Chiefs (Operations, Planning, Logistics, and Finance)
- Adjacent district Operations Chief (nearest to spill location)
- Current District and Strike Team Resource Unit Leader
- District Documentation Unit Leader

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NOTIFICATION & MOBILIZATION PROCEDURES

Agenda

- Roll call, ground rules
- Current state of the response
- Initial action plan
- Identification of any significant gaps of concern
- Confirmation that immediate external resources (OSROs & critical consultants) have been mobilized
- Confirmation that required agency notifications have been made
- Location of incident command post and staging
- Identification of who will be filling the Strike Team Command Staff and Section Chief positions and their estimated times of arrival
- Confirmation that the command staff and section chiefs are assembling their organizations for both day and night shifts and identification of any significant personnel gaps of concern
- Set the shift schedule for the next work period and the time for the next work period to begin.

Conference Call Notes

Following the call, the Documentation Unit Leader will send a text message to the Group 4 and affected district Group 8 distributions alerting them to an upcoming email containing the notes from the conference call. After emailing the notes, they will be uploaded to the emergency response SharePoint site and/or entered into the Incident Event Log in the IAP software.

Immediate Mobilization for Certain Responders

Certain non-district resources are considered time critical and shall immediately prepare to mobilize to the spill site upon receiving a Group 4 notification (except such notifications that are clearly prefaced as “for informational purposes only”). These time critical resources are:

- Information Officer (Strike Team)
- Government Liaison (Strike Team)
- ICS Consultant Team (The Response Group)
- 3rd Party Monitoring Contractor Team

The Planning Section Chief is responsible for confirming immediate mobilization of the ICS Consultant. The Finance Section Chief is responsible for confirming immediate mobilization of the 3rd Party Monitoring Contractor.

During the 1st hour conference call, the Incident Commander may elect to cancel the mobilization of these resources.

Responder Mobilization and Transportation

Personnel assigned to the incident command post are to report to the command post. All other personnel are to initially report to staging.

Responders are to arrange for their own transportation to the site. If air travel is required, assistance in making reservations is available from Colonial's corporate travel agent:

Normal Business Hours:

678-762-2425 (in-house) or

404-591-7120; Toll Free: 800-878-2677 (Age of Travel)

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After Hours:

855-512-7952

On-line (Concur):

<https://www.concursolutions.com/travelhome.asp>

Should chartered air travel be warranted, contact information for such services in the Atlanta area is provided in Section 5.11 of this plan.

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COMMUNICATION METHODS & EQUIPMENT

Emergency Notification Equipment and Methods

Colonial uses computers, traditional phones, blackberries, cell phones and/or pagers as emergency notification equipment. Notifications are sent via text messaging, email, voice calls, and/or pagers as explained in section 2.01 of this plan.

Time Designation

Any time designation established during verbal communications, emails, text messages, documentation, etc. refers to local time for the location of the incident.

SharePoint

A SharePoint site has been established for use during an incident response. The site provides a resource for sharing information about the incident with the appropriate response personnel. Upon notification of an emergency response, the Environmental coordinator will begin to post relevant information (i.e. location of IC, Staging, etc.), manage security levels, etc. Incident responders will have access to the site for posting relevant information.

The designated SharePoint site can be accessed by first going to the Emergency Response Plan site. Next, go to the quick launch toolbar on the left hand side of the screen then click on the name of the incident.

Emergency Voice and Computer Communications Equipment

Colonial has available the following telephone communications equipment that can be used while responding to an emergency:

- 1) Traditional Public Switched Telephone Network (PSTN) land lines
- 2) Cell phones including AT&T/Cingular, Sprint Nextel and Verizon (depending on area code)
- 3) Cellular data cards
- 4) Nextel Two-Way Off-Network 5-mile Radio Phones
- 5) Satellite Phones
- 6) Dispatch voice circuits

Emergency Communications Equipment Locations

- 1) Traditional land lines where available
- 2) Over 600 cell phones are distributed throughout the company
- 3) Over 200 cellular data cards distributed throughout the company
- 4) Over 100 Nextel two-way radio phones are distributed throughout the company
- 5) Over 30 satellite phones are strategically distributed across the pipeline including one for most tank farms, one for each Director of Operations, several in the IT ER kit, and others in key locations
- 6) Dispatch voice circuits are used for pipeline operators and could be used for ER if needed

IT Emergency Response Kit

The Communications Leader maintains an ER kit which includes satellite phones and accessories.

Emergency Use Communications Programs

The National Communications System (NCS) offers a range of National Security and Emergency Preparedness (NS/EP) communications services that support qualifying federal, state, local and tribal government, industry, and non-profit organization personnel in performing their NS/EP missions. These services ensure a high probability of call completions in both wireline and wireless portions of the PSTN during emergency situations when there is extreme network congestion.

Government Emergency Telecommunications Service (GETS)

Colonial Pipeline Company

COMMUNICATION METHODS & EQUIPMENT

GETS provides emergency access and priority processing in the local and long distance segments of the public switched wireline network. Colonial received numerous GETS identification cards. IT maintains an updated list of Colonial responders with GETS cards.

GETS should only be used while performing duty in a NS/EP role during an emergency *after* experiencing call congestion or blockage. From a touch-touch or cell phone, GETS is accessed by dialing 1-710-627-4387. When you hear the tone, enter your 12 digit PIN. Listen for the prompt and then enter the 10 digit destination number. From an Iridium satellite phone dial 00-1-710-627-4387 and press send. When you hear the tone, enter your 12 digit PIN. Listen for the prompt and then enter the 10 digit destination number.

Note that GETS calls cannot be made to toll free phone numbers. GETS user assistance is available 24 hours a day at 800-818-4387 or 703-818-4387.

Wireless Priority Service (WPS)

WPS provides priority cellular network access that works complimentary to GETS to ensure a high probability of call completions in both the wireless portions of the PSTN. IT has implemented WPS for many cell phones and will continue to review and optimize the list of active WPS cell phones.

WPS is activated by dialing *272 prior to the destination number. If a cell phone is set up with WPS and you receive an "all circuits are busy" response, you can dial *272 code plus the phone number you wish to connect with to get priority service for your call.

Telecommunications Service Priority (TSP)

TSP provides service vendors with a Federal Communications Commission (FCC) mandate for prioritizing service requests by identifying those data and voice services critical to NS/EP. This priority only applies during the restoration of specific existing Colonial network services such as most of Colonial's AT&T Frame Relay wide area network and some voice circuits.

Iridium Satellite Phone Procedures

The Iridium satellite telephones operate through a network of 66 low-earth orbiting (LEO), cross-linked satellites. The Iridium network is the largest commercial satellite constellation in the world. Colonial's Iridium satellite phone network is a combination of docked, hard-wired installations at key pipeline locations, and hand-carry units for emergency response use. The docked satellite phones are also wireless/portable and can be taken anywhere (similar to the hand carry units). All Colonial satellite phones are compatible with U.S. Department of Homeland Security's WPS and can be used with your Colonial issued GETS card.

The Iridium satellite phones are simple to use.

- 1) You must be outside, with an unobstructed view of the sky (unless you are using a docking station or other exterior antenna configuration).
- 2) Turn the unit on; raise the integrated swivel antenna; the unit will register with the Iridium network.
- 3) Wait until you see a signal strength of at least three bars.
- 4) Dial your number; 001+ Area Code + Number; (Note: The 001 prefix is required for hand-carry units; it is NOT required if the unit is docked in a hard-wired configuration! Once a unit is docked, only standard, 10-digit dialing is required.)

Colonial Pipeline Company

COMMUNICATION METHODS & EQUIPMENT

Satellite Phone Numbers, Locations and Custodians

No.	Toll Free	Location	Custodian	Dock	Dist.
01	866-396-3638	Houston	Dean Chance	X	GCD
02	866-396-3642	Hebert	Robert Frank	X	GCD
03	866-396-3643	Lake Charles	Tim Poole	X	GCD
04	866-396-3645	Baton Rouge	Bobby Blouin	X	GCD
05	866-615-8245	Collins	Doyle Batte	X	GCD
06	866-396-3651	Gulf Coast District Office	Michelle Carnes	X	GCD
07	866-211-1332	Collins Tank Farm	Ann Brashier		GCD
08	866-755-1542	Gulf Coast Project Leader	Barry Conkle		GCD
09	866-396-3649	Moundville	Troy Gibbons	X	SED
10	866-396-3650	Pelham	Troy Gibbons	X	SED
11	866-396-0851	Atlanta	Gordon Cannon Preston Seagraves	X	SED
12	866-396-0853	Belton	Andy Martin	X	SED
13	866-396-0857	Charlotte	Andy Martin	X	SED
14	866-396-0858	Greensboro	Susan Adams	X	SED
15	866-396-0859	Southeast District Office	Val Harlow	X	SED
16	866-435-6959	Director of Operations (Paste)	Darren Pruitt		SED
17	866-213-8988	Atlanta Junction	Val Harlow		SED
18	866-396-0714	Mitchell	Clint Hamby	X	NED
19	866-623-2813	Mitchell	Clint Hamby		NED
20	866-396-0715	Richmond	Sean McFadden	X	NED
21	866-396-0716	Fairfax	Brandon La	X	NED
22	866-396-0717	Dorsey	Willie Heater	X	NED
23	866-396-0718	Woodbury	Eric Johnson	X	NED
24	866-396-0719	Linden	Matt Kane	X	NED
25	866-615-8246	Northeast District Office	Eric Johnson	X	NED
26	866-396-0721	Director of Operations (Northeast)	Gerald Beck		NED
27	866-396-0865	Norfolk	Terry Sullivan		NED
28	866-396-5923	Director, HSSE	Tom Cervino		OFF
29	866-396-5924	Emergency Response Kit	Mari Mardre		OFF
30	866-272-8076	Emergency Response Kit	Mari Mardre		OFF
31	866-441-9022	Emergency Response Kit	Mari Mardre		OFF
32	866-615-8243	Emergency Response Kit	Mari Mardre		OFF
33	866-615-8244	Sanctuary Park	Ray Reese/Security		OFF
34	866-615-8244	Collins	Doyle Batte		GCD
36	866-396-0720	Emergency Response Kit	Mari Mardre		OFF
37	866-438-1215	Emergency Response Kit	Mari Mardre		OFF

EMERGENCY NOTIFICATION FLOWCHART

Alliance Station (Remote)

1551 Highway 23 Belle Chasse, LA 70073
504-656-3563

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, and Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

All Emergencies: LA Hazmat Line 225-925-6595 or 877-925-6595	St. Bernard Parish Sheriff	911 or 504-271-2501
Plaquemines Parish Sheriff/Fire 911 or 504-564-2525	St. Bernard Parish/Fire	911 or 504-278-4275
Plaquemines - LA Spill Hazmat 504-297-5600	St. Bernard State Police	504-471-2775
Plaquemines Emer Planning 504-274-2476	St. Bernard Emergency Planning	504-278-4267
St. Tammany Parish Sheriff 911 or 985-898-2340	Coast Guard	504-846-6160
St. Tammany Parish Fire Dist. I 911 or 985-649-3665		
St. Tammany Parish Emer Planning 985-898-2359		
LA Dept of Environmental Quality 225-342-1234		

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

*Tom Cervino Wk: 678-762-2217
Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Baton Rouge Delivery - **ABANDONED**

Mengel Rd, Baton Rouge, LA

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Office of Emer. Preparedness - E. Baton Rouge Parrish 225-389-3035 or 3036	Fire	225-383-4425 or 911
LA HAZMAT Hotline 225-925-6595		
Police 225-389-2000 or 911		
West Baton Rge Emer Planning Com 225-343-9234		

THIRD: Notify Operations Manager * Carroll White Work: 225-570-3012 Cell: (b) (6) Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217
Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Baton Rouge Junction

1476 Hwy 61, Jackson, LA 70748

225-570-3030 800-388-6367

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Industrial Emergency Services	800-862-0466	Baker Fire	225-775-3712
All Emergencies - LA HAZMAT Hotline	225-925-6595	Baker Police	225-775-6000
St. Francisville Fire (24 hr)	225-784-3136	Zachary Fire	225-654-0026 or 911
W. Feliciana Parish Sheriff	225-635-3241	Zachary Police	225-654-9393 or 911
W. Feliciana Emer Planning Com	225-635-3241 or 225-343-8337	Pointe Coupee Parish Emer Plan Com	225-287-4068
W. B/Rge Parish Sheriff	225-343-9234	E. Feliciana Emer Operations	225-683-5459
W. B/Rge Emer Plan Com	225-343-9234	E. Feliciana Parish Police	225-683-5459
W. B/Rge Parrish Fire	225-343-6691	E. B/Rge Parish Fire	225-383-4425 or 911
E. B/Rge Emer Plan Com	225-389-2100	St. Helena Parish Sheriff & Fire (LA)	225-222-4413
E. B/Rge Parish Police	225-389-2000 or 911		
E. Feliciana Director of Homeland Security	225-244-5881		

THIRD: Notify Operations Manager * Carroll White Work: 225-570-3012 Cell: (b) (6)
Home: (b) (6) Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

***Tom Cervino Wk: 678-762-2217**
Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith
Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze
Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle
Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Beaumont Station (Remote)

2655 Gulf States Rd. Beaumont, TX
409-833-4455

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

TX Dept. of Public Safety	409-924-5456	Pt. Arthur Fire Chief	409-983-8734
Jefferson Cnty Emer Mgmt	409-835-8672	Pt. Arthur City Emerg. Mgt. Coordinator	409-983-8616
Jefferson Cnty Sheriff Dept	409-835-8411	Pt. Arthur Police Chief	409-983-8611
Coast Guard	409-723-6500	Beaumont Fire Dept	409-838-6371

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6)
Home: (b) (6) Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Cedar Bayou Injection

4201 FM 1942, Baytown, Tx 77521

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Baytown Emer Mgmt	281-420-6558	Harris Cnty Emer Mgmt	713-881-3100 (24 Hr)
Baytown Police Dept.	281-422-8371	Harris Cnty Sheriff	713-221-6000 (24 Hr)
Chambers Cnty Sheriff	409-267-8318 (24 Hr)	Harris County East Dispatch (fire & EMS)	281-847-5544
Chambers Cnty Emer Mgmt	409-267-8343	Center Point	281-894-0491 (24 Hr)
		Dayton Police Dept.	936-258-7621 (24 Hr)

THIRD: Notify Operations Manager * Adam Wolfe **Work:** 409-291-5644 **Cell:** (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino **Wk:** 678-762-2217 **Cellular:** (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 **Cellular:** (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 **Cellular:** (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 **Cellular:** (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Church Point Station

2105 Britany Hwy Church Pt., LA 70525
337-684-5416

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

LA HAZMAT Hotline	877 or 225-925-6595	Acadia Sheriff	337-788-8700 or 911
Office of Emer. Preparedness - Acadia Parish		Opelousas Police Dept. (inside city limits of Opelousas)	
	337-783-4357		337-948-2500
Office of Emer. Preparedness - St. Landry Parish		LA Dept of Environmental Quality	225-342-1234
	337-948-7177		
LA State Poliec (Troop I in Lafayette)	337-262-5880	St. Landry Parish Sheriff	337-948-6516
LA State Police (Troop D in Lake Charles)	337-491-2511	Crowley Sheriff	337-788-8772

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Collins Delivery

1702 S. Fir Ave Collins, MS 39428

601-765-4434

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Collins Fire Dept	911 or 601-765-5110
Covington Emer Mgmt	601-765-6687
Covington Cnty Sheriff/Fire	911 or 601-765-4216
Collins Police Department	601-765-4491

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Collins Injection

357 Hwy 588 East Collins, MS 39428
601-765-4433 800-688-7742 601-765-9164

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Collins Fire Dept	911 or 601-765-5110
Covington Emer Mgmt	601-765-6687
Covington Cnty Sheriff/Fire	601-765-4216

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

*Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Collins Station

59 Dennis Knight Rd, Collins, MS 39656
601-765-4951

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Collins Fire Dept	911 or 601-765-5110
Covington Emer Mgmt	601-765-6687
Covington Cnty Sheriff/Fire	601-765-4216

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6) Home: (b) (6) Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Collins Tank Farm

35 Pump Station Road Collins, MS 39428
601-765-6589 601-765-9156

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Collins Fire Dept	911 or 601-765-5110
Covington Emergency Mgmt	601-765-6687
Covington Cnty Sheriff/Fire	911 or 601-765-4216

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith
Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze
Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle
Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Columbia Station (Remote)

369 Hathorne Rd Oakvale, MS 39656

601-736-5791

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Columbia Fire	911 or 601-736-4418
Marion Cnty Sheriff	601-736-2711
Columbia Emer Mgmt.	601-736-9627
Columbia Police	601-736-8204

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Epes Station (Remote)

11261 Sumter 20 Epes, AL 35460

205-652-7642

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Sumter County Sheriff Dispatch	911 or 205-652-2841
Sumter County Fire	205-652-2223
Emergency Management	205-652-6347

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell (b) (6) Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Felixville Station

8089 Folley Brown Rd Clinton, LA 70722
225-683-8246

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

All Emergencies - LA HAZMAT Hotline	225-925-6595	Emer Operations - E. Feliciana	225-683-5459
E. Feliciana Parish Sheriff	225-683-5459	Clinton Fire	225-683-5459
E. Feliciana Director of Homeland Security	225-244-5881		

THIRD: Notify Operations Manager * Carroll White Work: 225-570-3012 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Hebert Station

13300 West Port Arthur Rd. Beaumont, TX 77705
409-722-4054 800-388-2577

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

TX Dept of Public Safety	409-924-5456	Pt. Arthur Fire Dept	409-983-8740
Coast Guard	409-723-6500	Beaumont Fire Dept	409-838-6371
Jefferson Cnty Sheriff Dept	409-835-8411	Chambers Cnty Emer Mgmt (daytime)	409-267-2445
Pt. Arthur Fire Chief	409-983-8734	Chambers Cnty Sheriff Dept (24hrs)	409-267-8318
Pt. Arthur City Emergency Mgm.Coordinator	409-983-8738	Pt. Arthur Police Chief	409-983-8611

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART**Houston Station**

302 1/2 Jefferson Street Pasadena, TX 77501
713-473-2434 800-723-0017

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill ≥ 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Deer Pk Emer Mgmt	281-478-7298	Harris Cnty Emer Mgmt	713-881-3100 (24 Hr)
Deer Pk Police (24 Hr)	281-479-1511	Harris Cnty Sheriff	713-221-6000 (24 Hr)
Port Terminal Railroad (24 Hr) Pasadena		Pasadena Police (non emergency)	713-477-1221 (24 Hr)
Yard Master	713-393-6790	Pasadena Police (emergnecy)	713-475-7800 (24 Hr)
Galena Park Dispatch - Fire/Police/EMS	713-675-3471 (24 Hr.)	CenterPoint	281-894-0491 (24 Hr)
Jacinto City Dispatch - Fire/Police/EMS	713-672-2455		
Coast Guard	409-723-6500 x0		

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6)

Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers**District Environmental Mgr * Randy Smith**

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Kola Station (Remote)

31 Pump Station Rd Collins, MS 39428
601-765-6383

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Collins Fire Dept	911 or 601-765-5110
Covington Emer Mgmt	601-765-6687
Covington Cnty Sheriff/Fire	911 or 601-765-4216

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Krotz Springs

329 Highway 105, Krotz Springs, LA 70750
337-566-3907

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

All Emergencies - LA HAZMAT Hotline	225-925-6595	St. Landry Parish EMS	337-948-8404
Krotz Springs Police	337-566-3784	St. Landry Parish Sheriff	337-948-6516
All Emergencies: St. Landry Parish Emer Planning Com	337-948-7177		
Krotz Springs Fire	337-566-3311 or 337-566-3900		
Point Coupee Parish Emer Planning Com	225-287-4068		

THIRD: Notify Operations Manager * Carroll White **Work:** 225-570-3012 **Cell:** (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino **Wk:** 678-762-2217 **Cellular:** (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 **Cellular:** (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 **Cellular:** (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 **Cellular:** (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Lake Charles Station

2053 Clifton Ridge Rd, Sulphur, LA 70665
337-882-1711

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

LA HAZMAT Hotline	877 or 225-925-6595	Cameron Parish Sherrif, Fire	337-775-5111
Office of Emer. Preparedness - Cameron Parish	337-775-7048	Calcasieu Parish Sheriff	337-491-3700
Office of Emer. Preparedness - Calcasieu Parish	337-721-3800	LA Dept of Environmental Quality	225-342-1234
LA State Police (Troop D - Lk. Charles)	337-491-2511	LA State Police (Troop I - Lafayette)	337-262-5880
		Lk Charles Police (Inside city limits)	337-491-1311

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell (b) (6)

Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

McComb Station (Remote)

7154 Centerville Rd. Magnolia, MS 39652

601-783-2341

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Magnolia Fire Department	911 or 601-783-5211
McComb Fire Department	911 or 601-684-2124
Pike Cnty Sheriff	601-783-2323
Pike County Emergency Management	601-684-3564

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6) Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Meridian Delivery

6530 N. Frontage Rd Meridian, MS 39307
601-483-3735

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Meridian Fire & Police	911 or 601-485-1821
Meridian Police Chief (C)	601-527-7070 (H) 601-485-2713
Lauderdale Cnty Fire	601-486-4952
Lauderdale Cnty Sheriff	601-486-4952
Lauderdale Cnty Emer Mgmt	601-482-9852

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Meridian Station

4917 State Blvd Meridian, MS 39307

601-483-6893 800-444-7742

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Meridian Fire & Police	911 or 601-485-1821
Meridian Police Chief (C)	601-527-7070 (H) 601-485-2713
Lauderdale Cnty Fire	601-486-4952
Lauderdale Cnty Sheriff	601-486-4952
Lauderdale Cnty Emer Mgmt	601-482-9852

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)

Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

North Port Arthur Station

800 Dorsey Road Port Arthur, TX 77640

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

TX Dept of Public Safety	409-924-5456	Pt. Arthur Fire Chief	409-983-8740
Jefferson Cnty Emer Mgmt	409-835-8672	Pt. Arthur City Emergency Mgm. Coordinator	409-983-8616
Jefferson Cnty Sheriff Dept	409-835-8411	Pt. Arthur Fire Dept	409-983-8700
Coast Guard	409-723-6500	Pt. Arthur Police Chief	409-983-8611

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6) Home: (b) (6) Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)
Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART**Opelousas Delivery (Remote)**

5495 Hwy 182 (16 Mi. North of I-10) Church Point, LA 70525

337-942-4742

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

LA HAZMAT Hotline Office of Emer. Preparedness - Acadia Parish 337-783-4357	877 or 225-925-6595	Acadia Sheriff Opelousas Police Dept. (inside city limits of Opelousas) 337-948-2500	337-788-8700 or 911
Office of Emer. Preparedness - St. Landry Parish 337-948-7177		St. Landry Parish Sheriff Crowley Sheriff LA Dept of Environmental Quality LA State Poliec (Troop I in Lafayette)	337-948-6516 337-788-8772 225-342-1234 337-262-5880
LA State Police (Troop D in Lake Charles)	337-491-2511		

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

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Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

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Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Orange Station (Remote)

FM 1006 Orange, TX

409-883-9549

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

TX Dept of Public Safety	409-898-0770	Coast Guard	409-723-6500
Orange Cnty Emer Mgmt	409-882-7926	Orange Cnty DPS	409-883-0273
Orange Cnty Sheriff Dept.	409-883-2612	Orange Police & Fire Dept	409-883-1026
Pt. Arthur Fire Chief	409-983-8734	Pt. Arthur Police Chief	409-983-8613
Pt. Arthur City Emerg Mgmt. Coord	409-983-8611		

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6) Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Pasadena Injection (Remote)

916 N. Witter Pasadena, TX 77501

713-473-6984

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

Harris Cnty Emer Mgmt	713-881-3100	Harris Cnty Emer Mgmt	713-881-3100 (24 Hr)
Pasadena (Dispatch) Fire/EMS/Police	713-473-2273	Harris Cnty Sheriff	713-221-6000 (24 Hr)
Port Terminal Railroad Yard Master	713-393-6790	Pasadena Police (non emergency)	713-477-1221 (24 Hr)
Coast Guard	409-723-6500 x0	Pasadena Police (emergency)	713-475-7800 (24 Hr)
Centerpoint	281-894-0491 (24 Hr)		

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell (b) (6)

Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Paulding Station (Remote)

3692 County Road 16, Louin, MS
601-764-4385

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Jasper Cnty Sheriff & Fire	911 or 601-764-2588
Jasper County Emergency Management	601-764-3800

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

* **Tom Cervino Wk: 678-762-2217 Cellular: (b) (6)**

In the event none of the individuals listed can be reached immediately, the person discovering the spill shall make all necessary agency notifications.

See Section 5.01 for Contact Numbers

District Environmental Mgr * Randy Smith

Work: 601-765-9174 Cellular: (b) (6)

Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

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EMERGENCY NOTIFICATION FLOWCHART

Poplarville Station (Remote)

1327 Savannah-Millard Road Poplarville, MS 39470

601-795-6179

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Poplarville Police	601-795-2241 or 601-795-4447
Poplarville Fire Dept.	911 or 601-795-2200
Pearl River Cnty Sheriff	911 or 601-795-2241
Pearl River Cnty Emer Planning	601-795-3058

THIRD: Notify Operation Manager * David Peeler Work: 601-765-9160 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

Director of Health, Safety, Security, and Environmental

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District Environmental Mgr * Randy Smith

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Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)
Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Port Arthur Station (Remote)

1825 H. O. Mills Port Arthur, TX

409-736-2644

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.

If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.

If necessary, request the nearest staffed location to assist in making the notifications below:

TX Dept of Public Safety	409-924-5456	Pt. Arthur Fire Chief	409-983-8734
Jefferson Cnty Emer Mgmt	409-835-8672	Pt. Arthur City Emergency Mgm. Coordinator	409-983-8616
Jefferson Cnty Sheriff Dept	409-835-8411	Pt. Arthur Fire Dept (24hr)	409-983-8700
Coast Guard	409-723-6500	Pt. Arthur Police Chief (24hr)	409-983-8600

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6) Home: (b) (6) Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

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Home: (b) (6)

Director of Operations * Greg Glaze

Work: 409-291-5645 Cellular: (b) (6)

Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

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EMERGENCY NOTIFICATION FLOWCHART

Shiloh Station

Hwy 61 Hankamer, TX
409-374-2101

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

Baytown Emer Mgmt	281-420-6558	Baytown Police Dept.	281-422-8371
Entergy	800-340-3604	Chambers Cnty	409-267-8318
Liberty Police (Inside City Limits)	936-336-5666	Harris County East Dispatch	281-847-5544
Liberty Sheriff (Outside City Limits)	936-336-4500	Dayton Police Dept.	936-258-7621 (24 Hr)
Coast Guard	409-723-6500		

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

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Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

EMERGENCY NOTIFICATION FLOWCHART

Welsh

Hwy 99 (4 Mi. N of I-10) Welsh, LA 70591

337-734-3383

Employee Is Notified, or Discovers, that an Emergency Exists.
Employee Receiving The Notification Is To Record The Name And Phone Number Of The Individual Making The Notification
And Complete The Leak Report and Checklist (Form 7082).

FIRST: Notify Atlanta Controller - Voice Line – 800-926-2728 if spill \geq 5 gal.
If required, District Operations initiates a Group 8 notification and/or the Atlanta Controller initiates a Group 4 notification.

SECOND: Notify Police, Fire, Emergency Management Agencies in Suspected Area.
If necessary, request the nearest staffed location to assist in making the notifications below:

LA HAZMAT Hotline	877 or 225-925-6595	Jeff Davis Sheriff	337-824-3850
Office of Emer. Preparedness - Jeff Davis Parish	337-824-3850	Jeff Davis Fire & Police	337-734-2625 or 2626
Office of Emer. Preparedness - Calcasieu Parish	337-721-3800	Calcasieu Parish Sheriff	337-491-3700
LA Dept of Environmental Quality	225-342-1234	Lk Charles Police (Inside city limits)	337-491-1311
LA State Police (Troop I in Lafayette)	337-262-5880	Lk Charles Police (Inside city limits)	337-491-1311
LA State Police (Troop D in Lake Charles)	337-491-2511		

THIRD: Notify Operations Manager * Adam Wolfe Work: 409-291-5644 Cell: (b) (6)
Home: (b) (6) * Initiates Group 8 Notification

In the event the Operations Manager cannot be reached immediately, contact one of the three persons listed to the right. In the event one of these people cannot be reached immediately, contact the

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Home: (b) (6)

District Project Leader * Barry Conkle

Work: 601-765-9173 Cellular: (b) (6)

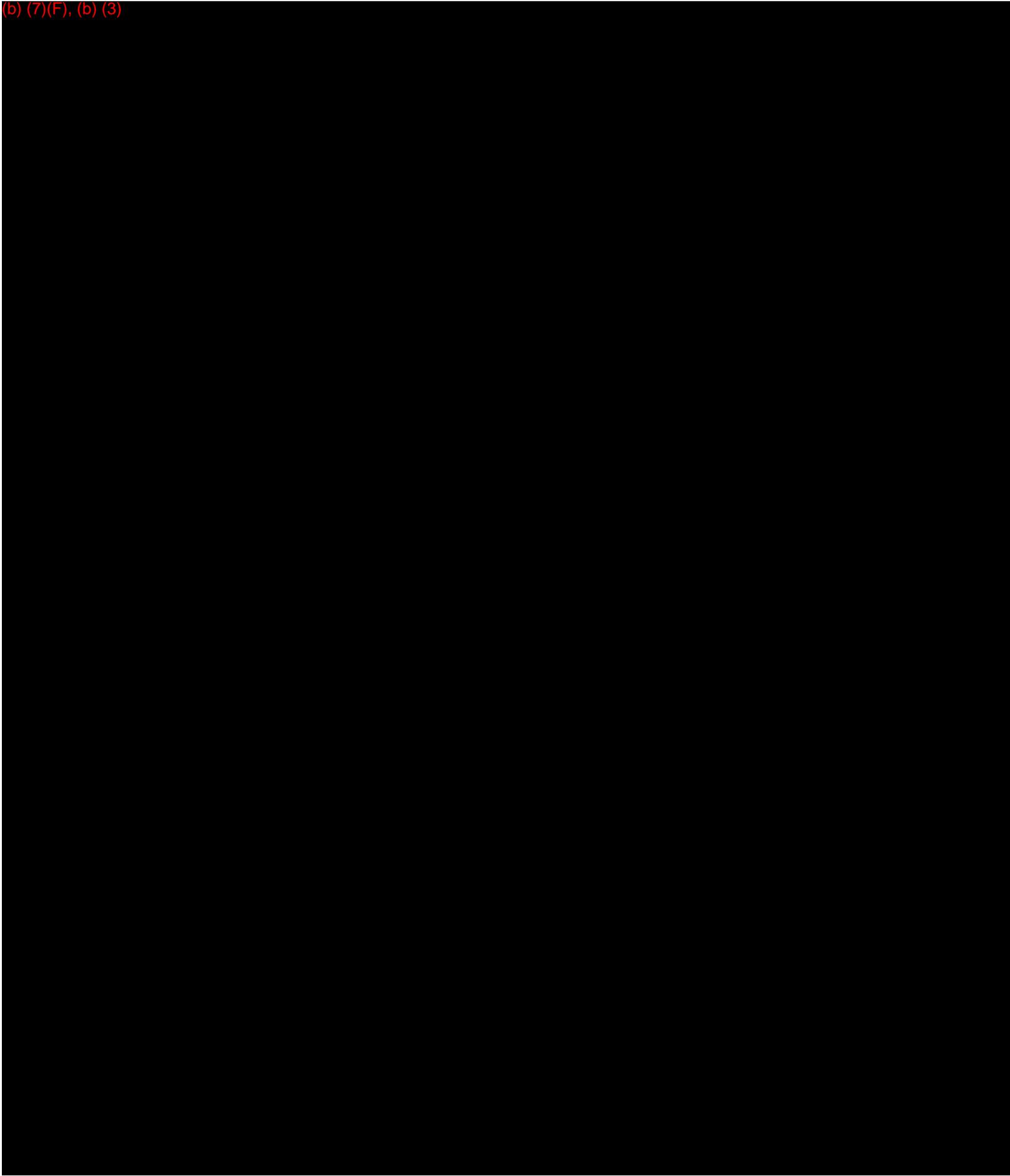
Home: (b) (6)

Further state and federal notifications will be made by the Operations Manager, Director of Operations, District Project Leader or District Environmental Project Manager following the guidelines of Corporate Procedure 30. The Director of Operations and District Environmental Manager should be consulted in every case, if possible in a timely manner, to ensure regulatory agencies are appropriately notified.

Responsible Parties for government notification, along with contact information, is included in Corporate Procedure 30.

Colonial Pipeline Company
LEAK DETECTION AND EMERGENCY PROCEDURES

(b) (7)(F), (b) (3)



Colonial Pipeline Company

LEAK DETECTION AND EMERGENCY PROCEDURES

Colonial has developed Operating Procedures for events and conditions that are considered emergency operations for the pipeline control center and facilities. These procedures cover:

- Fire or explosion
- Leak
- Tank Overflow
- Evacuation
- Complete Loss of Communication
- Natural Disasters
- Security

Colonial's Operating Procedures are available to all Operators and Controllers via the Colonial Intranet. In addition, paper copies are available at each Controller Console in the Atlanta Control Center and at all staffed Delivery Facilities.

Abnormal and emergency operations can be prevented or mitigated through training, both initial and recurring. All of these events are discussed during the following:

- Associate Controller training (initial certification)
- Simulator training (annual three-hour session)
- Maximum Critical Event training (twelve tabletop scenarios per year)

LEAKS

The criteria listed below should serve as a guide for determining the action to be taken by the Controller or Operator.

REPORTS ACCEPTED AS CONCLUSIVE EVIDENCE OF A LEAK REQUIRING THE LINE TO BE SHUT DOWN IMMEDIATELY:

1. Reported visual sighting of product/vapor (including product release due to line damage/puncture by equipment).
2. Sudden unexpected change in pressure and/or flow rate.
3. Suspected leak monitoring/investigation has determined a leak is present
4. Activation of Leak Detection Alarm

REPORTS OF THE FOLLOWING ARE TO BE INVESTIGATED WHILE CONTINUING TO OPERATE THE LINE UNDER CLOSE OBSERVATION:

1. Report of product odor
2. Report of soil discoloration
3. Report of dead vegetation on or in the vicinity of the right of way
4. Report of sheen on water in vicinity of right-of-way
5. Unusual Low pressure trend.
(Exp: Returning to service of an inactive line or segment of line.)
6. Unusual variance in flow rates/pressure between Origin and Delivery Points.
(Exp. High origination and injection rates or low delivery rates.)
7. Unexpected alarm/condition which may indicate a leak.

IF THERE IS EVER ANY DOUBT OF THE EXISTENCE OF A LEAK, THE LINE WILL BE SHUT DOWN AND THE SUSPECT LINE SEGMENT WILL BE ISOLATED.

Information to Obtain

Colonial Pipeline Company

LEAK DETECTION AND EMERGENCY PROCEDURES

Information should be as complete and detailed as possible in order to determine the location and extent of the emergency. Company Form No. 7082, REV. 11/98 "Leak Report Questionnaire/Checklist" (shown on following page), should be completed when receiving a call concerning a leak or other emergency.

After the basic information has been obtained and initial notification and/or actions have been taken (monitoring the line for a pressure drop/increased flow rate, or in the case of a confirmed leak, shutting down the line), the person receiving the call should determine the following:

- Colonial Alignment Map Number
- Stationing
- Area involved (farmland, homes, or industrial, etc.)
- Direction and distance from communities, highways, rivers and railroads
- Type of product
- Amount of product (size of leak and area covered).

The employee who first becomes aware of the emergency should immediately notify the Atlanta Controller or originating location. Notification should then be made as outlined on the Emergency Notification flow chart posted at all locations (Section 2.03 of this plan).

After the initial notification and/or actions have taken place, the employee should contact the Atlanta Controller or originating location with any additional information available. This information should include pressure changes, flow rate changes, malfunction of equipment, etc.

Colonial Pipeline Company
LEAK DETECTION AND EMERGENCY PROCEDURES
LEAK REPORT QUESTIONNAIRE/CHECKLIST

WHEN A REPORT OF A LEAK OR A SUSPECTED LEAK IS RECEIVED, THE PERSON RECEIVING THE CALL SHOULD OBTAIN SUFFICIENT INFORMATION FROM THE PERSON MAKING THE REPORT TO COMPLETE THE FOLLOWING SECTIONS OF THIS FORM.

TIME:	LINE NUMBER:	CONTROLLER/OPERATOR:	DATE:
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LOCATION OF LEAK:

CITY, COUNTY & STATE

STREET OR ROAD NUMBER

LANDMARKS OR OTHER REFERENCE LOCATIONS:

IS THERE FIRE OR PERSONAL INJURY? (IF YES, DETAILS)

HAVE THE FIRE AND POLICE DEPARTMENTS BEEN NOTIFIED?

LEAK REPORTED BY:

NAME:

ADDRESS:

PHONE NUMBER:

TITLE OR ORGANIZATION:

IF IT CAN BE DETERMINED, PRODUCT AT LEAK SITE: GASOLINE KEROSENE FUEL OIL

NOTICE

**REPORTS ACCEPTED AS CONCLUSIVE EVIDENCE OF A LEAK REQUIRING
THE LINE BE SHUT DOWN IMMEDIATELY:**

1. THE LINE HAS BEEN DAMAGED OR PUNCTURED BY EQUIPMENT.
2. POLICE OR FIRE DEPARTMENT REPORTS VISUAL SIGHTING OF PRODUCT OR HAVE RECEIVED CALLS OF A VISUAL SIGHTING.
3. SUDDEN CHANGE IN PRESSURE AND/OR FLOW RATE.
4. INDIVIDUAL MAKES A POSITIVE REPORT OF PRODUCT SIGHTING.

**REPORTS OF THE FOLLOWING ARE TO BE INVESTIGATED WHILE CONTINUING
TO OPERATE THE LINE WHILE MAINTAINING CLOSE OBSERVATION:**

1. REPORT OF ODOR
2. REPORT OF SOIL DISCOLORATION.
3. DEAD VEGETATION ON, OR IN THE VICINITY OF, THE RIGHT OF WAY.
4. RECURRING MINOR HOURLY SHORTAGES.

INVESTIGATION OF THESE REPORTS MAY CONFIRM THAT A LEAK EXISTS. IN THE EVENT OF A CONFIRMED LEAK, THE LINE WILL BE SHUT DOWN IMMEDIATELY, AND THE SEGMENT EVACUATED AND ISOLATED.

AFTER COMPLETING THE REPORT, THE PERSON RECEIVING THE CALL SHOULD REFER TO THE NOTIFICATION PROCEDURE AS SHOWN ON THE "EMERGENCY NOTIFICATION FLOW CHART." THIS CHART IS LOCATED IN THE "NOTIFICATION" SECTION OF THIS GUIDE.

INITIAL ACTION TAKEN
(USE BACK OF FORM IF NECESSARY)

Form 7082 – Revised 11/03/98

Colonial Pipeline Company

INITIAL RESPONSE ROLES & RESPONSIBILITIES

PROCEDURES

INITIAL PROCEDURES

Upon confirmation of a release, Colonial must make an initial assessment to determine the type of material and estimated volume. This assessment is usually conducted by the Atlanta Control Center Operations Manager. As part of this initial assessment, it is necessary for Colonial field personnel to determine the geographical and environmental factors of the area surrounding the release in order to plan the proper protective and remedial measures. The steps for the ascertaining the environmental impact of the release are as follows:

Release site: Investigate the release location and the affected natural areas to verify the extent of damage. Determine if any immediate actions at the scene can lessen further damage. At the release site, Colonial Personnel should determine the direction and rate of the flow. Steps should be taken to stop the discharge of additional material and to safely contain the release if possible.

Areas of immediate danger: Following the assessment of the spill site, Colonial or its' contractors should examine the areas immediately downstream or adjacent to the release, which may not have been affected, but are in immediate danger of contact with the release. (*"Immediate danger" can be defined as occurring in a matter of hours.*) If sensitive areas are located, then preemptive measures should be taken to minimize the impact prior to contact with product. This includes, but is not limited to, booms, dams, or other diversion measures to lessen the impact prior to contact.

Areas of potential danger: While steps are being taken to control the spread of the release, Colonial shall conduct reconnaissance to determine what other sensitive areas might be impacted if the flow continues downstream. If sensitive areas are located, provisions shall be made to protect these areas. Preparation should be made for the deployment of additional resources as necessary.

SECONDARY PROCEDURES

Once a sensitive area has been identified and protective measures have been taken, the Colonial site commander shall monitor the integrity and effectiveness of those measures. At a minimum, a daily inspection will be carried out to ensure that the protective measures are secure and that no additional measures are required. The Colonial site commander will also monitor the ecological health of the threatened area.

PUBLIC AFFAIRS COMMUNICATIONS STRATEGY

Objective

By effectively communicating factual information about Colonial objectives, functions, accidents, accomplishments, plans, activities, facilities, and personnel, Colonial's public and community relations activities should:

- Create acceptance of Colonial as a good neighbor serving an important purpose
- Promote credibility, respect, and fair treatment on the part of news media and community leaders toward Colonial
- Avoid or correct misunderstandings about Colonial

Colonial Pipeline Company

INITIAL RESPONSE ROLES & RESPONSIBILITIES

- Defend Colonial's reputation at all times, but particularly during times of crises when erosion of that reputation is most likely to occur. Defending Colonial in the "court of public opinion" is especially critical

Organizational Responsibility

The Director of Communications will coordinate the release of information about Colonial, obtaining prior leadership approval as required.

Media inquiries and information requests to Colonial will be directed to the Director of Communications who will either respond or authorize others to respond, with the approval of leadership.

As an exception, an officer, leader, or manager may make a direct response if he or she believes it is appropriate and in the best interest of Colonial. However, the Director of Communications must be informed of such contacts and, as a general rule, all requests and inquiries should be referred to the Public Affairs.

General

Advance approval must be obtained from Corporate Communications before providing information that has not been published or released previously in the following areas:

- Colonial's position on topical issue
- Colonial financial data
- Expansion plans, personnel changes, and new or changed policies
- Technical operating data
- Articles, speeches, and papers that refer to Colonial
- Photographs of Colonial facilities
- Advertisements

Dealing with the Media

The content and tone of answers to questions will have a definite bearing on how favorable the coverage is to Colonial. Be confident. Do not be defensive or vague. Do not be critical of other agencies involved. Be factual and courteous. Do not speculate.

Reporters cannot be "brushed off." Any attempt to avoid cooperating with them will hurt Colonial. Calm, advised answers make their jobs easier, and will more quickly satisfy them. A promise to supply more complete information later must be kept. Supplemental information may be forwarded even though it is not specifically requested.

Reporters live by deadlines and want as much information as possible as soon as possible. An emergency is a difficult time to give a clear and complete story. Do not give a persistent reporter hasty, incorrect, or answers in exasperation. Do not be intimidated. When possible, answer specifically what is asked. Try to avoid embellishing.

If asked a question that cannot be answered, give a valid reason why this is the case. It is acceptable to say, "I do not know the answer to that." Never say "No comment."

Employees should not, except as authorized, consent to interviews with the news media, insurance adjusters, government investigators, or other non-Colonial personnel.

Colonial Pipeline Company

INITIAL RESPONSE ROLES & RESPONSIBILITIES

All Emergencies

In emergency situations, designated field personnel may respond directly, as provided under Minor Emergencies and Major Emergencies below. Corporate Communications should be informed of all inquiries and answers so all corporate responses can be coordinated, made current, remain consistent, corrected, and clarified as necessary.

Minor Emergencies

To prevent exaggerated reports, the Director of Communications (or Director of Operations, Operations Manager, or other designated Company spokesperson when the Corporate Communications Manager is unavailable) will respond to all inquiries following the guidelines listed below:

- Confirm that Colonial has experienced an irregularity in operations, but emphasize that there is no apparent danger to the public. If there are dangers to the public state them factually and explain what actions local government agencies and Colonial are taking.
- In simple terms, describe what happened, where it happened, and when.
- Explain what is being done to remedy or normalize the situation.

Major Emergencies

In the event of news media inquiries regarding events such as fires, explosions, significant releases, pollution, property damage, sabotage, serious injuries, death, or any potential hazard or immediate danger to the public, the following procedure will be followed:

The Director of Communications, with leadership approval, will coordinate all communications and will respond to all inquiries received at the incident site and at the Atlanta Office.

The Director of Operations, or in his absence, the ranking Operations Manager or other designated Company spokesperson, while awaiting the arrival of the Director of Communications, should make every effort to give factual, complete information to news media as soon as possible. The Colonial spokesperson should normally be the single source of information at the scene.

In the absence of the Director of Communications, the Director of Operations, or in his absence, the ranking Operations Manager or designated Colonial spokesperson, should expect the news media to arrive or call almost immediately, and should be prepared to respond to them. Any responses should provide only facts, but should emphasize and confirm that the Director of Communications will make a follow-up response. The following information should be released:

- A general statement of the situation. Speculation or comment as to what caused the event must be avoided.
- The number of Colonial and contractor response personnel involved.
- The number of fatalities or people injured, if any, and where they were taken. Immediate families must be notified before releasing names of injured or dead employees, or other individuals to the news media. Statements as to the extent of injuries should not be made unless it is obvious they are minor and only first aid is required.
- A brief, non-technical description of the damaged facilities and the functions they performed.

Only Corporate Communications is authorized to release information related to the monetary amount of damage, quantities of products involved, the time it may take to repair damages, the cause of the incident, and the original cost of facilities or equipment. (When other company employees are asked for this type of information, the best and most honest reply is "I don't know." Rather than speculate, merely respond that Colonial will check on the facts and provide the information when available.)

Colonial Pipeline Company

INITIAL RESPONSE ROLES & RESPONSIBILITIES

The Director of Communications will:

- Supervise the handling of all contacts with the media at a contingency site after arriving at the scene.
- If necessary, set up a communications center to keep reporters together as a group to effect better coordination. Colonial facilities normally will not be used as pressrooms. Arrangements may be made at nearby hotels or public facilities.
- If desired by reporters, a site tour may be arranged, but only after it is established that no hazards exists. Tours of any “warm” or “hot” zones must be coordinated with on-site safety personnel. Maximum cooperation possible, within limits of safety, will be given to reporters.
- Oversee contacts with local government officials in the absence of the Government Relations Manager.
- Oversee release of information about an incident to employees and retirees.
- Coordinate issuance of news releases to the trade press and other mass media.
- Maintain current media contact lists.
- Prepare letters or other messages for distribution door-to-door or by mail in an accident impact area.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

Colonial Pipeline Company utilizes an Incident Command System (ICS) when responding to emergencies. Colonial's ICS has been developed and modified from the generic Incident Command System based on Colonial's actual experiences and available resources.

Section 4.02 outlines the overall Incident Command System Structure utilized in each of Colonial's three response zones. Response zone personnel identified in the spill management team structure are the primary responders for their area of expertise. In the event of an incident, they will be in communication with on-site personnel to monitor events and relay instructions until their arrival at the scene. Additionally, a list of all trained personnel in the response zone can be found in Section 5.02.

Specific roles and responsibilities of positions within the ICS can be found via the link on the response plan webpage. Information accessible through the above referenced link details response structure positions as well as those not specifically depicted on the ICS structure chart. All positions are staffed by trained response zone and/or corporate personnel.

An ICS structure should be established as soon as possible during response to an incident. As responders listed on the affected Response Zone's ICS report to the incident command, they will assume the Section Leader roles as described in the structure.

In ICS, Unified Command is an integrated team effort that allows all agencies with responsibility for the incident, either geographical or functional, to manage an incident by establishing a common set of incident objectives and strategies. This is accomplished without losing or abdicating agency authority, responsibility, or accountability.

The Unified Command is responsible for the overall management of the incident. It directs incident activities including the development and implementation of strategic decisions and approves the ordering and releasing of resources. The Unified Command may activate Deputy Incident Commanders to assist in carrying out Incident Command responsibilities.

Depending on the complexity of the emergency event, the Incident Commander may be organized under the Unified Command Structure which includes:

- The pre-designated Federal On Scene Coordinator (FOSC) acting under the authority of the National Contingency Plan (NCP)
- The pre-designated State On Scene Coordinator (SOSC) representing state and local response agencies
- Local Government
- The Responsible Party (RP) representing Colonial Pipeline Company

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

The functions of a Unified Command are to:

- Provide overall response direction
- Coordinate effective communication
- Coordinate resources
- Establish incident priorities
- Develop incident objectives
- Develop strategies to achieve objectives
- Assign objectives to response structure
- Review/approve incident action plans
- Ensure integration of response organization
- Establish protocols.

An ICS led by a Unified Command has been used to manage federal, state, and local responses to complex multi-agency, multi-jurisdictional incidents. The guidelines of the National Preparedness for Response Exercise Program – PREP (which were issued by the Department of Transportation, Department of the Interior, and the U.S. Environmental Protection Agency) describe the ICS as "the system to achieve the coordination necessary to carry out an effective and efficient response."

Advantages to using the ICS/UC include:

- Optimization of combined efforts
- Elimination of duplicative efforts
- Establishment of one command post
- Development of collective approval of shared operations, logistics, planning, and finance
- Encouragement of cooperative response environment
- Allowance for shared facilities, which not only reduces costs for those responding, but also maximizes efficiency and reduces communication breakdowns.

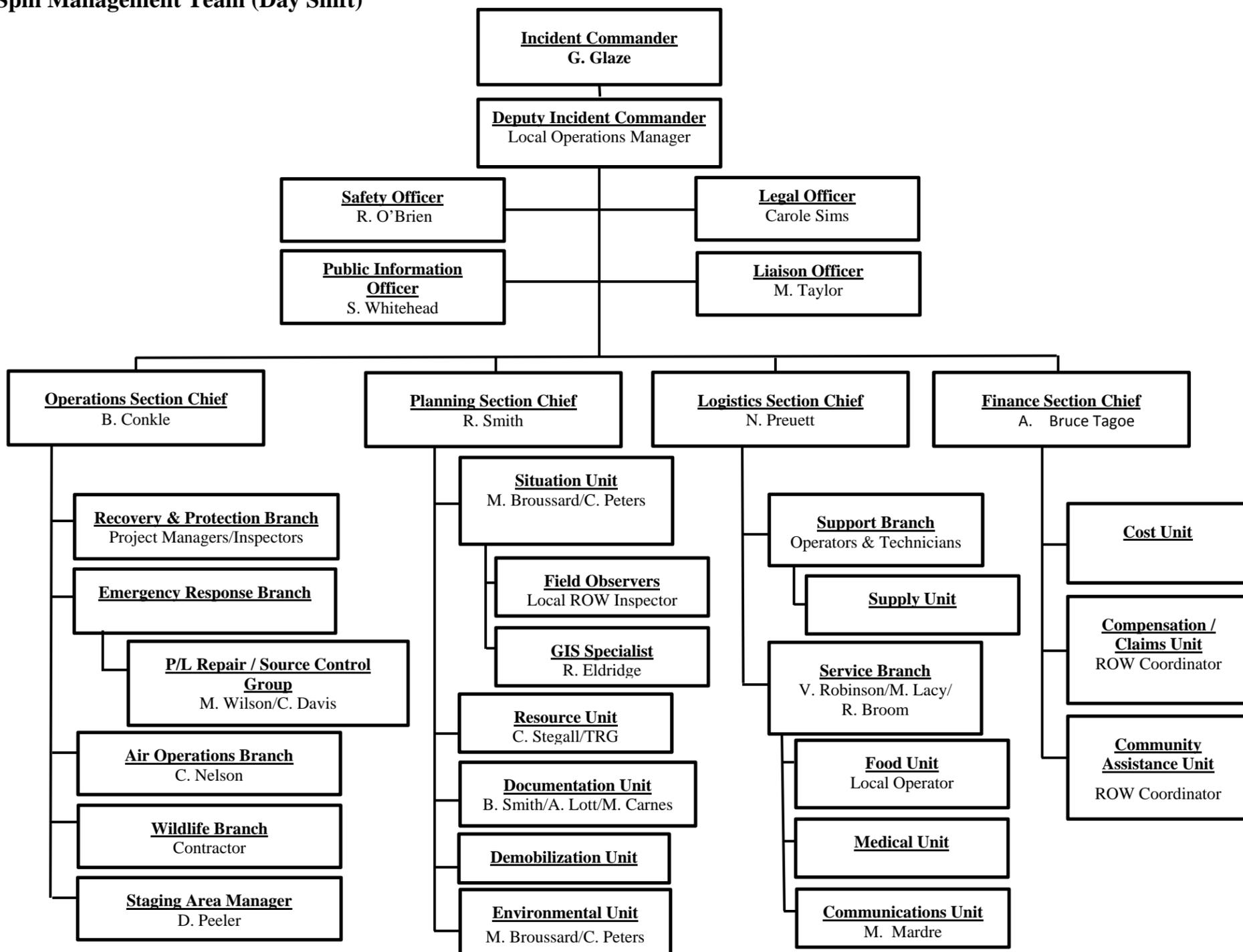
The ICS/UC structure itself outlines responsibilities and functions (not people), therefore reducing potential conflicts, and improves information flow among all organizations. The ICS maintains its modular organizational structure, so that none of the advantages of the ICS are lost by the introduction of a Unified Command.

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

**Gulf Coast Response Zone
Spill Management Team (Day Shift)**

Gulf Coast Response Zone

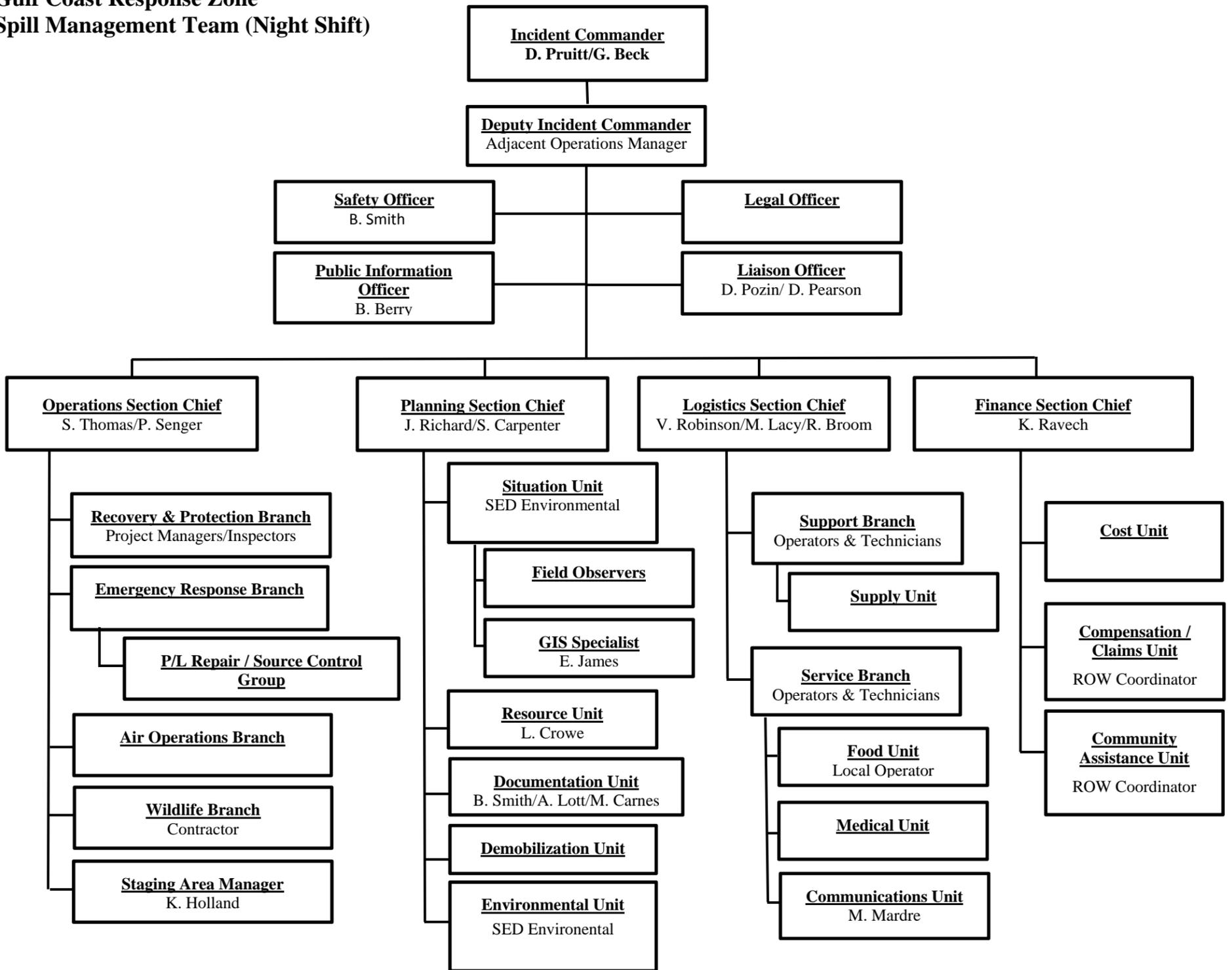


Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

**Gulf Coast Response Zone
Spill Management Team (Night Shift)**

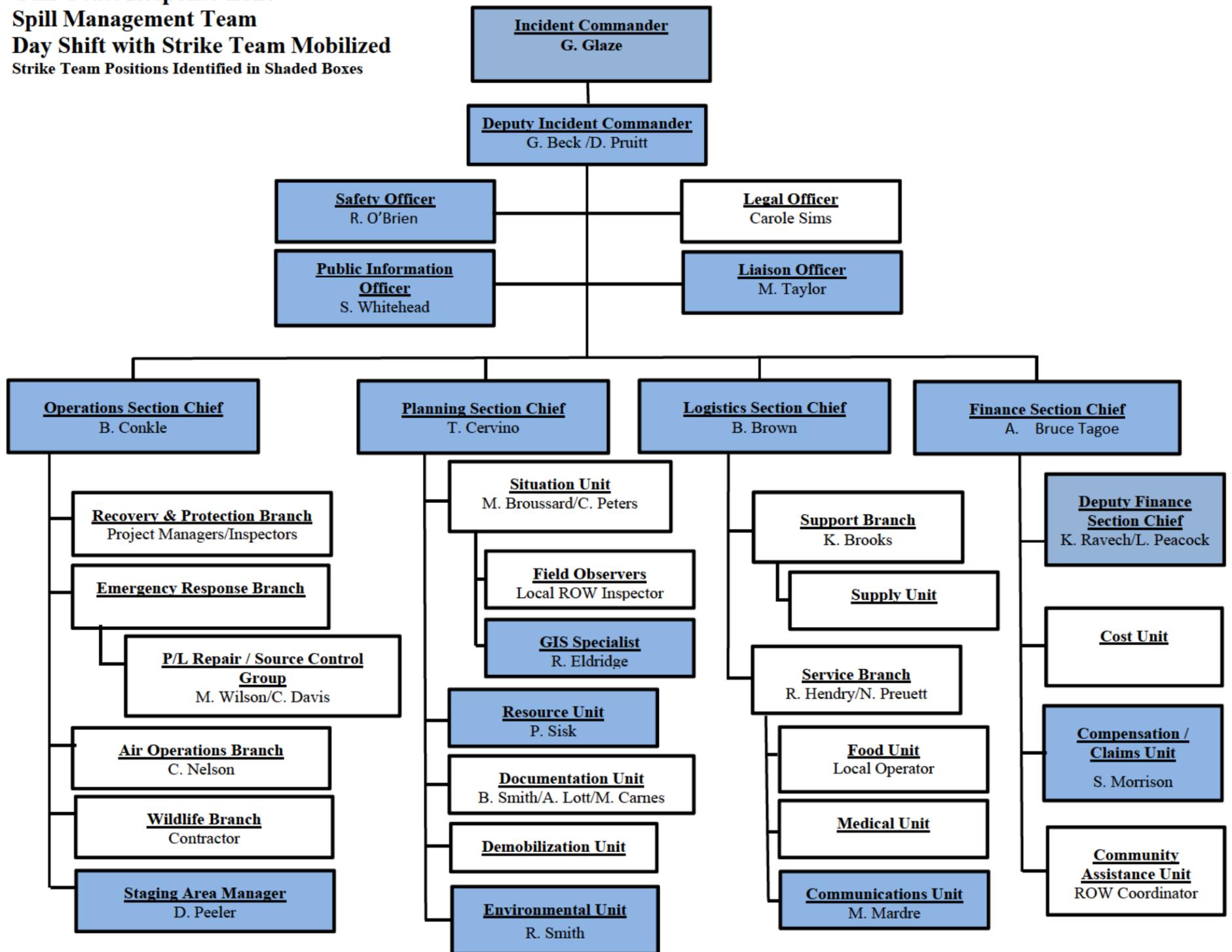


Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

**Gulf Coast Response Zone
Spill Management Team
Day Shift with Strike Team Mobilized**
Strike Team Positions Identified in Shaded Boxes

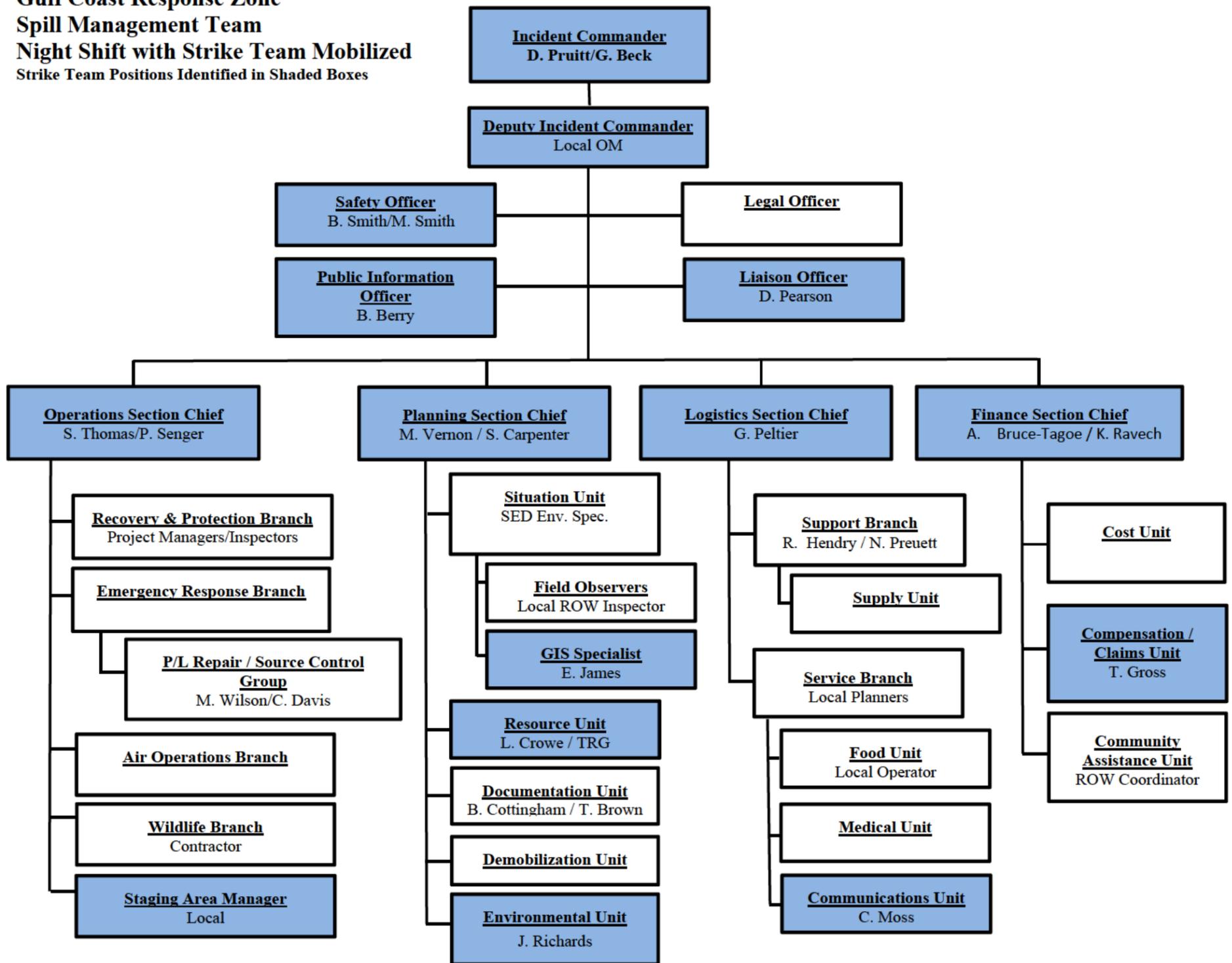


Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

**Gulf Coast Response Zone
Spill Management Team
Night Shift with Strike Team Mobilized**
Strike Team Positions Identified in Shaded Boxes



Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

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- The pre-designated State On Scene Coordinator (SOSC) representing state and local response agencies
- Local Government
- The Responsible Party (RP) representing Colonial Pipeline Company

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

The functions of a Unified Command are to:

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- Coordinate effective communication
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Colonial Pipeline Company INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone
Spill Management Team (Day Shift)

Gulf Coast Response Zone

Incident Commander
G. Glaze

Incident Commander
Operations

Safety Officer
R. O'Brien

Legal Officer
Carole Sims

Public Information Officer
S. Whitehead

Business Officer
M. Taylor

Operations Section Chief
B. Conkle

Planning Section Chief
R. Smith

Logistics Section Chief
N. Prebett

Recovery & Protection Branch
Project Managers/Inspectors

Situation Unit
M. Broussard/C. Peters

Support Branch
Operators & Technicians

Cost Unit

Emergency Response Branch

Field Observers
Local ROW Inspector

Supply Unit

Compensation / Claims Unit
ROW Coordinator

P/L Repair / Source Control Group
M. Wilson/C. Davis

GIS Specialist
P. Eldridge

Service Branch
V. Robinson/M. Lacy/
R. Broom

Air Operations Branch
C. Nelson

Resource Unit
C. Stegall/TRG

Food Unit
Local Operator

Community Assistance Unit
ROW Coordinator

Wildlife Branch
Contractor

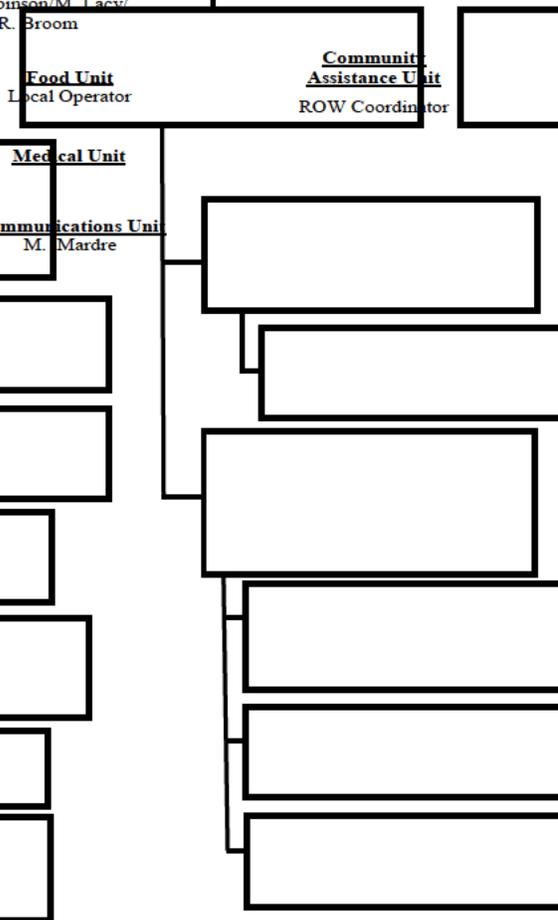
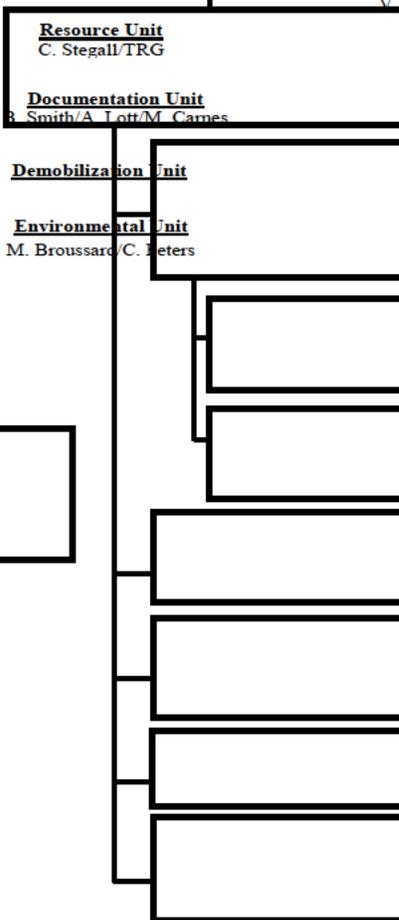
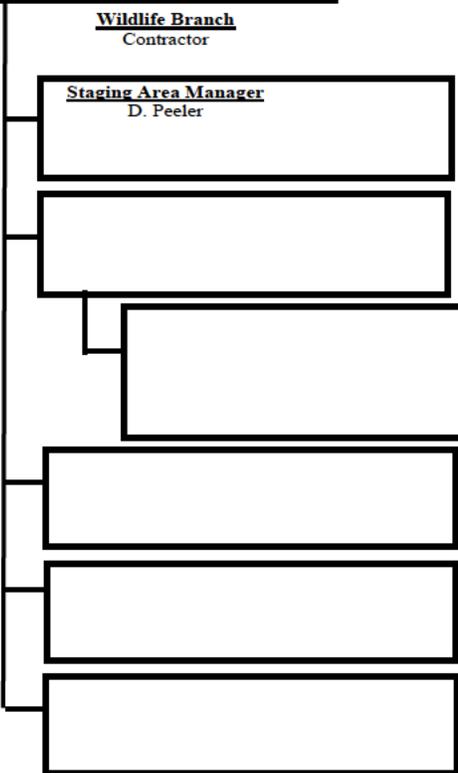
Demobilization Unit

Medical Unit

Staging Area Manager
D. Peeler

Environmental Unit
M. Broussard/C. Peters

Communications Unit
M. Mardre



Colonial Pipeline Company INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

Gulf Coast Response Zone Spill Management Team (Night Shift)

Incident Commander
D. Pruitt/G. Beck

Incident Commander
Operations

Safety Officer
B. Smith

Public Information Officer
B. Berry

Operations Section Chief
S. Thomas/P. Senger

Recovery & Protection Branch
Project Managers/Inspectors

Emergency Response Branch

P/L Repair / Source Control Crew

Air Operations Branch
Wildlife Branch
Contractor

Staging Area Manager
K. Holland

Planning Section Chief
J. Richard/S. Carpenter

Situation Unit
SED Environmental

Field Observers

GIS Specialist
E. James

Logistics Section Chief
V. Robinson/M. Lacy/R. Broom

Support Branch
Operators & Technicians

Supply Unit

Service Branch
Operators & Technicians

Resource Unit
L. Crowe
Documentation Unit
B. Smith/A. Lott/M. Carnes

Demobilization Unit

Environmental Unit
SED Environmental

Food Unit
Local Operator

Medical Unit

Communications Unit
M. Mardre

Compensation / Claims Unit
ROW Coordinator

Community Assistance Unit
ROW Coordinator

Colonial Pipeline Company INCIDENT COMMAND SYSTEM AND STRUCTURE

Gulf Coast Response Zone

**Gulf Coast Response Zone
Spill Management Team
Day Shift with Strike Team Mobilized**
Strike Team Positions Identified in Shaded Boxes

Incident Commander
G. Glaze

Commander
J. Pruitt

Safety Officer
R. O'Brien

Legal Officer
Carole Sims

Public Information Officer
S. Whitehead

Analysis Officer
M. Taylor

Operations Section Chief
B. Conkle

Planning Section Chief
T. Cervino

Logistics Section Chief
B. Brown

Finance Section Chief

Recovery & Protection Branch
Project Managers/Inspectors

Situation Unit
M. Broussard/C. Peters

Support Branch
K. Brooks

Deputy Finance Section Chief
K. Raveon/L. Peacock

Emergency Response Branch

Field Observers
Local ROW Inspector
GIS Specialist
R. Eldridge

Supply Unit

Cost Unit

P/L Repair / Source Control Group
M. Wilson/C. Davis

Service Branch
R. Hendry/N. Preuett

Resource Unit
P. Sick

Air Operations Branch
C. Nelson
Wildlife Branch
Contractor

Documentation Unit
B. Smith/A. Lott/M. Carnes
Demobilization Unit

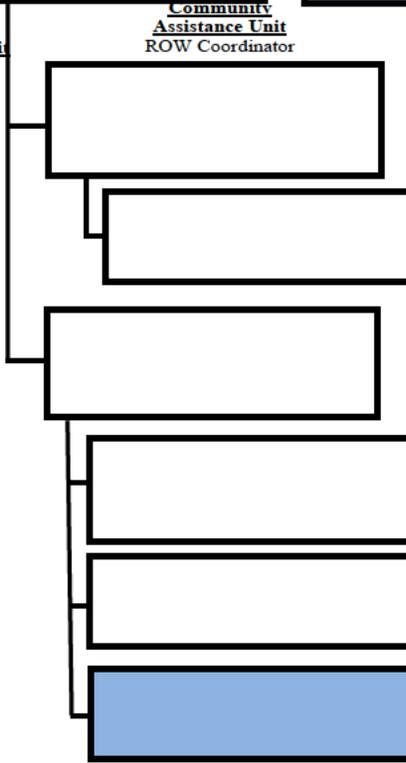
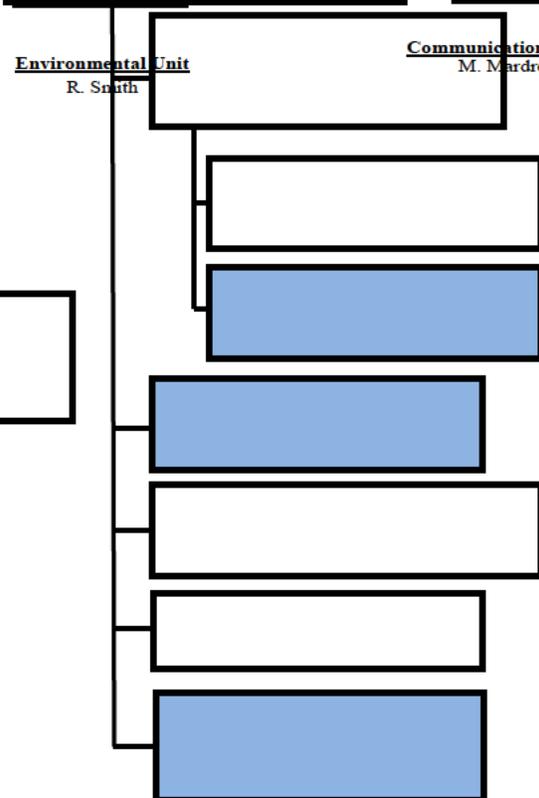
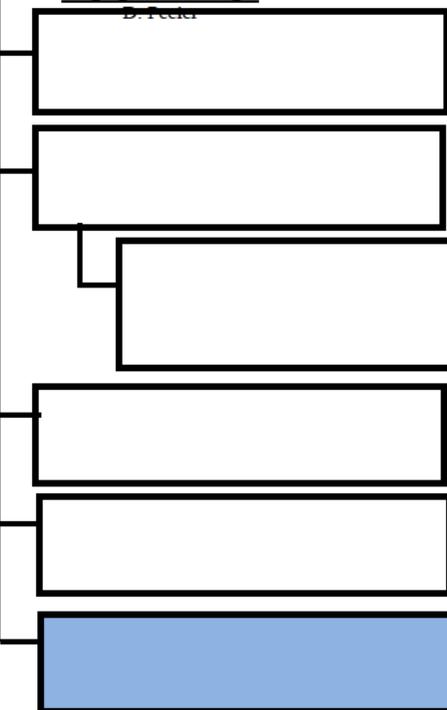
Food Unit
Local Operator
Medical Unit

Community Assistance Unit
ROW Coordinator

Staging Area Manager
B. Pecker

Environmental Unit
R. Smith

Communications Unit
M. Mardre



Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMON ICS RESPONSIBILITIES

COMMON RESPONSIBILITIES FOR ALL ICS POSITIONS	
Responsibilities	
	Receive assignment from your agency, including:
	<ul style="list-style-type: none"> • Job assignment (e.g., Strike Team designation, position, etc.) • Brief overview of type and magnitude of incident • Travel instructions including reporting location & response time • Any special communications instructions (e.g., travel, radio frequency) • Monitor incident related information from media, internet, etc., if available • Assess personal equipment readiness for specific incident and climate (e.g., medications, money, computer, medical record, etc.) Maintain a checklist of items and possible a person Go-Kit • Inform others as to where you are going and how to contact you • Review Colonial Incident Management Handbook • Take advantage of available travel to rest prior to arrival
	Upon arrival at the incident, check-in at the designated check-in location. Check-in may be found at any of the following locations:
	<ul style="list-style-type: none"> • Incident Command Post (ICP), Base/Camps, Staging Areas, Helibases
	If you are instructed to report directly to an on-scene assignment, check-in with the Division/Group Supervisor or the Operations Section Chief
	Receive briefing from immediate supervisor
	Agency Representatives from assisting or cooperating agencies report to the Government Liaison Officer (LNO) at the ICP after check-in
	Acquire work materials
	Abide by organizational code of ethics
	Participate in IMT meetings and briefings as appropriate
	Ensure compliance with all safety practices and procedures. Report unsafe conditions to the Safety/Security Officer
	Supervisors shall maintain accountability for their assigned personnel with regard as to exact location(s) and personal safety and welfare at all times, especially when working in or around incident operations
	Organize and brief subordinates
	Know your assigned communication methods and procedures for your area of responsibility and ensure that communication equipment is operating properly.
	Use clear text and ICS terminology (no codes) in all radio communications
	Complete forms and reports required of the assigned position and ensure proper

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMON ICS RESPONSIBILITIES

	disposition of incident documentation as directed by the Documentation Unit.
	Ensure all equipment is operational prior to each work period
	Report any sign/symptoms of extended incident stress, injury, fatigue or illness for yourself or coworkers to your supervisor
	Brief shift replacement on ongoing operations when relieved at operational periods or rotation out
	Respond to demobilization orders and brief subordinates regarding Demobilization
	Prepare personal belongings for demobilization
	Return all assigned equipment to the appropriate location
	Complete Demobilization Check-out process before returning to home base.
	Participate in After-Action activities as directed
	Carry out assignments as directed
	Upon demobilization, notify RESL at incident site or home unit of your safe return

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

INCIDENT COMMANDER - IC & DEPUTY INCIDENT COMMANDER - DUPUTY IC

Responsibilities

The Incident Commander's (IC) responsibility is the overall management of the incident. On most incidents, the command activity is carried out by a single IC but could be the UC particularly on larger incidents. The IC is selected by qualifications and experience. The IC may have one or more deputies, who may be from the same agency/organization, or from an assisting agency/organization. Deputies must have the same qualifications as the person for whom they work, as they must be ready to take over the position any time.

Checklist

	Review common responsibilities.
	Obtain a briefing from the prior IC (201 Briefing).
	Determine Incident Objectives & general direction for managing the incident.
	Establish the immediate priorities.
	Assess the situation and/or obtain a briefing from the prior Incident Commander.
	Communicate with the CMT as described in Section 2.01 of the ERP.
	Establish an ICP, assign to Logistics if activated.
	Brief and coordinate activity of Command Staff and General Staff.
	Establish an appropriate organization & set shift change schedule.
	Direct the completion of the ICS forms 201 and 202 and through the development and implementation of 12 hour or 24 hour Response Plan.
	Determine incident objectives and strategies in accordance with Area Contingency Plan(s) (ACP).
	Represent company as member of Unified Command.
	Ensure planning meetings are scheduled as required.
	Approve and authorize the implementation of an IAP.
	Ensure that adequate safety measures are in place.
	Seek appropriate legal counsel.
	Coordinate with key stakeholders and officials through the Liaison Officer.
	Approve requests for additional resources or for the release of resources.
	Ensure incident funding is available.
	Approve the use of trainees, volunteers, and auxiliary personnel.
	Authorize release of information to the news media through PIO.
	Ensure ICS 209 is completed and forwarded to appropriate higher authority.
	Order the demobilization of the incident when appropriate.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

SAFETY OFFICER - SOFR

Responsibilities

The SOFR function is to develop and recommend measures for assuring personnel safety, and to assess and/or anticipate hazardous and unsafe situations. Only one primary SOFR will be assigned for each incident. The SOFR may have specialists, as necessary, and the assistants may also represent assisting agencies or jurisdictions. Safety assistants may have specific responsibilities, such as air operations, hazardous materials, etc.

Checklist

	Review Common Responsibilities.
	Become familiar with all applicable National, State, and Local health and safety regulations.
	Obtain briefing from Incident Commander
	Participate in tactics and planning meetings, and other meetings and briefings as required.
	During initial response, document the hazard analysis process addressing hazard identification, personal protective equipment, control zones, and decontamination area.
	Identify hazardous situations associated with the incident.
	Review the Incident Action Plan for safety implications.
	Provide safety advice in the IAP for assigned responders via the safety message on each ICS 204.
	Exercise emergency authority to stop and prevent unsafe acts.
	Investigate accidents that have occurred within the incident area.
	Assign assistants and manage the incident safety organization.
	Review and approve the medical plan (ICS Form 206).
	Ensure preparation and implementation of Site Safety and Health Plan (SSHP) (ICS Forms 201-5/I208) in accordance with the Area Contingency Plan (ACP) and state and Federal OSHA regulations.
	Develop the Work Safety Analysis Worksheet (ICS 215A) as required.
	Participate in tactics meetings to identify any health and safety concerns inherent in the operations daily work plan.
	Ensure that all required agency forms, reports, and documents are completed prior to demobilization.
	Brief Command on safety issues and concerns.
	Have debriefing session with the IC prior to demobilization.
	Quality assurance of Site Safety Plan effectiveness.
	Pre-operations health and safety conference for all incident participants.
	The SSHP shall, at a minimum, address, include, or contain the following elements:
	<ul style="list-style-type: none"> • Health and safety hazard analysis for each site task or operation using the Work

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

	Safety Analysis Worksheet (ICS 215A) as required
	• Comprehensive operations work plan
	• Personnel training requirements
	• PPE selection criteria
	• Site-specific occupational medical monitoring requirements
	• Air monitoring plan: area/personal
	• Site control measures
	• Confined space entry procedures "only if needed"
	• Pre-entry briefings (tailgate meetings): initial and as needed
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

PUBLIC INFORMATION OFFICER - PIO

Responsibilities

The Public Information Officer (PIO) is responsible for developing and releasing information about the incident to the news media, to incident personnel, and to other appropriate agencies and organizations. Only one primary PIO will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The PIO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. Agencies have different policies and procedures relative to the handling of public information.

Checklist

	Review Common Responsibilities.
	Determine from the IC if there are any limits on information release.
	Obtain briefing from the Incident Commander.
	Develop material for use in media briefings.
	Develop a local media list.
	Obtain IC/UC approval of media releases.
	Prepare prompt and informative news releases to inform the public and conduct media briefings.
	Prepare letters for door to door distribution.
	Update employees through E-Mail/bulletins.
	Arrange for tours and other interviews or briefings that may be required.
	Establish and maintain a Joint Information Center as necessary.
	Implement applicable ACP JIC/PIO policies and procedures.
	Obtain media information that may be useful to incident planning.
	Maintain current information summaries and/or displays on the incident and provide information on the status of the incident to assigned personnel.
	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
	Brief Command on PIO issues and concerns.
	Monitor incident status to maintain current knowledge of events and progress.
	Monitor media for accuracy, correct as necessary.
	Have debriefing session with the IC prior to demobilization.
	Complete Media Contact and Community Inquiry reports as necessary.
	Utilize consultants handling media and community relations.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

LIAISON OFFICER - LNO

Responsibilities

Incidents that are multi-jurisdictional, or have several agencies involved, may require the establishment of the LNO position on the Command Staff. Only one primary LNO will be assigned for each incident, including incidents operating under UC and multi-jurisdiction incidents. The LNO may have assistants as necessary, and the assistants may also represent assisting agencies or jurisdictions. The LNO is assigned to the incident to be the contact for assisting and/or cooperating Agency Representatives.

Checklist

	Wear position identification vest.
	Review Common Responsibilities.
	Obtain briefing from the Incident Commander.
	Verify notifications to all appropriate agencies have been made and log agency, date/time of notification and case number is assigned.
	Establish a Liaison area near the Command Center to assist local government agencies.
	Be a contact point for non-jurisdictional agencies, NGOs, special interest groups, or other organizations seeking input to the response.
	Obtain input on issues and concerns from above organizations, vet with appropriate response personnel, and communicate resolutions back to the organizations.
	Make required and courtesy notifications to regulatory agencies and potentially affected parties as requested by the IC.
	Identify and interface with the appropriate State and Federal response organizations.
	Implement applicable ACP policies and procedures.
	As necessary, identify and interface with the appropriate local, state, and federal elected officials who represent the affected area.
	Maintain a list of assisting and cooperating agencies and Agency Representatives, including name and contact information. Monitor check-in sheets daily to ensure that all Agency Representatives are identified.
	Assist in establishing and coordinating interagency contacts.
	Keep agencies supporting the incident aware of incident status.
	Monitor incident operations to identify current or potential inter-organizational problems.
	Call, visit and/or greet and brief elected officials.
	Participate in planning meetings, providing current resource status, including limitations and capability of assisting agency resources.
	Coordinate resource needs for incident investigation activities with the OSC.
	Provide ongoing briefings and forward concerns to the Command Center.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

	Monitor activities and establish/update briefing charts.
	Coordinate response resource needs for Natural Resource Damage Assessment and Restoration (NRDAR) activities with the OSC during oil and HAZMAT responses.
	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
	Work with the volunteer Coordinator to ensure volunteer training and activities are aligned with direction provided by the IC/UC.
	Brief Incident Commander/Command on agency issues and concerns.
	Have debriefing session with the IC prior to departure/demobilization.
	Coordinate activities of visiting dignitaries
	DOT COMPLIANCE
	Obtain briefing from Incident Commander.
	Don position identification vest.
	Gather data concerning the cause of the incident as required on PHMSA/OPS Accident investigation form.
	Serve as liaison for Office of Pipeline Safety and National Transportation Safety Board
	Document the excavation and removal of damaged pipe/equipment by photography, video and/or written report.
	Arrange for the shipment of the damaged pipe/equipment and develop a chain of custody for shipment.
	Ensure the repair of the pipeline/equipment is performed in accordance with applicable governmental regulations.
	Brief DOT/PHMSA personnel using ICS Form 201.
	Coordinate response resource needs for incident investigation activities with PHMSA/OPS.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

LEGAL OFFICER*	
Responsibilities	
The Legal Officer is responsible for providing advice and direction on matters of a legal nature including legal requirements relating to the emergency response, investigations, Natural Resource Damage assessment (NRDA), major procurement contracts, and review of information releases to the media, government agencies and the public ¹ .	
Checklist	
	Review Common Responsibilities.
	Obtain briefing from the Incident Commander.
	Advise the Incident Commander (IC) and the Unified Command (UC), as appropriate, on legal issues associated with response operations (only applicable as to advising Colonial members).
	Provide advice regarding response activity documentation to the response team.
	Provide legal input to the Documentation Unit, the Compensation/Claims Unit, and other appropriate Units as requested.
	Review press releases, documentation, contracts and other matters that may have legal implications for the Company.
	Participate in Incident Command System (ICS) meetings and other meetings, as requested.
	Participate as appropriate in incident investigations and the assessment of damages (including natural resource damage assessments).
	Maintain Individual/Activity Log (ICS Form 214a).

*Legal Officer will be dispatched to Incident Command Center for incidents meeting the following criteria:

- A spill that causes, or is likely to cause, death and serious bodily injury.
- A spill greater than 1,000 gallons which reaches, or is likely to reach, waters.
- A spill in which a NTSB investigation is initiated, or is likely to be initiated.
- A spill in which a DOJ or EPA investigation or enforcement action is initiated, or is likely to be initiated.
- A spill in which a class action or multiple toxic tort claims are filed, or is likely to be filed.
- A spill with national media interest, or local media interest, lasting or likely to last, beyond the initial response.
- A spill with the General Counsel or Incident Commander determines is advisable to have Legal resources located at the Incident Command Center.

¹ The Legal Officer will provide advice as requested and appropriate; however, certain of these functions may be normally handled by others at the Incident Command. For instance, advice and direction relating to the legal nature of claims and insurance coverage will normally be handled by the Compensation/Claims Unit Leader.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST COMMAND SECTION

INTELLIGENCE/SECURITY OFFICER - INTO	
Responsibilities	
The responsibility of the INTO is to provide Command intelligence information that can have a direct impact on the safety of response personnel and influence the disposition of maritime security assets involved in the response.	
Checklist	
	Collect and analyze incoming intelligence information from all sources.
	Determine the applicability, significance, and reliability of incoming intelligence information.
	As requested, provide intelligence briefings to the IC/UC.
	Provide intelligence briefings in support of the Incident Command System Planning Cycle.
	Provide Situation Unit with periodic updates of intelligence issues that impact the incident response.
	Answer intelligence questions and advise Command and General Staff as appropriate.
	Review the IAP for intelligence implications.
	Supervise, coordinate, and participate in the collection, analysis, processing, and dissemination of intelligence.
	Assist in establishing and maintaining systematic, cross-referenced intelligence records and files.
	Establish liaison with all participating law enforcement agencies including the CGIS, FBI/JTTF, State and Local police departments.
	Conduct first order analysis on all incoming intelligence and fuse all applicable incoming intelligence with current intelligence holdings in preparation for briefings.
	Prepare all required intelligence reports and plans.
	As the incident dictates, determine need to implant Intelligence Specialists in the Planning and Operations Sections.
	Ensure that all required agency forms, reports and documents are completed prior to demobilization.
	Have debriefing session with the IC prior to demobilization.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

FINANCE SECTION CHIEF – FSC **DEPUTY FINANCE SECTION CHIEF – Deputy FSC**

Responsibilities

The FSC, a member of the General Staff, is responsible for all financial, administrative and cost analysis aspects of the incident and for supervising members of the Finance/Admin Section. The FSC may have Deputy FSC's, who may be from the same organization or from an assisting agency. The Deputy FSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Checklist

	Review Common Responsibilities.
	Obtain Briefing from Incident Commander.
	Assess & ensure the adequacy of financial internal controls at the incident site.
	Manage all financial aspects of an incident.
	Participate in incident planning meetings and briefings as required.
	Review operational plans and provide alternatives where financially appropriate.
	Assure that cost tracking services are provided prior to the arrival of a third party cost monitoring service group.
	Evaluate the need for third party monitoring services.
	Assess staffing requirements of third party monitoring services.
	Provide on-site management of third party monitoring services.
	Provide financial and cost analysis information as requested.
	Prepare contracts with vendors or contractors as requested by Logistics.
	Maintain communications with Logistics/Staging.
	Inform Incident Commander of scheduled actions taken during briefings.
	Inform Incident Commander of cost estimates related to the leak, as requested:
	• Gather information to discuss leak related cost estimates with Incident Commander
	• Facilitate communication of leak related cost estimates to the appropriate corporate office personnel, as requested
	Serve as liaison at staging for the Shared Services and Financial Services Teams:
	• Coordinate with Procurement to obtain contractor rates/contract adjustments as needed
	• Coordinate efforts with the Atlanta finance team to request limits be raised on employee credit cards, if needed
	• Assign accounting tracking number(s) for incident and assure appropriate use of the tracking number
	Serve as financial point of contact for costs incurred at site:
	• Facilitate processing of invoices once approved by appropriate field personnel

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

	• Gather information to discuss leak related cost estimates with Corporate Office as requested
	• Participate with procurement in third party administrative monitoring services contractor negotiations
	Coordinate with Financial Manager at Corporate Office to assure that leak-related and insurance recovery costs are properly recorded
	Gather pertinent information from briefings with responsible agencies.
	Maintain daily contact with assisting/cooperating agency(s) on Finance/Admin matters.
	Ensure that all personnel time records are accurately completed and transmitted to home agencies, according to policy.
	Provide financial input to demobilization planning including recommending priorities for resources to be demobed based on cost considerations.
	Ensure that all obligation documents initiated at the incident are properly prepared and completed.
	Brief agency administrative personnel on all incident-related financial issues needing attention or follow-up prior to leaving incident.
	Develop recommended list of Section resources to be demobed and initial recommendation for release when appropriate.
	If required, develop IAP interface to track costs in Accounting System.
	Receive and implement applicable portions of the incident Demobilization Plan.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

COST UNIT LEADER – COST	
Responsibilities	
The Cost Unit Leader (COST) is responsible for collecting all cost data, performing cost effectiveness analyses and providing cost estimates and cost saving recommendations for the incident.	
Checklist	
	Review Unit Leader Responsibilities.
	Obtain a briefing from the Finance Section Chief.
	Coordinate with business unit/organization management on cost reporting procedures
	Collect and record all cost data.
	Develop incident cost summaries.
	Prepare resources-use cost estimates for the Planning Section.
	Make cost-saving recommendations to the Finance Section Chief.
	Ensure all cost documents are accurately prepared.
	Maintain cumulative incident cost records.
	Complete all records prior to demobilization.
	Provide reports to the Finance Section Chief.
	Maintain Individual/Unit Log (ICS 214a/214).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

TIME UNIT LEADER – TIME	
Responsibilities	
The Time Unit Leader (TIME) is responsible for equipment and personnel time recording.	
Checklist	
	Review Unit Leader Responsibilities.
	Determine incident requirements for time recording function.
	Determine resource needs.
	Contact each responding organization management to ensure daily personnel time records are prepared and in compliance with their policies.
	Establish time unit objectives.
	Maintain separate logs for overtime hours.
	Submit cost estimate data forms to the Cost Unit, as required.
	Maintain records security.
	Ensure that all records are current and complete prior to demobilization.
	Release time reports for responders to their respective management representatives prior to demobilization.
	Brief the Finance Section Chief on current problems and recommendations, outstanding issues and follow-up requirements.
	Maintain Individual/Unit Log (ICS 214a/214).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

PROCUREMENT UNIT LEADER – PROC

Responsibilities

The PROC is responsible for administering all financial matters pertaining to vendor contracts, leases and fiscal agreements.

Checklist

	Review Common Responsibilities.
	Review Unit Leader Responsibilities.
	Review incident needs and any special procedures with Unit Leaders, as needed.
	Coordinate with local facility or business unit managers on potential contractors and supply sources.
	Ensure procurement procedures are compliant with the incident Finance Guidelines.
	Prepare and authorize contracts, building and land-use agreements.
	Draft memoranda of understanding as necessary.
	Establish contracts and agreements with supply vendors.
	Provide for coordination between the Supply Unit and all other procurement organizations supporting the incident.
	Develop a property management system that meets company requirements and accounts for all new property.
	Interpret contracts and agreements; resolve disputes within delegated authority.
	Coordinate with the Compensation/Claims Unit for processing claims.
	Complete final processing of contracts and send documents for payment.
	Coordinate cost data in contracts with the COST.
	Brief the FSC on current problems and recommendations, outstanding issues and follow-up requirements.
	Maintain Individual/Unit Log (ICS 214a/214).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST FINANCE SECTION

COMPENSATION/CLAIMS UNIT LEADER – COMP	
Responsibilities	
The COMP is responsible for the overall management and direction of all administrative matters pertaining to compensation for injury and claims related activities (other than injury) for an incident.	
Checklist	
	Review Common & Unit Leader Responsibilities.
	Obtain briefing from Finance Section Chief.
	Activate appropriate personnel and insurance/claims manager.
	Activate third party administrator/claims unit.
	Establish Claims Center with appropriate communication system.
	Assess the scope of the incident and potential damages/claims.
	Develop list of possible affected parties/property owners and contact as appropriate.
	Document and preserve evidence/information by all available means, (video, photos, etc.).
	Consult with Safety/Security to determine role in cause investigation.
	Obtain settlements from injured and damaged parties.
	Interface with the appropriate state and federal response organizations.
	Notify insurance brokers as applicable.
	Arrange for emergency care and housing of affected parties.
	Identify and list nearest hospitals/claims to the area and arrange for handling of affected parties as necessary.
	Compile list of claimants including claim details and CPC response.
	Update Finance Section Chief as necessary.
	Ensure that all Compensation for Injury and Claims logs and forms are complete and routed to the appropriate agency for post-incident processing prior to demobilization.
	Keep the FSC briefed on Unit status and activity.
	Demobilize unit in accordance with the Incident Demobilization Plan.
	Maintain Unit Log (ICS 214).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

OPERATIONS SECTION CHIEF - OSC **DEPUTY OPERATIONS SECTION CHIEF - DEPUTY OSC**

Responsibilities

The Operations Section Chief (OSC), a member of the General Staff, is responsible for the management of all operations directly applicable to the primary mission. The OSC activates and supervises operational elements in accordance with the IAP and directs its execution. The OSC also directs the preparation of Unit operational plans, requests or releases resources, makes expedient changes to the IAP, as necessary; and reports such to the IC. The OSC may have one or more Deputy OSCs and may assign a Deputy OSC or On-Scene Commander to supervise on-scene operations.

Checklist

	Review Common Responsibilities.
	Obtain briefing from IC.
	Ensure public safety is communicated to be the top priority at all times.
	Ensure that each Site Supervisor holds a pre-work safety meeting.
	Request sufficient section staffing for both Operations & Planning activities consistent with the Emergency Response Plan.
	Pipeline Repair Leader, Branch Director(s), Site Supervisor(s), and Waste Disposal positions and brief them on their roles. Fill in organization chart.
	Verify that the source has been contained and that all adjacent pipelines have been shutdown.
	Ensure Site Safety and Health plan (including O ₂ , TPH and LEL readings) is completed for each site.
	Determine if mobilization of additional personnel and/or response equipment is necessary.
	Communicate with Safety, Planning and Logistics/Staging.
	Request sufficient Section supervisory staffing for both ops & planning activities.
	Subdivide work areas into manageable units/Areas of Operation and define the areas of operations and appropriate zone for each OSRO.
	Work with Planning Section Chief to ensure that all sites are named for identification purposes.
	Ensure that all personnel have been Hazwoper trained and have the appropriate Documentation.
	Follow Resource Tracking Process.
	Document initial callout of resources and personnel on ICS-201-4 "Resource Summary" and provide updates to the Resource Unit Leader.
	Ensure status board with personnel and equipment at each site is displayed on

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	Command Center wall.
	Convert operational incident objectives into strategic and tactical options through a work analysis matrix.
	Prepare ICS 234 Work Analysis Matrix with PSC to convert operational objectives into strategic and tactical options and ensure those options are in line with ICS 202 Response Objectives.
	Coordinate and consult with the PSC, SOFR, technical specialists, modeling scenarios, trajectories, etc., on selection of appropriate strategies and tactics to accomplish objectives.
	Identify kind and number of resources required to support selected strategies.
	Develop reactive phase work assignments and allocate tactical resources based on strategy requirements.
	Coordinate planned activities with the SOFR and appropriate agency representatives to ensure compliance with safety practices.
	Prepare, in conjunction with RESL and others, the ICS 215 Operational Planning Worksheet using tactics and work areas identified on the ICS 234 Work Analysis Matrix.
	Participate in the planning process and the development of the tactical portions (Areas of Operation, ICS 204, ICS 209 (mass balance and waste management)) of the IAP.
	Assist with development of long-range strategic, contingency, and demobilization plans.
	Supervise Operations Section personnel.
	Monitor need for and request additional resources to support operations.
	Evaluate/monitor current situation for use in next operational period planning.
	Interact and coordinate with Command on achievements, issues, problems, significant changes special activities, events, and occurrences.
	Troubleshoot operational problems with other IMT members.
	Implement the IAP for the Operations Section.
	Evaluate on-scene operations and adjust operations organization, strategies, and tactics as necessary.
	Ensure the Resource Unit is advised of changes in the status of resources assigned to the section.
	Investigate the possibility of using a USCG approved dispersant to facilitate recovery operations.
	Investigate the possibility of halting all river traffic in affected area.
	Utilize knowledge and experience of Federal, State and Local Government agency representatives and assign in appropriate position within IC.
	Establish hourly communications schedule for each site – preferably 45 minutes after the hour.
	Work with logistics to effectively distribute equipment at staging to various recovery sites.
	Ensure that proper PPE is available and worn by all necessary personnel.
	Communicate overall objectives of response effort to Operations personnel.
	Provide any digital photographs to the Documentation Unit Leader.

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	Determine final destination for recovered product.
	Advise Incident Commander of any significant changes in situation status.
	Ensure the Operations Section personnel execute work assignments following approved safety practices.
	Supervise and adjust operations organization and tactics as necessary.
	Participate in operational briefings to IMT members as well as briefings to media, and visiting dignitaries.
	Assemble/disassemble task force/strike teams as appropriate.
	Identify/utilize staging areas.
	Develop recommended list of Section resources to be demobilized and initiate recommendation for release when appropriate.
	Receive and implement applicable portions of the incident Demobilization Plan.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

RECOVERY AND PROTECTION BRANCH DIRECTOR – RPBD

Responsibilities

The Recovery and Protection Branch Director (typically activated only for oil spills) is responsible for overseeing and implementing the protection, containment and cleanup activities established in the IAP

Checklist

	Identify Divisions, Groups, and resources assigned to the Branch.
	Obtain briefing from OSC/DOSC/On-scene Commander and person you are relieving.
	Implement IAP for Branch by assigning specific work tasks.
	Develop with subordinates alternatives for Branch control operations.
	Review Division/Group Assignment Lists (ICS 204) for Divisions/Groups within the Branch. Modify lists based on effectiveness of current operations.
	Attend planning meetings at request of the OSC/DOSC/On-scene Commander.
	Ensure through chain of command that Resources Unit is advised of changes in the status of resources assigned to the Branch.
	Report to OSC/DOSC/On-scene Commander when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
	Approve accident and medical reports originating within the Branch.
	Consider demobilization well in advance.
	Debrief with OSC/DOSC and/or as directed at the end of each shift.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

EMERGENCY RESPONSE BRANCH DIRECTOR – ERBD

Responsibilities

The Emergency Response Branch Director is primarily responsible for overseeing and implementing emergency measures to protect life, mitigate further damage to the environment, and stabilize the situation.

Checklist

	Review Branch Director Responsibilities.
	Develop with subordinates alternatives for Branch control operations.
	Attend planning meetings at the request of the OSC/DOSC/On-scene Commander.
	Review Division/Group Assignment Lists (ICS Form 204) for Divisions/Groups the within the Branch. Modify lists based on effectiveness of current operations.
	Assign specific work tasks to Division/Group Supervisors.
	Report to OPS when: the IAP is to be modified; additional resources are needed; surplus resources are available; or hazardous situations or significant events occur.
	Approve accident and medical reports (home agency forms) originating within the Branch.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

P/L REPAIR/SOURCE CONTROL GROUP SUPERVISOR

Responsibilities

Under the direction of the Emergency Response Branch Director, the P/L Repair/Source Control Group Supervisor is responsible for coordinating and directing all salvage/source control activities related to the incident in compliance with the IAP.

Checklist

	Review Division/Group Supervisor Responsibilities.
	Coordinate the development of P/L Repair/Source Control Plan.
	Determine P/L Repair Source Control resource needs.
	Direct and coordinate implementation of the Salvage/Source Control Plan.
	Manage dedicated P/L Repair/Source Control resources.
	Consult with Engineering Services as necessary.
	Acquire special road permits, if necessary, for transportation of heavy equipment/supplies.
	Coordinate SAFE and effective repairs to pipeline/equipment by considering the following:
	•Equipment capable for monitoring the atmosphere for oxygen and lower explosive limits will be maintained during all repair activities
	•Trenching and excavation standards as established by OSHA must be maintained. This standard requires a person competent in trenching and excavation to be on site.
	•Free repair area of flammable vapor or other hazards before repairs are started.
	•Utilize a minimum of personnel and equipment to accomplish the repair.
	•Man fire extinguishers at all times until repairs have been completed.
	•De-energize cathodic protection rectifiers on each side of the repair area.
	•Keep the Controller advised of the situation, the feasibility of continuing to operate, proposed plan of action and estimated time to accomplish the repair.
	•A state of emergency will exist along with the entire operating line until such time as the Area Manager advises the Controller that the repair is complete.
	•Give particular care to location and use of excavating and other equipment in relation to vapor/air movement and other operating pipelines.
	•Isolate line segment by closing block valves and physically locking out.
	•Drain product from the section of line to be repaired.
	•Have bonding cables in place before line cuts are made.
	•Make all pipe cuts in the line "cold" using pipe saw or mechanical cutters.
	•Inject nitrogen or CO ₂ into the pipe through the cut as soon as entry can be gained. Caution when using nitrogen or carbon dioxide, low pressure shall be used to avoid generation of static electricity. If portable carbon dioxide extinguishers are used the extinguisher must be grounded to the pipe before discharging (Continuous monitoring

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	of oxygen levels is necessary during this process due to nitrogen and CO ₂ depleting/displacing oxygen).
	•After section has been removed, position spheres at least two feet from the open ends of the pipeline and inflate them with water to seal vapors from the work area.
	•New section of pipe to be installed must be pre-tested hydrostatically to at least the same pressure as was required.
	•Load sufficient dry ice to last the duration of the repair into the new pipe section before the pipe is clamped into place for welding.
	Backwelding procedures requiring entry into an open pipeline are not permitted.
	Update Operations on activities and progress as necessary.
	Ensure the repair of the pipeline/equipment is performed in accordance with applicable industry/ governmental standards.
	Insure that affected pipeline segment is not disturbed until authorized.
	Insure that appropriate firefighting equipment is on site and personnel are trained in its use.
	Take numerous digital photographs of the undisturbed site (from all angles).
	Take numerous digital photographs of the repair efforts once authorized to proceed.
	Communicate with Situation Unit Leader on an hourly basis regarding status.
	Insure welders have current Colonial documentation (gold cards) and are using appropriate welding techniques as per Colonial's Maintenance Manual.
	Contact Engineering System Integrity Team regarding proposed method of repair for their concurrence.
	Be aware of the operational status of any adjacent pipelines.
	Check area for any underground facilities.
	Clearly mark any underground facilities and any above ground obstructions (telephone and power lines, etc.).
	Insure that an emergency 1-call is made and properly documented.
	Insure that any adjacent rectifiers have been deactivated.
	Insure that the affected pipeline is double blocked on both the upstream and downstream sides of the release and that all lockout-tagout documentation is complete before starting work.
	Obtain purchase order and hydrotest records for the new section of pipe to be installed.
	Assign a Colonial employee as a full-time Safety Monitor.
	Insure that the appropriate MSDS sheets are present at the site.
	Utilize satellite phones or OSRO communications system if necessary.
	Utilize ICS 204 form as a site work plan.
	Hold a pre-work safety meeting for all personnel.
	Insure Site Safety and Health plan completed for site including O ₂ , TPH and LEL readings.
	Insure that all Colonial employees wear their Colonial ID Badge on the exterior of their clothing.
	Insure that all personnel at the site have the appropriate Hazwoper training and

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	documentation.
	Coordinate the development of Salvage/Source Control Plan.
	Determine Salvage/Source Control resource needs.
	Direct and coordinate implementation of the Salvage/Source Control Plan.
	Manage dedicated salvage/Source Control resources.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

AIR OPERATIONS BRANCH DIRECTOR - AOBD

Responsibilities

The AOBD is ground-based and is primarily responsible for preparing the air operations portion (ICS 220) of the IAP and for providing logistical support to incident aircraft. The AOBD will ensure that agency directives, to include COMDTINST M3710.1e, flight manuals, unit restrictions, and other agency directives will not be violated by incident aircraft, e.g., flight hours, hoist limitations, night flying, etc. After the IAP is approved, the AOBD is responsible for overseeing the tactical and logistical assignments of the Air Operations Branch. In coordination with the Logistics Section, the AOBD is responsible for providing logistical support to aircraft operating on the incident.

Checklist

	Review Common Responsibilities.
	Organize preliminary air operations.
	Coordinate airspace use with the FAA. Request declaration (or cancellation) of Temporary Flight Restriction (TFR) IAW FAR 91.173 and post Notice to Airmen (NOTAM) as required.
	Attend the tactics and planning meetings to obtain information for completing ICS 220.
	Participate in preparation of the IAP through the OSC/DOSC. Insure that the air operations portion of the IAP takes into consideration the Air Traffic Control requirements of assigned aircraft.
	Coordinate with the COML to designate air tactical and support frequencies.
	Perform operational planning for air operations.
	Prepare and provide Air Operations Summary Worksheet (ICS 220) to the Air Support Group and Fixed-Wing Bases.
	Supervise all air operations activities associated with the incident.
	Evaluate helibase and helispot locations.
	Establish procedures for emergency reassignment of aircraft.
	Coordinate approved flights of no-incident aircraft in the TFR.
	Coordinate Coast Guard air assets with the appropriate Command Center(s) through normal channels on incident air operations activities.
	Consider request for logistical use of incident aircraft.
	Report to the OSC/DOSC on air operations activities.
	Report special incident/accidents.
	Develop Aviation Site Safety Plan in concert with SOFR.
	Arrange for an accident investigation team when warranted.
	Debrief with OSC/DOSC as directed at the end of each shift.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

WILDLIFE BRANCH DIRECTOR

Responsibilities

The Wildlife Branch Director is responsible for minimizing wildlife injuries during spill responses; coordinating early aerial and ground reconnaissance of the wildlife at the spill site and reporting results to the SUL; advising on wildlife protection strategies, including diversionary booming placements, in-situ burning, and chemical countermeasures; removing of oiled carcasses, employing wildlife hazing measures as authorized in the IAP; and recovering and rehabilitating impacted wildlife. A central Wildlife Processing Center should be identified and maintained for, evidence tagging, transportation, veterinary services, treatment and rehabilitation storage, and other support needs. The activities of private wildlife care groups, including those employed by the RP, will be overseen and coordinated by the Wildlife Branch Director.

Checklist

	Review Branch Director Responsibilities.
	Develop the Wildlife Branch portion of the IAP.
	Supervise Wildlife Branch operations.
	Determine resource needs.
	Review the suggested list of resources to be released and initiate recommendation for release of resources.
	Assemble and disassemble teams/task forces assigned to the Wildlife Branch.
	Report information about special activities, events, and occurrences to the OPS.
	Assist the Volunteer Coordinator and Training Specialist in determining training needs of wildlife recovery volunteers.
	Conduct all wildlife protection, recovery, and rehabilitation activities in compliance with the IAP.
	RECOVERY
	Determine resource needs.
	Establish and implement protocols for collection and logging of impacted wildlife.
	Coordinate with Planning Section and NRDA Advisor to conduct aerial and ground surveys of wildlife in the vicinity of the spill.
	Deploy acoustic and visual wildlife hazing equipment as needed.
	Coordinate transportation of wildlife to processing station(s).
	REHABILITATION
	Determine resource needs and establish processing station for impacted wildlife.
	Process impacted wildlife and maintain logs.
	Collect numbers/types/status of impacted wildlife.
	Conduct triage, stabilization, treatment and rehabilitation of impacted wildlife.

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	Coordinate transport of wildlife to other facilities.
	Coordinate release of recovered wildlife.
	Implement demobilization plan.
	Maintain Individual/Activity log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

STAGING AREA MANAGER – STAM	
Responsibilities	
The Staging Area Manager is responsible for managing all activities within a Staging Area which includes establishing, maintaining, check-in, storage, and distribution of resources at staging. The Staging Area Manager works closely with the Security Manager, Resource Unit, Operations, and Logistics. Several staging areas may be required depending on the incident.	
Checklist	
	Review Common Responsibilities.
	Proceed to Staging Area.
	Obtain briefing from person you are relieving, if applicable.
	Establish Staging Area layout which may include storage of equipment, fueling, decontamination of equipment, issuing of tools & PPE to the field, etc.
	Determine any support needs for equipment, feeding, sanitation and security and provide to Staging Branch Director or Logistics Section Chief.
	Maintain and provide status to Staging Branch Director or Resource Unit of all resources in Staging Area(s).
	Request maintenance service for equipment at Staging Area as appropriate.
	Establish check-in/out functions using the ICS 211p (personnel) and 211e (equipment) forms as well as the ICS 210 Change of Status form.
	Ensure security of staged resources.
	Post areas for identification and traffic control.
	Designate a Check-in Recorder to perform check-in/out function at larger staging areas or Incident Command Post if necessary.
	Respond to request for resource assignments. (Note: This may be direct from the OSC or Staging Branch Director).
	Obtain and issue receipts for radio equipment and other supplies distributed and received at Staging Area.
	Determine required resource levels from the OSC/DOSC.
	Maintain and provide status to STAM and/or Resource Unit of all resources.
	Coordinate with Staging Branch Director or Logistics Section regarding staging requirements for ordered and en-route resources.
	Demobilize Staging Area in accordance with the Incident Demobilization Plan.
	Service and prepare equipment for the next operational period.
	Maintain Staging Area in orderly condition.
	Debrief with OSC/DOSC or as directed at the end of each shift.
	Establish Staging Area has:
	• Communications available
	• Easy access for response equipment

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	• Convenient to recovery sites
	• Size to accommodate large amounts of equipment & supplies
	• Access to food and lodging
	Develop and implement traffic control plan
	• Establish entrance checkpoint
	• Establish exit checkpoint
	Directions
	• Maps developed by Incident Command should be distributed, showing the spill site, command center and recovery sites
	Develop a Staging Command Structure
	• Staging Manager
	• Safety / Security Officer
	• Administrative Assistant
	• Receiving Manager
	• Shipping Manager
	• Runners (2 minimum)
	• Yard Man (1 minimum)
	• Decon Manager
	• Consultants – The Response Group/ Crowley Co.
	Equipment
	• Office Trailer w/power (generator or hard-wire)
	• Light towers
	• First Aid kits
	• Radios (walkie-talkies)
	• Cell phones
	• Telephones / Fax machine
	• Copy machine
	• Maps
	• Computers
	• Road Cones / Caution Tape / Road Signs
	• Flashlights
	• PPE – Raingear / Boots / Gloves / Hardhats
	• Tool Kit – hammer, nails, adj. wrench, pliers, screw driver, duct tape, etc.
	Supplies
	• Food
	• Water
	• Port-a-pots
	• General office supplies
	• Other – list as necessary
	Goals
	• Site Specific Safety & Health Plan
	• Daily Work Permit and Safety Checklist

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST OPERATIONS SECTION

	• ICS Forms
	• Establish update schedule with RESL
	• Establish resource inventory tracking system
	• Establish communications plan – copy IC
	• Establish decontamination procedure – copy IC
	Staging Manager Response Kit
	• Ring Binder w/ICS forms, etc. (disk & hard copy)
	• Printer (portable) with paper/ extra cartridges
	• 12 v > 120 volt power supply inverter, APC AC/DC 75 W
	• Power outlet strip
	• Cell phone > laptop communications modem
	• Cell phone batteries w/charger base
	• Walkie-talkies
	• Diskettes
	• Batteries
	• Clip board
	• Surveyors tape
	• Camera
	• Gloves
	• Note pads
	• Post-It Notes
	• Name badges
	• Incident Log Book (CPC)
	• Flashlight
	• Pens / Pencils / Sharpie Markers
	• Stapler / Paper-Binder Clips
	• Street Atlas Program
	• Envelopes / File Folders
	• Contractor Safety Orientation pamphlets (6)
	• Emergency Response Plan
	• CPC Directional Signs
	Establish check-in function as appropriate utilizing the ICS 211P & E and provide updates to the resource unit leader as requested.
	Request maintenance service for equipment at Staging Area as appropriate.
	Respond to request for resource assignments. (Note: This may be direct from the OSC or Staging Area Director).
	Demobilize Staging Area in accordance with the Incident Demobilization Plan.
	Service and prepare equipment for the next operational period.
	Maintain Staging Area in orderly condition.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

PLANNING SECTION CHIEF – PSC **DEPUTY PLANNING SECTION CHIEF – DEPUTY PSC**

Responsibilities

The PSC, a member of the General Staff, is responsible for the collection, evaluation, dissemination and use of incident information and maintaining status of assigned resources. Information is needed to: 1) understand the current situation; 2) predict the probable course of incident events; 3) prepare alternative strategies for the incident; and 4) submit required incident status reports. The PSC may have Deputy PSC's, who may be from the same organization or from an assisting agency. The Deputy PSC should have the same qualifications for which they work and must be ready to take over position at any time.

Checklist

Reactive Phase

- | | |
|--|-----------------------------------------------------------------------------------------------------------------|
| | Obtain briefing from Incident Commander and confirm Agency Notifications have been made. |
| | Notify and activate initial Planning Section personnel (SITL, FO, RESL and DOCL). |
| | Determine need for Air Patrol, NRDA Contractor and ICS Contractor. |
| | Notify Strike Team PSC to build out Planning Section including specialty contractors as needed. |
| | Contact OSC to develop initial response strategy. |
| | Establish Reactive Phase communications plan for IMT. |
| | Contact GIS staff to initiate development of a Google Earth fly-over of source area and the affected watershed. |

Proactive Phase

- | | |
|--|------------------------------------------------------------------------------------|
| | Review Common Responsibilities. |
| | Obtain briefing from the Incident Commander or District Spill Management Team PSC. |
| | Collect, process, and display situation information about the incident. |
| | Provide input to Incident Command & Operations Section Chief. |
| | Work with IC and Section Chiefs to prepare draft ICS 202 Incident Objectives. |
| | Assist OSC in the development of response strategies. |
| | Supervise preparation of the Incident Action Plan |

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

	Facilitate planning meetings and briefings.
	Assign personnel already on-site and request additional personnel to staff
	Planning Section positions appropriately and per the response plan.
	Establish information requirements and reporting schedules for Planning Section Units (e.g., Resources, Situation).
	Determine the need for any specialized resources in support of the incident.
	Establish special information collection activities as necessary (e.g., weather, environmental, toxics, etc.).
	Assemble information on alternative strategies.
	Provide periodic predictions on incident potential.
	Keep IMT apprised of any significant changes in incident status.
	Supervise the tracking of incident personnel and resources through the RESL
	Develop ICS 230 Meeting Schedule in conjunction with the IC/UC and SITL.
	Oversee preparation and implementation of the Incident Demobilization Plan.
	Incorporate plans (e.g., Traffic, Medical, Communications, and Site Safety) into the IAP.
	Develop other incident supporting plans (e.g., salvage, transition, security).
	Assist Operations with development of the ICS 234 Work Analysis Matrix and ICS 215 Operational Planning Worksheet.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

RESOURCE UNIT LEADER - RESL

Responsibilities

The RESL is responsible for maintaining the status of all assigned tactical resources and personnel at an incident. This is achieved by overseeing the check-in of all tactical resources and personnel, maintaining a status-keeping system indicating current location and status of all these resources.

Checklist

	Review Common and Unit Leader Responsibilities.
	Obtain briefing and special instructions from Planning Section Chief.
	Establish the check-in (ICS 211P) function at command post.
	Work with Staging Area Manager(s) in the field to ensure they are utilizing the check-in (ICS 211P & E) process to track equipment and personnel arriving and departing the staging area. Obtain regular updates for available resources.
	Prepare, post, & maintain Organization Assignment List (ICS 203) and Organization Chart (ICS 207) working with each section chief and unit leader.
	Ensure appropriate resource tracking process is established and communicated.
	Maintain master roster of all tactical resources checked in at the incident.
	Ensure ICS 210 Change Status forms are utilized when resources are reassigned to another location.
	Review & filter all ICS 213RR Resource Requests from OPS with available resources in staging before ICS 213RR is submitted to Logistics for ordered.
	Coordinate with Logistics to establish tracking of ordered/en-route resources.
	Maintain and post the current status and location and assignments of all tactical resources on ICS-201-4 "Resource Summary".
	Work with Operations and Environmental Unit to prepare strategies and tactics (ICS 234 Work Analysis Matrix) to support objectives (ICS 202).
	Draft ICS 215 Operational Planning Worksheet with Operations, Environmental, and Safety to determine required resources needed to implement tactics in the field and what additional resources need to be ordered.
	Prepare appropriate parts of Division Assignment Lists (ICS 204).
	Establish communication with Operations (Field) and Staging Area Managers to maintain, track, & update resource summary and status changes.
	Oversee and deploy check-in recorders to the field and staging sites to assist with resource/personnel verification, update/maintain of the resource summary.
	Attend appropriate meetings and briefings as required.
	Provide resources and organization information to SITL for situation display.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

ENVIRONMENTAL UNIT LEADER - ENVL

Responsibilities

The Environmental Unit Leader is responsible for environmental matters associated with the response, including strategic assessment, modeling, surveillance, and environmental monitoring and permitting. The ENVL may be staffed or co-staffed by an agency representative as required by state policy or the UC. Technical support staff frequently assigned to the Environmental Unit may include the Scientific Support Coordinator and Specialists in the following areas: Sampling, Weather Forecast, NRDA, Remediation Technologies, Wildlife, Shoreline Cleanup/Assessment, Disposal, Trajectory Analysis, Resources at Risk, Historical/Cultural Resources, and Response Technologies.

Checklist

	Review Common & Unit Leader Responsibilities
	Obtain a briefing and special instructions from the PSC.
	Identify sensitive areas, recommend response strategies and prioritize for protection
	Consult with Liaison to our ROW patrol contractor to obtain availability of planes to provide aerial recon support.
	Following consultation with natural resource trustees, provide input on wildlife protection strategies (e.g., removing oiled carcasses, pre-emptive capture, hazing, and/or capture and treatment).
	Determine the extent, fate, and effects of contamination.
	Acquire, distribute, and provide analysis of weather forecasts.
	Coordinate with the Air Operations Branch Director for the establishment of flight restrictions, if necessary, for sensitive wildlife areas.
	Participate in Prep for Tactics and in development of ICS 204 Work Assignments to identify potential environmental concerns and associated mitigation measures and participate in other planning cycle meetings.
	Work with OSC to determine response actions with the greatest net environmental benefit and monitor the environmental consequences of response actions.
	Develop shoreline cleanup and assessment plans. Identify the need for, and prepare any special advisories or orders.
	Identify the need for, and obtain, permits, consultations, and other authorizations, including Endangered Species Act (ESA) provisions.
	Following consultation with the FOSC's.
	Historical/Cultural Resources Technical Specialist identifies and develops plans for protection of affected historical/cultural resources.
	Evaluate the opportunities to use various response technologies.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

	Develop disposal plans.
	Develop a plan for collecting, transporting, and analyzing samples.
	Maintain Individual/Unit Log (ICS 214a/214).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

SITUATION UNIT LEADER - SITL

Responsibilities

The Situation Unit Leader is responsible for collecting, processing and organizing incident information relating to the growth, mitigation or intelligence activities taking place on the incident. The SITL may prepare future projections of incident growth, maps and intelligence information.

Checklist

	Review Common & Unit Leader Responsibilities.
	Check in to Command Post to obtain briefing and special instructions from the Planning Section Chief.
	In coordination with Operations Section, organize and direct Recon Teams, including twice daily Air Recon.
	• Post Recon results in Situation Status display
	• Provide updated Recon information to appropriate personnel (Operations Section Chief, Division Supervisors, etc.)
	Follow Resource Tracking Process described in Section 4.06. Provide hourly updates (to be determined by the SITL) on equipment and personnel status to Resource Unit Leader.
	Develop and implement accountability, safety and security measures for Situation Unit personnel and resources.
	Ensure GIS/Trajectory Specialist predicts spill trajectory and marks ETA to established mileposts on the Situation display map.
	• Refer to Tactical Response Plan for pre-determined shoreline & division segments
	• Request initial trajectory
	a) Obtain updated trajectories based on surveillance and weather updates.
	Develop spilled product Mass Balance Summary.
	• Obtain weathering profile for type of oil spilled from GIS/Trajectory Specialist or Environmental Unit Leader
	• Request weather/fate data from NOA SSC
	• Collect, maintain and display spill movement data for duration of incident
	• Weather, slick surveillance, trajectory
	Develop maps depicting spill area, spill trajectories.
	Provide updated spill surveillance data to trajectory specialist as necessary
	Collect, maintain and display spill response data including:
	• Spill Report
	• Frequently used phone numbers
	• Maps depicting response operations, staging areas, and other information as

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

	necessary
	Coordinate with appropriate Response Team personnel to gather information for incident Status Reports and Equipment Status Board.
	<ul style="list-style-type: none"> • Status of manpower and equipment resources currently assigned, available and/or out of service
	<ul style="list-style-type: none"> • Maps showing environmentally sensitive areas, protection strategies
	<ul style="list-style-type: none"> • Status of oily waste management operations, including quantity of oil spilled and quantity of oil, oily water, and debris recovered
	Prepare the Incident Status Summary (ICS 209).
	Ensure CMT Assumed Consequences and ICS 201, 202 forms are completed, approved by the Incident Commander, and forwarded to the Atlanta Crisis Management Team as early as possible in the event and at least every 4 hours.
	Provide status reports to appropriate requesters.
	Maintain Individual/Activity Log (ICS Form 214a).
	Participate in incident planning meetings, as required.
	Advise Planning Section Chief and Incident Commander or any significant changes in incident status.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

GEOGRAPHIC INFORMATION SYSTEM SPECIALIST – GIS

Responsibilities

The GIS Specialist is responsible for gathering and compiling updated incident information and providing various map products to the incident. The Specialist will work with the Situation Unit and the Information Officer to ensure accurate and rapid dissemination of the incident to the cognizant parties.

Checklist

Reactive Phase

	Initiate development of a Google Earth fly-over of source area and the affected watershed.
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Proactive Phase

	Review Common Responsibilities.
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	Obtain briefing and special instructions from Planning Section and/or Situation Unit Leader.
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	Determine GIS resource needs. Obtain required resources.
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	Participate in incident planning meetings and provide briefings, as required.
--	-------------------------------------------------------------------------------

	Gather and compile data from the different incident sections required to prepare maps or perform requested technical tasks.
--	-----------------------------------------------------------------------------------------------------------------------------

	Conduct technical tasks or activities related to your area of expertise as requested.
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	Provide maps for various components of the incident; including booming site maps for ICS 204 "Division Assignment Lists". Develop route maps from staging areas to recovery points, route maps to medical facilities, and trajectory maps after approval from SITL.
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	Develop required products within time limits.
--	-----------------------------------------------

	Provide status reports to appropriate requesters & Situation Unit.
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	Arrange spill observations / overflights as needed, including night infrared photography. Coordinate with SITL & Air Operations Branch.
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	Provide trajectory and overflight maps, with current information.
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	Assist contract GIS personnel as necessary, including assisting with utilization of CPC Response Site Sheets and Recovery Point Map Books.
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	Assist with identifying resources at risk from USGS maps. Post them on the ICS 232 "Resources At Risk Summary" status board.
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	Maintain Individual Log (ICS 214a).
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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

FIELD OBSERVER - FOBS

Responsibilities

The Field Observer (FOBS) is responsible for collecting or confirming situation information from personal observations at the incident location and provides this information to the SITL. If communications with the SITL are difficult, relay all information through the Situation Room at 678.762.2261, 2298, 2310, or 2383.

Checklist

	Review Common Responsibilities.
	Determine location of assignment, type of information required, priorities, time limits for completion, method of communication, and method of transportation.
	Obtain necessary equipment and supplies (e.g., safety equipment, radio, cell phone, incident specific phone list with all numbers for Incident Command Sections and Site Commanders, timepiece with second hand to measure stream velocity, field notebook, flagging to mark roads and turnoffs at boom deployment locations for response crews, CPC or county road maps, sample containers).
	Determine leading edge of the spill, perimeters of the incident, locations of oil concentration, rates of speed, weather conditions, environmentally sensitive areas, natural resources at risk, economically critical areas, hazards to personnel, and any other pertinent information.
	Assist in locating the following recovery points (in order of importance): 1. Last Stand, 2. Primary Recovery, 3. Leak Site Recovery.
	Determine the location of effective booming and recovery sites using the Recovery Point Maps or as directed by Incident Command or the Situation Room.
	If assigned to Air Recon, confirm schedule through staging and establish clear communication with Ground Recon personnel.
	Regularly report information to the Initial Incident Commander by established procedure.
	Be prepared to identify all facility locations (e.g., Helispots, Division and Branch boundaries).
	Report information to the SITL by established procedure.
	Report immediately any condition observed that may cause danger and a safety hazard to personnel.
	Gather intelligence that will lead to accurate predictions.
	Maintain Individual/Activity Log (ICS Form 214a), including shoreline oil conditions.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

DOCUMENTATION UNIT LEADER - DOCL

Responsibilities

The Documentation Unit Leader (DOCL) is responsible for establishing a filing system for the maintenance of accurate, up-to-date incident information that will constitute the incident's legal record. Examples of incident documentation include: Incident Action Plan, incident reports, communication logs, injury claims, situation status reports, etc. Thorough documentation is critical to post-incident analysis. Some of the documents may originate in other sections. This unit shall ensure each section is maintaining and providing appropriate documents for inclusion in the incident file. The DOCL will, after the response is terminated, provide to the IC the complete set of incident files to store for legal, analytical, and historical purposes. The DOCL will prepare meeting minutes, track open action items and maintain the incident event log.

Checklist

The Administrative Assistant for the District (Documentation Unit Leader) in which the incident occurs will be responsible for overseeing administrative support within the Command Center to the Incident Commander and each of the following sections of the Response Organization (Operations, Planning, Logistics, Staging and Finance).

Review Common & Unit Leader Responsibilities.

Coordinate with the Planning Section Chief to obtain briefing.

Set up work area; begin organization of incident files. Set up work area; establish filing area; begin organization of incident files.

Establish duplication service; respond to requests.

Develop and communicate documentation protocols to the IMT.

File all official forms and reports.

Review records for accuracy and completeness; inform appropriate units of errors or omissions.

Provide incident documentation as requested.

Organize files for submitting final incident documentation package.

Prepare, ICS 231 Meeting Summary & ICS 233 Open Action Tracker and Incident Event Log.

Ensure adequate supply of commonly used office supplies and equipment. Direct errand runners for replenishing supplies, other.

Attend all Command Center meetings, record notes and all decisions (date, time and decision-making personnel/organizations) as well as maintain a detailed log of daily activities as required.

Oversee Copy Center, Data Entry Center, Fax Center, and Supply 'Store', ensuring

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST PLANNING SECTION

DEMOBILIZATION UNIT LEADER - DMOB

Responsibilities

The Demobilization Unit Leader (DMOB) is responsible for developing the Incident Demobilization Plan. On large incidents, demobilization can be quite complex, requiring a separate planning activity. The demobilization planning should be initiated early in a response to avoid delays in demobilizing resources that are no longer needed.

Checklist

	Review Common & Unit Leader Responsibilities.
	Review incident resource records to determine the likely size and extent of demobilization effort and develop a resource matrix.
	Coordinate demobilization with Agency Representatives.
	Monitor the on-going Operations Section resource needs.
	Identify surplus resources and probable release time.
	Utilize the demobilization checkout procedures for release of incident resources (ICS 221).
	Establish communications with off-incident facilities, as necessary.
	Develop an Incident Demobilization Plan that would include: <ol style="list-style-type: none"> 1. General information section 2. Responsibilities section 3. Release priorities 4. Release procedures 5. Demobilization Checkout form ICS 221 6. Directory.
	Prepare appropriate directories (e.g., maps, instructions, etc.) for inclusion in the demobilization plan.
	Demobilization Plan should include process by which suppliers inspect condition of released resources and sign off if acceptable prior to moving offsite.
	Distribute demobilization plan (on and off-site).
	Provide status reports to appropriate requestors.
	Ensure that all Sections/Units understand their specific demobilization responsibilities.
	Supervise execution of the Incident Demobilization Plan.
	Brief the PSC on demobilization progress.
	Maintain Individual/Unit Log (ICS 214a/214).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

LOGISTICS SECTION CHIEF – LSC **DEPUTY LOGISTICS SECTION CHIEF – DEPUTY LSC**

Responsibilities

The LSC, a member of the General Staff, is responsible for providing facilities, services, and material in support of the incident. The LSC participates in the development and implementation of the IAP and activates and supervises the Branches and Units within the Logistics Section.

The LSC may have Deputy LSC's, who may be from the same organization or from an assisting agency. The Deputy LSC must have the same qualifications as the person for whom they work, as they must be ready to take over that position at any time.

Checklist

	Review Common Responsibilities.
	Obtain briefing from Incident Commander.
	Plan the organization of the Logistics Section.
	Obtain information on available aircraft charters prior to initial Strike Team conference call.
	Assign work locations and preliminary work tasks to Section personnel.
	In conjunction with Command, develop and advise all Sections of the IMT resource approval and requesting process.
	Determine the size, organization and staffing needs of the Logistics Section as required to support the incident.
	Assemble and brief Logistics Branch Directors and Unit Leaders on their duties and your expectations.
	Notify the Resources Unit of the Logistics Section Units activated, including names and locations of assigned personnel.
	Locate and order personnel and resources as requisitioned by Operations via the Resource Unit Leader.
	Establish Incident Command Center – coordinate with Incident Commander and Communications Leader. Secure 1,500 sq. ft. room, private IC section leader conference room. Establish necessary communications & equipment. Set up office service area that includes fax, copier, workstations, etc. Secure necessary staff to support operation including IAP software assistants.
	Establish initial Base and future Staging Area – coordinate with Operations and Resource Unit Leader. Set up field office (mobile office) that includes fax, copier and workstations. Establish communications. Secure necessary staff to support operation including IAP software assistants and field runners.
	Identify service and support requirements for additional resources by OPS.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

	Develop comprehensive communication plan – coordinate with Communication Unit Leader.
	Participate in ICS 234 development and/or review proposed tactics for next operational period for ability to provide resources and logistical support.
	Coordinate and process requests for additional resources by OPS.
	Communicate with Resource Unit & Staging Manger regarding ordered/en-route resources.
	Review IAP & estimate Section needs for the next operational period.
	Advise on current service and support capabilities.
	Advise Command and Chiefs on resource availability to support incident needs.
	Identify resource needs for incident contingencies.
	Track resource effectiveness and make necessary adjustments.
	Provide input to and review the Communications Plan, Medical Plan and Traffic Plan.
	Obtain personnel and equipment rate sheets from vendors and review with Finance.
	Maintain regular contact with supply vendors to maintain accuracy of equipment inventory (at Staging) and availability (at vendor's warehouse). Discuss lead time necessary for delivery of equipment from the warehouse to Staging.
	Prepare service and support elements of the IAP and estimate future requirements.
	Request and/or set up expanded ordering processes as appropriate to support incident.
	Receive Incident Demobilization Plan from Planning Section.
	Recommend release of Unit resources in conformity with Incident Demobilization Plan.
	Implement applicable portions of the incident Demobilization Plan.
	Ensure the general welfare and safety of Logistics Section personnel.
	Maintain Individual/Activity Log (ICS Form 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

SERVICES BRANCH DIRECTOR - SVBD	
Responsibilities	
The SVBD, when activated, is under the supervision of the LSC and is responsible for the management of all service activities at the incident. The SVBD supervises the operations of the Communications, Medical and Food Units.	
Checklist	
	Review common responsibilities.
	Obtain working materials.
	Determine the level of service required to support operations and the staff of the Branch accordingly.
	Prepare or provide input to and review the Communications Plan (ICS 205) and Medical Plan (ICS 206).
	Participate in planning meetings of Logistics Section personnel.
	Organize and prepare assignments for the Service Branch personnel.
	Coordinate activities of the Branch Units.
	Inform the LSC of Branch activities.
	Resolve Service Branch problems.
	Maintain Individual Log (ICS 214a).

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

COMMUNICATIONS UNIT LEADER - COML	
Responsibilities	
The COML is responsible for developing plans for the effective use of incident communications equipment and facilities; installing and testing of communications equipment; supervision of the Incident Communications Center; distribution of communications equipment to incident personnel; and the maintenance and repair of communications equipment.	
Checklist	
	Review Common & Unit Leader Responsibilities.
	Obtain briefing from Logistics Section Chief.
	Ensure that adequate means of communication exists between the Command Post, field personnel and the Atlanta Control Center.
	Incorporate Satellite phones as necessary.
	Activate Incident and Response e-mail account.
	Maintain list of vendors that can provide communications equipment for emergency use.
	Recover equipment for use in future incidents.
	Secure additional communications equipment including cellular phones, telephones and telephone lines, radio base stations and two way radios to provide a complete communications network by ensuring the following:
	Incident Command Center
	• Install a minimum of 8 hardwired phone lines
	• Install a minimum of 1 dedicated fax line
	• Install a minimum of 1 dedicated line for a personal computer
	• Utilize a satellite phone if other means of communications are not functional
	• Test different modes of communication to determine which ones are to be used
	• Establish a schedule for periodic progress reports from section leaders and recovery sites
	• Meetings of section leaders should be held twice daily prior to shift changes to review the status of the clean-up and the upcoming 12 hour plan
	• Prepare and maintain personnel lists with pertinent information (phone #, shift, hotel/room #, pager #, cellular phone #, etc.)
	• Prepare maps with directions to the incident command center, staging, each containment/recovery site, product off-loading sites, and hotels
	Have runners available should all other means of communications fail or become disabled.
	Staging/Logistics
	• Install or have access to at least 2 hardwired phones
	• Install a minimum of 1 dedicated fax line
	• Install a minimum of 1 dedicated line for a personal computer
	• Utilize portable radio and/or cellular phone if there is adequate reception

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

	• Check to see if pager is functional
	• Utilize a satellite phone if other means of communications are not functional
	• Determine which modes of communication connecting staging with the incident command center, logistics, and each containment/recovery site are functional
	• Have runners available to set up a remote communications point if no means of communication are functional at the staging location
	Oil Containment/Recovery Sites
	• Utilize portable radio and/or cellular phone if there is adequate reception
	• Check to see if pager is functional
	• Utilize a satellite phone if other means of communications are not functional
	• Have runners available if normal communications are inadequate at the work site. Personnel may need to be positioned at locations where there is good reception (e.g.: at a higher elevation). Runners can be used to convey information between the work site and the relay points
	Ground Recon
	Utilize portable radio and/or cellular phone if there is adequate reception
	• Check to see if pager is functional
	• Utilize a satellite phone if other means of communications are not functional
	Aerial Recon
	• Colonial is licensed to use the aviation frequency 122.925 MHz for communications between ground personnel and patrol planes (or any other airborne craft). This is a standard aviation frequency that will be in both Colonial patrol planes and in any helicopters or airplanes that are used. Portable radios on this frequency are carried by Colonial ROW personnel and will be distributed to each emergency response site for communications with any aerial recon aircraft or helicopters.
	• In the event that air-to-ground radio communications are not functional and something is observed that warrants urgent notification land the helicopter at a location where communications can be established via cellular, radio, or satellite phone.
	Public Affairs/ROW Claims
	• Establish an office separate from Incident Command Center
	• Install or have access to at least 2 hardwired phones
	• Install a minimum of 1 dedicated fax line
	• Install a minimum of 1 dedicated line for a personal computer
	• Advertise 1-800 claims notification phone number for those affected by the incident per regulatory requirements
	• P.R. and claims to each have at least one representative available around the clock
	• Use frequency 122.925 MHz to communicate between ground personnel and aircraft
	Provide technical assistance to ensure all phases of the communications network functions properly.
	Prepare and implement the incident Radio Communications Plans (ICS 205).
	Ensure an equipment accountability system is established.

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

	Recover equipment from Units being demobilized.
	Maintain Individual/Activity Log (ICS Form 214a)

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INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

FOOD UNIT LEADER - FDUL	
Responsibilities	
The FDUL is responsible for supplying the food needs for the entire incident, including all remove locations, e.g., Staging Areas, as well as providing food for personnel unable to leave tactical field assignments.	
Checklist	
	Review Unit Leader Responsibilities.
	Determine food and water requirements.
	Determine the method of feeding to best fit each facility or situation.
	Obtain necessary equipment and supplies.
	Ensure that well-balanced menus are provided.
	Order sufficient food and potable water from the Supply Unit.
	Maintain an inventory of food and water.
	Maintain food service areas, ensuring that all appropriate health and safety measures are being followed.
	Supervise Food Unit personnel as appropriate.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

MEDICAL UNIT LEADER - MEDL

Responsibilities

The Medical Unit Leader (MEDL) is primarily responsible for; 1) development of the Medical Plan, 2) providing medical care and overseeing health aspects of response personnel, 3) obtaining medical aid and transportation for injured and ill incident personnel, 4) coordinating with other functions to resolve health and safety issues, and 5) preparation of reports and records.

Checklist

	Review Common Responsibilities.
	Review Unit Leader Responsibilities.
	Participate in Logistics Section/Service Branch planning activities.
	Establish the Medical Unit.
	Prepare the Medical Plan (ICS 206).
	Provide any relevant medical input into the planning process for strategy development.
	Coordinate with Safety Officer, Operations, hazmat specialists, and others on proper personnel protection procedures for incident personnel.
	Prepare procedures for major medical emergency.
	Develop transportation routes and methods for injured incident personnel.
	Ensure incident personnel patients are tracked as they move from origin, care Facility and disposition.
	Provide continuity of medical care for incident personnel.
	Declare major medical emergency as appropriate.
	Provide or oversee medical and rehab care delivered to incident personnel.
	Monitor health aspects of incident personnel including excessive incident stress.
	Respond to requests for medical aid, medical transportation and medical supplies.
	In conjunction with Finance/Admin Section, prepare and submit necessary authorizations, reports and administrative documentation related to injuries, compensation or death of incident personnel.
	Coordinate personnel and mortuary affairs for incident personnel fatalities.
	Provide oversight and liaison as necessary for incident victims among emergency medical care, medical examiner and hospital care.
	Provide for security and proper disposition of incident medical records.
	Maintain Unit Log (ICS 214).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

SUPPORT BRANCH DIRECTOR - SUBD	
Responsibilities	
The SUBD, when activated, is under the direction of the LSC, and is responsible for the development and implementation of logistics plans in support of the Incident Action Plan. The SUBD supervises the operations of the Supply, Facilities, Ground Support and Vessel Support Units.	
Checklist	
	Review Common Responsibilities.
	Obtain work materials.
	Determine initial support required for operations in coordination with the Logistics Section Chief and Service Branch Director.
	Determine the Support Branch organization and staffing level required to support operations.
	Prepare initial organization and assignments for support operations.
	Assemble and brief Support Branch personnel on the incident details and your expectations.
	Prepare Security, Transportation, Traffic and Vessel Routing plans as required by the incident.
	Determine if assigned Branch resources are sufficient.
	Maintain surveillance of assigned Units work progress and inform the LSC of their activities.
	Resolve problems associated with requests from the Operations Section.
	Maintain Individual Log (ICS 214a).

Colonial Pipeline Company

INCIDENT COMMAND SYSTEM RESPONSIBILITY CHECKLIST LOGISTICS SECTION

SUPPLY UNIT LEADER – SPUL

Responsibilities

The Supply Unit Leader (SPUL) is primarily responsible for procuring all resources (personnel, equipment and supplies) for the incident. If not conducted by the Staging Area Manager(s), the SPUL is also responsible for receiving, storing and distributing all supplies; maintaining an inventory of supplies; and storing and disbursing of non-expendable supplies and equipment.

Checklist

	Review Common Responsibilities.
	Review Unit Leader Responsibilities.
	Participate in Logistics Section/Support Branch planning activities.
	Determine the type and amount of resources en route to the incident.
	Review the IAP for information on operations of the Supply Unit.
	Develop and implement safety and security requirements for equipment/supplies storage areas/facilities.
	Order, receive, distribute and store supplies and equipment.
	Receive and respond to requests for personnel, supplies and equipment.
	Maintain an inventory of supplies and equipment.
	Prepare ICS 210 Change Status forms if equipment or other significant resources are deployed from storage areas.
	Service reusable equipment.
	Submit reports to the SUBD.
	Maintain Individual/Unit Log (ICS 214a/214).

Colonial Pipeline Company

Post Emergency Response Reviews

Each time an Emergency Operating Procedure is activated for an actual event, a post response review shall be conducted to determine if the emergency operating procedures and emergency response activities were effective. Depending on the nature and complexity of the event, this evaluation may be separate from the Incident Analysis Process of Corporate Procedure 16 that is more focused on determining the cause(s) of the incident.

The relevant Operations Manager is responsible for assembling the review team and ensuring the review is conducted, corrective actions (if any) are identified and assigned, and the findings are properly documented. The assessment will include the adequacy of the following:

- the emergency operating procedures activated
- required notifications were made
- availability of response equipment, materials, and personnel
- competency of the responders to minimize the safety and environmental hazards

Corrective actions are to be identified, assigned, and documented in OPIS/Maximo for deficiencies discovered during the review. The findings from the review are to be:

- entered into the Work Log section of the Event Report in Maximo (smaller events)
- posted into the Drill and Spill Repository in the Emergency Response SharePoint site (more significant events)

For significant spills the template in section 4.04.1 may be used to document the learnings.

Colonial Pipeline Company

Post Emergency Response Review – Significant Spill

Date of spill:

Location:

District Response Team, Strike Team, or both activated:

Attach listing of participants

Brief description of scenario:

Significant difficulties encountered during this response? (If yes, briefly describe)

Lessons learned:

Areas for improvement:

Corrective actions to be taken (also enter corrective actions into OPIS):

Core Response Components Evaluation (provide an explanation for answers that are not affirmative)

1) Notifications

Test the notifications procedures identified in the ERP

- Were required federal, state, and local agency notifications completed in a timely manner?
- Were spill management team call-out procedures effectively executed?
- Were notifications and responses properly documented?
- Were shippers notified as appropriate?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute notification procedures?

2) Staff Mobilization

Demonstrate the ability to assemble the spill response organization identified in the ERP

- Was an initial Strike Team conference call effectively initiated within an hour?
- Was there adequate coverage in key positions by Colonial and contractor to mount an acceptable initial response?
- Did we utilize pre-determined command center and staging locations?
- Was the command center adequately equipped?
- Were adequate directions provided for those unfamiliar with the area to find the command center and staging area?
- Did personnel initially report thru Staging if not members of the IC?
- Were there effective transitions when initial responders were relieved by pre-assigned personnel?
- Any changes need to be made to current procedures being used or the ERP?

3) Ability to Operate Within the Response Management System Described in the ERP

Demonstrate the ability of the Spill Management Team work within the Incident Command System as defined in the response plan to effectively address the event

Initial Response Management

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- Were appropriate emergency shutdown actions taken by the control center and/or local operations in a timely manner?
- Did initial responders perform a thorough initial assessment and size-up of the incident (e.g., spill volume, product type and hazards, including consideration of environmental conditions.)?
- Was an acceptable Site Safety & Health Plan quickly developed and implemented in the field?
- Were Initial Strategic Objectives quickly identified and implemented?
- Was an effective Unified Command established?
- Were initial responders familiar with their responsibilities?
- Comments/Lessons Learned/Recommendations

Incident Command Staff

- Was staff familiar with the ICS Planning Cycle and able to effectively apply it?
- Did the staff develop and prioritize overall incident objectives and assess if current and planned actions were consistent with those objectives?
- Did the staff establish operational periods, meeting schedules, and approve an IAP?
- Did the incident commander establish a link with CMT/Situation Room in Alpharetta office; complete the Spill Situation Status Summary and Crisis Management Assumed Consequences forms; and set up a communication cycle to keep appropriate information flow between IC and CMT?
- Did the incident commander effectively delegate duties?
- Was there good information flow within the within and between sections?
- Was there adequate administrative support?
- Were there enough adequately trained (hazwoper and functionally proficient) internal and contractor personnel to fill the required positions for two shifts for a sustained response?
- Was a shift change schedule established and was there an effective plan for making the transitions?
- Were effective briefing meetings held at appropriate intervals?
- Comments/Lessons Learned/Recommendations

Safety

Demonstrate the ability to monitor all field operations and ensure compliance with safety standards

- Were field operations adequately monitored to ensure compliance with safety standards, especially with respect to proximity of pipeline repair and recovery activities to water?
- Was a Site Safety & Health Plan prepared and updated?
- Were pre-work safety briefings held at all work sites?
- Were safety zones established?
- Were safety and health hazards adequately assessed to plan for effective protection?
- Comments/Lessons Learned/Recommendations

Operations

Demonstrate the ability to coordinate or direct operations related to the implementation of action plans

- Were tactical assignments appropriate to the overall incident objectives and strategies?
- Was there effective coordination with Planning, Staging, and Logistics Sections to develop resource status tracking and documentation?
- Was a communications schedule established at all recovery sites to report on progress and issues encountered that need attention?
- Were sufficient personnel available to effectively manage all field operations?
- Comments/Lessons Learned/Recommendations

Planning

Demonstrate the ability to develop short-range tactical plans for the operations section and specific long-range strategic plans

- Was an incident action plan effectively developed using the IAP forms?

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- Was an appropriate meeting schedule established to prepare the action plan?
- Was the Command Post Situation Display prepared and maintained?
- Was a master list of all resources checked in at incident including check-in, status, current location, estimated time of deployment, etc maintained?
- Were the spill response activities (i.e., utilizing a historian, use of proper forms, etc.) adequately documented?
- Comments/Lessons Learned/Recommendations

Logistics

Demonstrate the ability to provide the necessary support of both short-term and long-term action plans

- Was there effective integration of Logistics, Staging, and the Resource Unit sections?
- If Logistics did not immediately mobilize to the command center was there a smooth transition planned for when the move was made to join the command center?
- Comments/Lessons Learned/Recommendations

Finance

Demonstrate the ability to document the daily expenditures of the organization and provide cost estimates for continuing operations

- Was a claims phone number posted and processing system established?
- Were daily committed cost estimates documented and provided to IC?
- Was it confirmed that all contractors responding had valid contracts with CPC?
- Were contracts promptly established/adjusted for contractors without valid contracts?
- Was it quickly determined if a 3rd party cost monitoring contractor was needed?
- Comments/Lessons Learned/Recommendations

Public Information/Liaison

Demonstrate the ability to form a joint information center and provide the necessary interface between unified command and the media

- Was an initial press release issued within an appropriate time frame?
- Was a protocol established for authorizing release of information to media?
- Was a schedule prepared for regular progress reports on the spill cleanup efforts to be distributed to local officials, citizens, and the media?
- Were email updates on response progress prepared for employees?
- Comments/Lessons Learned/Recommendations

4) Source Control

Demonstrate the ability of the spill response organization to control and stop the discharge at the source

- Was the spill location confirmed in a timely manner?
- Were control measures effectively executed to stop/minimize the discharge at the source (effective station shut-down and valve closures)?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute source control procedures?

5) Assessment

Demonstrate the ability of the response organization to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of tactical operations

- Were weather and trajectory information obtained/determined?
- Were estimates of initial spill volume and potential drain down determined?
- Were recon teams (ground and air) dispatched in a timely fashion and did they provide needed information to Planning to identify effective recovery locations?

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- Were NRDA implications considered and acted upon to collect time sensitive information?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute assessment procedures?

6) Containment

Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations

- Were timely/effective actions taken to minimize product from entering creek?
- Was the “last stand” recovery point identified and boom deployed in advance of the product leading edge?
- Was there sufficient equipment available for all containment sites?
- Did contractors demonstrate adequate expertise in booming strategy and timely deployment?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute containment procedures?

7) Recovery

Demonstrate the ability of the response organization to recover, mitigate, and remove the discharged product

- Were skimmers adequately deployed and operational?
- Was there adequate on-site storage capacity available (vac trucks, tank trucks, frac tanks) to accommodate recovered volumes?
- Were arrangements made to provide adequate offloading capabilities and off-site storage capacity to hold recovered product?
- Were there appropriate means to track volume of recovered product and distinguish between volume discharged from the environment and volume collected from the pipe?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute recovery procedures?

8) Protection

Demonstrate the ability of the response organization to protect the environmentally and economically sensitive areas identified in the ACP and ERP.

- Were sensitive areas identified and prioritized?
- Did action plan adequately address protective booming strategies?
- Were potentially affected water intakes quickly identified and were measures taken to provide appropriate protection?
- Were wildlife protection areas at risk identified and were effective protective measures included in the action plan?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute protection procedures?

9) Disposal

Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris

- Was an adequate waste minimization plan (i.e. segregation of contaminated soil/debris) prepared?
- Was an adequate waste disposal plan prepared?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute waste management procedures?

10) Communications

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Demonstrate the ability to establish an effective communications system for the spill response organization

- Were there adequate communications capabilities available between the incident command center, recon, staging, logistics (if off-site), containment/recovery sites, and Alpharetta situation room?
- Did the command center have adequate internet access?
- Did command center and staging make arrangements to acquire hard-wired phones?
- Were satellite phones brought to the site and were they ready for use?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute communication procedures?

11) Transportation

Demonstrate the ability to provide effective transportation to facilitate response activities.

- Was thought given to traffic flow and how to integrate support from local authorities?
- Was the acquisition of required road permits for heavy equipment and supplies adequately addressed?
- Comments/Lessons Learned/Recommendation

12) Personnel Support

Demonstrate the ability to provide the necessary support of all personnel with the response.

- Was there adequate overnight accommodations provided for on a continuing basis for a sustained response?
- Were suitable feeding arrangements made for response personnel?
- Were emergency services for response personnel made available?
- Were adequate portable toilets facilities mobilized?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute support procedures?

13) Equipment Maintenance & Support

Demonstrate the ability to maintain and support all equipment associated with the response

- Were there adequate capabilities provided to maintain response equipment?
- Are personnel adequately trained to successfully execute maintenance procedures?
- Comments/Lessons Learned/Recommendations

14) Procurement

Demonstrate the ability to establish an effective procurement system to obtain the necessary personnel, equipment, and supplies for a sustained response

- Were needed equipment and supplies secured in a timely manner?
- Was a linkage established with corporate Procurement to provide assistance for difficult to obtain items?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute procurement procedures?

15) Documentation

Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken

- Did we record the salient information?
- Were the appropriate ICS forms completed?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute documentation procedures?

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Responses to be Used as Credit for Exercises

Credit may be taken for internal exercises conducted in response to actual spills. The qualifying requirements are explained in Section 7.01 of the ERP.

Exercise element to be credited (place "x" to identify element(s)):

- District Spill Management Team tabletop exercise ____
- Strike Team tabletop exercise ____
- Equipment deployment ____
- Components of plan exercised (place "x" to identify element(s)):
 - Notification ____
 - Staff mobilization ____
 - Ability to operate within the response management system ____
 - Source control ____
 - Assessment ____
 - Containment ____
 - Recovery ____
 - Protection ____
 - Disposal ____
 - Communications ____
 - Transportation ____
 - Personnel support
 - Equipment maintenance & support ____
 - Procurement ____
 - Documentation ____

I certify that the spill response qualifies for credit for the exercises and plan components identified above.

Incident Commander

Date

2/19/10

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Name	District	Section / Unit	Strike Team?	Primary Within Their District?	Primary Outside Their District?	Work Phone	Home Phone	Cell Phone
Command Staff							(b) (6)	
Glaze, Greg	GCD	Incident Command	x	x		409-291-5645		
Pruitt, Darren	SED	Incident Command	x	x		336-339-1280		
Beck, Gerald	NED	Incident Command	x	x		443-504-4339		
Barnes, Steve	NED	Incident Command	x	x		732-734-2060		
O'Brien, Ricky	GCD	Command Staff - Safety	x	x		225-223-5193		
Livingston, Andrew	SED	Command Staff - Safety	x	x		678-762-3555		
Smith, Brian	NED	Command Staff - Safety	x	x		703-517-3051		
Smith, Mike	Corp	Command Staff - Safety	x			770-732-6868		
Sims, Carole	Corp	Command Staff - Legal	x			678-762-2393		
District Management (Deputy ICs)								
Wolfe, Adam	GCD-TX	IC				409-291-5644		
White, Carroll	GCD-LA	IC				225-570-3012		
Kirk, Denise (AOM)	GCD-LA	IC				225-570-3015		
Gibbons, Troy	SED-AL/TN	IC				205-685-6001		
West, Robert	SED-GA	IC				770-819-3552		
Cutting, Mike	SED-SC/NC	IC				336-931-6023		
Daniel, Todd	SED-NC	IC				336-931-6027		
Allen, Trent	NED-VA	IC				757-545-7004		
Gallo, Frank	NED-MD	IC				410-970-2150		
Gentzler, John	NED-NJ (WBJ)	IC				856-202-4068		
Kressley, Allen	NED-NJ (LIN)	IC / STAM				732-734-2050		
Curtis, Richard (AOM)	NED-NJ (LIN)	IC				732-734-2059		
Liaison Officer								
Taylor, Mac	Corp	Command Staff - LNO	x	x	x	678-762-2872		
Pearson, David	Corp	Command Staff - LNO	x	x	x	678-762-2634		
Piazza, Mark	Corp	Command Staff - LNO	x			678-762-2531		
McKay, Kevin	GCD	Command Staff - LNO	x			601-765-9168		
Hedgecock, James	SED	Command Staff - LNO	x			336-931-6044		
Smith, Amara	NED	Command Staff - LNO	x			410-970-2157		
Barnard, Sarah	Corp	Command Staff - LNO				678-762-2251		
Schafer, Maggie	Corp	Command Staff - LNO				678-762-2316		
Geis, Alan	Corp	Command Staff - LNO				678-762-2657		
Husband, Jessie	Corp	Command Staff - LNO				678-762-2349		
Tylinski, Jonathan	Corp	Command Staff - LNO				678-762-2615		
Public Information Officer								
Berry, Bill	Corp	Command Staff - PIO	x	x	x	678-762-2542		
Pozin, Don	Corp	Command Staff - PIO	x	x	x	678-762-2592		
Gardner, Don	Corp	Command Staff - PIO	x			678-762-2559		
York, David	Corp	Command Staff - PIO	x			678-762-2568		
Nodzak, Kelly	Corp	Command Staff - PIO	x			678-762-2429		
Harrington-Burns, Dona	Corp	Command Staff - PIO	x			678-762-2250		
Chanthaphonh, Eddy	Corp	Command Staff - PIO	x			678-762-2440		
Yunker, Ron	Corp	Command Staff - PIO				678-762-2484		
Operations								
Conkle, Barry	GCD	Operations	x	x		601-765-9173		
Senger, Paul	NED	Operations	x	x		856-381-4675		
Thomas, Stephen	SED	Operations	x	x		336-931-6022		
Staging								
Peeler, David (OM)	GCD-MS	Staging Area Director	x	x	x	601-765-9160		
Planning								
Cervino, Tom	Corp	Planning	x	x	x	678-762-2217		
Titus, Jeff	Corp	Planning	x	x	x	678-762-2231		
Verdon, Mike	Corp	Planning	x			678-762-2873		
Environmental Unit								
Richards, Jeff	SED	Environmental Unit	x	x		423-240-9166		
Smith, Randy	GCD	Environmental Unit	x	x		601-765-9174		
Carpenter, Stan	NED	Environmental Unit	x	x		856-381-4683		
Situation Unit								
Broussard, Mark	GCD	Situation Unit				225-570-3016		
Peters, John	GCD	Situation Unit				601-765-9183		
Williams, Mike	SED	Situation Unit				205-685-6007		
Wyatt, John	SED	Situation Unit				770-819-3561		

SPILL MANAGEMENT TEAM (SMT) PHONE LIST

Name	District	Section / Unit	Strike Team?	Primary Within Their District?	Primary Outside Their District?	Work Phone	Home Phone	Cell Phone
Culbreath, John	SED	Situation Unit				704-399-5259	(b) (6)	
Leigh, Faron	SED	Situation Unit				336-294-9737		
Napier, Megan	NED	Situation Unit				804-375-3268		
Fago, John	NED	Situation Unit				856-202-4070		
Shenk, Rob	NED	Situation Unit				410-970-2126		
James, Eric	Corp	GIS	x	x	x	678-762-2862		
McChesney, Paul	Corp	GIS	x	x	x	678-762-2406		
Eldridge, Roger	Corp	GIS	x	x	x	678-762-2210		
Resource Unit								
Sisk, Perry	Corp	Resources Unit	x	x	x	404-558-0650		
Crowe, Lamar	Corp	Resources Unit	x	x	x	678-762-2259		
Troupe, Terry	Corp	Resources Unit				678-762-2518		
Dooley, Scott	Corp	Resources Unit				678-762-2438		
Plishka, Michael	Corp	Resources Unit				678-333-3624		
Williams, Erika	Corp	Resources Unit				678-762-2242		
Morgan, Brett	Corp	Resources Unit				678-762-2783		
Documentation Unit								
Smith, Belinda	GCD	Documentation Unit	x	x	x	225-570-3010		
Cottingham, Brandi	SED	Documentation Unit	x	x	x	336-931-6026		
Needham, William	NED	Documentation Unit	x	x	x	856-628-6175		
Arnold, Terri	SED	Documentation Unit				770-819-3551		
Brown, Tom	SED	Documentation Unit				336-541-0171		
Carnes, Michelle	GCD	Documentation Unit				409-291-5642		
Fortune, Angela	NED	Documentation Unit				804-672-3077		
Jones, Dawn	Corp	Documentation Unit				678-762-2275		
Jones, Eric	NED	Documentation Unit				540-947-2651		
Langley, Denise	NED	Documentation Unit				410-970-2153		
Brashier, Ann	GCD	Documentation Unit				601-765-9170		
Morgan, Patrece	Corp	Documentation Unit				678-232-9116		
Perrin, Robert	NED	Documentation Unit				804-375-3907		
Stegall, Chris	GCD	Documentation Unit				409-291-5647		
Tinsley, Marie	GCD	Documentation Unit				409-291-5642		
Tolbert, Becky	NED	Documentation Unit				804-375-3329		
Logistics								
Brown, Buddy	Corp	LOG	x	x	x	678-762-2481		
Martin, Andy	Corp	LOG	x	x	x	678-762-2245		
Preuett, Norm	GCD	LOG	x			225-241-0288		
Peltier, Glenn	GCD	LOG	x			409-227-4365		
Brooks, Keith	SED	LOG	x			770-819-3556		
Mardre, Mari	Corp	Communications Unit	x	x	x	678-762-2730		
Moss, Christopher	Corp	Communications Unit	x			678-762-2267		
Booth, Dane	Corp	Communications Unit				678-762-2825		
Wisniewski, William	NED	Communications Unit				856-202-4047		
Finance								
Bruce - Tago, Aubrey	GCD	Finance	x	x		832-279-4560		
Ravech, Kim (AOM)	SED-NC	Finance	x	x		336-931-6060		
Peacock, Lauren	NED	Finance	x	x		856-381-4677		
Morrison, Skip	Corp	ROW/Claims	x	x	x	678-762-2318		
Gross, Tim	NED	ROW/Claims	x	x	x	804-672-3077		
Centeno, Jennifer	NED	ROW/Claims				732-734-2051		
West, Tom (William)	SED	ROW/Claims				336-931-6039		
Sinclair, Duncan	Corp	ROW/Claims				678-762-2381		
Corporate Office Management								
Adams, Joe	Corp	CCOM				678-762-2263		
Armstrong II, Harvey (Sonny)	Corp	CCOM				770-851-0854		
Baker, Steve	Corp	Director - Communications				678-762-2589		
Barbeauld, Rob	Corp	CMT Leader back-up				678-762-2841		
Barimo, Ken	Corp	Control Center Leader				678-762-2266		
Belden, Doug	Corp	CMT Leader				678-762-2498		
Brooks, Eve	Corp	Human Resources				678-762-2307		
Brown, David	Corp	CCOM				678-762-2346		
Dague, Kevin	Corp	CCOM				678-762-2263		
Doudna, David	Corp	Finance				678-762-2354		
Felt, Tim	Corp	President				678-762-2235		
Lackey, Meredith	Corp	Legal				678-762-2763		
Mobley, Brock	Corp	CCOM				678-762-2263		
Nguyen, Anh	Corp	Hydraulics SME				678-762-2363		
Reese, Ray	Corp	HSS Leader				678-762-2434		
Tompkins, Charley	Corp	Hydraulics SME				678-762-2791		

Primaries must contact Control Center within 15 minutes of receiving Group 4

Colonial Pipeline Company

HAZWOPER Trained Personnel

Depending on an individual's role and responsibility during an emergency incident, certain HAZOPER training may be required. Section 6.01 of this manual details the necessary training courses and requirements for Colonial personnel.

Personnel required to complete HAZWOPER training must be able to provide proof of such training before being allowed to work within specific areas of response. Colonial's Training Services team maintains these records and will make them available when requested by a governing agency.

Future updates to this manual may include these training records if deemed prudent during an emergency response activity.

Gulf Coast District

Cell Phone Text Message: Outlook Email Group: ER_Group8_GCD_All

First Name	Last Name	Office Location	Job Title	Business Fax	Business Phone	Home Phone	Mobile Phone
Bobby	Blouin	Baton Rouge	Senior Technician		225-570-3020	(b) (6)	
William	Bowman	Baton Rouge	Sr. Operator-Shift	225-658-4900	225-570-3023		
Tim	Breeden	Baton Rouge	Associate Technician				
Mark	Broussard	Baton Rouge	Environmental Specialist		225-570-3016		
Daniel	Brumley	Baton Rouge	Operator A-Shift				
Brent	Bueche	Baton Rouge	Technician		225-570-3028		
Nicholas	Carr	Baton Rouge	Operator A-Shift				
Casey	Circello	Baton Rouge	Operator A-Shift				
Dustin	Cleveland	Baton Rouge	Operator B-Shift				
Robert	Daniel	Baton Rouge	Lead Technician		225-570-3019		
Linda	Davis	Baton Rouge	HR Manager - District	770-754-8061	225-570-3041		
Mark	Dewitt	Baton Rouge	Sr Inspector		225-570-3024		
Philip	Dold	Baton Rouge	Associate Operator-Shift				
William	Edmonston	Baton Rouge	Technician				
Craig	Escher	Baton Rouge	Sr. Operator-Shift		225-570-3030		
Adina	Floyd	Baton Rouge	Associate Operator-Shift				
Matthew	Gray	Baton Rouge	Inspector				
Matthew	Guerin	Baton Rouge	Operator A-Shift		225-570-3032		
Jordan	Harrell	Baton Rouge	Operator B-Shift				
Michael	Johnson	Baton Rouge	Field Project Manager	770-754-8346	225-570-3042		
Joe	Jones	Baton Rouge	Construction Manager - Project		409-291-5651		
Joseph	King	Baton Rouge	Sr. Operator-Shift		225-788-3727		
Denise	Kirk	Baton Rouge	Associate Operations Manager		225-570-3015		
Mark	Lacy	Baton Rouge	Lead Operator		225-570-3033		
Michael	Lawson	Baton Rouge	Technician		225-570-3060		
Jared	Lee	Baton Rouge	Associate Operator-Shift				
Kenyon	Martin Sr.	Baton Rouge	Operator B-Shift				
John	Meche	Baton Rouge	Inspector				
William	Mills	Baton Rouge	Operator A-Shift				
Tammy	Neames	Baton Rouge	Operator A-Shift		225-570-3032		
Charles	Nelson	Baton Rouge	ROW Coordinator	770-754-8075	225-570-3011		

5.03 District-Wide Employee Phone List

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Gulf Coast District

Cell Phone Text Message: Outlook Email Group: ER_Group8_GCD_All

Chris	Nichols	Baton Rouge	Inspector		
Kenneth	Nipple	Baton Rouge	Inspector		225-570-3014
Ricky	O'Brien	Baton Rouge	HSS Field Coordinator		
Dewey	Ott	Baton Rouge	Technician		225-570-3025
Oliver	Preuett	Baton Rouge	Planner I	770-754-8314	
Jonathan	Sellers	Baton Rouge	Associate Operator-Shift		
Timothy	Shedd	Baton Rouge	Corrosion Technician II	770-754-8401	
Belinda	Smith	Baton Rouge	Administrative Coordinator	225-658-4900	225-570-3010
Gary	Smith	Baton Rouge	Operator A-Shift		225-570-3030
Russell	St. Romain	Baton Rouge	Technician		
Christopher	Statham	Baton Rouge	Sr Engineer		225-570-3017
Joshua	Tate	Baton Rouge	Associate Operator-Shift		
Wade	Weller Jr.	Baton Rouge	Operator B-Shift		
Carroll	White	Baton Rouge	Operations Manager		
Shane	Winans	Baton Rouge	Technician		

(b) (6)

First Name	Last Name	Office Location	Job Title	Business Fax	Business Phone
Curtis	Davis	Beaumont	Field Project Manager	770-754-8382	
Greg	Glaze	Beaumont	Director of Operations	409-842-6405	409-291-5645
Andrew	Guitreau	Beaumont	Corrosion Technician II	770-754-8197	409-291-5643
Bart	Leger	Beaumont	Inspector	770-754-8099	409-291-5646
Glenn	Peltier	Beaumont	Measurement Specialist		409-227-4365
Christopher	Stegall	Beaumont	Corrosion Program Manager	770-754-8117	
Marie	Tinsley	Beaumont	Administrative Assistant		
Adam	Wolfe	Beaumont	Operations Manager		409-291-5644

First Name	Last Name	Office Location	Job Title	Business Fax	Business Phone
Major	Anderson	Collins	Operator A-Shift		601-765-4433
Doyle	Batte	Collins	Lead Technician		601-765-9179
Betty	Brashier	Collins	Administrative Assistant	770-754-8355	601-765-9170
Ron	Broom	Collins	Lead Operator		601-765-9184

Gulf Coast District

Cell Phone Text Message: Outlook Email Group: ER_Group8_GCD_All

Douglas	Byrd	Collins	Senior Operator		
Barry	Conkle	Collins	District Project Leader	770-754-8048	601-765-9173
Casey	Crawford	Collins	Corrosion Technician II	770-754-8377	
Ike	Creel	Collins	Operator A-Shift	770-754-8299	
Tiffani	Durr	Collins	Operator A-Shift	770-754-8307	
Brian	Gipson	Collins	Technician	770-754-8297	601-765-9185
Timothy	Graves	Collins	Technician	770-825-7608	
Tyler	Hamilton	Collins	Technician		
John	Hannabass	Collins	Senior Operator		
Richard	Hendry	Collins	Planner I		
Tommie	Hillman Jr	Collins	Operator A-Shift	601-765-6868	601-765-4433
Wayne	Ingram	Collins	Operator A-Shift	770-825-7610	601-765-9155
Phillip	McDonald	Collins	Associate Operator		
Kevin	McKay	Collins	District Compliance Coord	770-754-8489	601-765-9168
David	McQueen	Collins	Operator A-Shift		
Eric	Newman	Collins	Associate Operator		
Mark	Norris	Collins	Operator A-Shift		
Terrell	Overland	Collins	Technician	770-754-8273	
David	Peeler	Collins	Operations Manager	770-754-8093	601-765-9160
John	Peters	Collins	Environmental Technician	770-754-8303	601-765-9183
Michael	Plishka	Collins	Engineer	770-754-8454	
Aaron	Rials Sr	Collins	Technician	601-765-6414	601-765-6706
Steve	Sanford	Collins	Senior Operator		601-765-9176
Randy	Smith	Collins	District Environmental Manager	601-765-6414	601-765-9174
Rhyan	Sparkman	Collins	Inspector		601-765-9167
Mark	Speed	Collins	Operator A-Shift		
Stacy	Sullivan	Collins	Field Project Manager	770-754-8316	601-765-9159
John	Walker	Collins	Technician	770-754-8240	
Chris	Walters	Collins	Associate Technician		
Mark	Wilson	Collins	Field Project Manager	770-754-8315	601-765-9171

(b) (6)

Gulf Coast District

Cell Phone Text Message: Outlook Email Group: ER_Group8_GCD_All

First Name	Last Name	Office Location	Job Title	Business Fax	Business Phone	Home Phone	Mobile Phone
Clint	Allison	Hebert	Associate Operator-Shift			(b) (6)	
Barrett	Broussard	Hebert	Sr. Operator-Shift		409-527-4416		
Michele	Carnes	Hebert	Planner I		409-527-4423		
Paul	Cox	Hebert	Operator A-Shift		409-722-4054		
Roger	Devillier	Hebert	Technician		409-527-4418		
John	Folsom	Hebert	Operator B-Shift				
Robert	Franks Jr.	Hebert	Technician				
Brandi	Hazel	Hebert	Associate Operator-Shift				
Jerry	Jackson	Hebert	Associate Technician				
Kovan	Johnson	Hebert	Associate Operator-Shift				
Troy	Landry	Hebert	Operator B-Shift				
Jon	Morein	Hebert	Operator B-Shift				
Jeromy	Nolan	Hebert	Operator A-Shift	770-754-8199			
Jeremy	Olivier	Hebert	Operator A-Shift				
Ron	Peterson	Hebert	Operator B-Shift				
Gary	Revia	Hebert	Technician				
Roger	Walker Jr	Hebert	Operator A-Shift		409-722-4054		
Kiley	Williams	Hebert	Sr. Operator-Shift		409-527-4424		
Donovan	Bonnett	Houston	Operator B-Shift		713-473-2434		

First Name	Last Name	Office Location	Job Title	Business Fax	Business Phone
Aubrey	Bruce-Tagoe	Houston	Business Manager		
Nolan	Champagne	Houston	Operator A-Shift		713-473-2434
Dean	Chance	Houston	Senior Technician		713-473-2434
Connie	Church	Houston	Operator A-Shift		713-473-2434
Leren	Curry	Houston	Operator B-Shift		
Calvin	Dodson	Houston	Operator B-Shift		
Eric	Fiala	Houston	Technician		
Bart	Havard	Houston	Inspector	770-754-8141	713-332-5273
Kevin	Holland	Houston	Lead Technician		N-A

Gulf Coast District

Cell Phone Text Message: Outlook Email Group: ER_Group8_GCD_All

Daniel	Lagasse	Houston	Operator A-Shift		713-473-2434
Coy	McAdams	Houston	Senior Operator		678-896-3074
Keith	Penn	Houston	Quality Assurance Coordinator		713-473-0542
Brian	Phelps	Houston	Senior Operator		713-473-5954
Von	Robinson	Houston	Lead Operator		713-473-5954
Juan	Salvatierra	Houston	Operator A-Shift		
Ray	Styron	Houston	Technician		713-724-1907
Jerry	Trawick	Houston	Senior Operator		713-473-2434

First Name	Last Name	Office Location	Job Title	Business Fax	Business Phone
William	Lacobie	Krotz Springs	Senior Operator	337-566-3999	337-566-3907

First Name	Last Name	Office Location	Job Title	Business Fax	Business Phone
Mike	Brabham	Lake Charles	Technician	337-882-1533	337-882-1711
Samuel	DeVile	Lake Charles	Sr. Operator-Shift		
Justin	Ferguson	Lake Charles	Associate Technician		
Christopher	Fontenot	Lake Charles	Sr. Operator-Shift		337-882-1541
Thomas	Johnson	Lake Charles	Lead Technician		337-882-5169
Tim	Poole	Lake Charles	Technician		337-882-5169
Randy	Sullivan	Lake Charles	Sr Inspector		337-882-1714
Blane	Thomason	Lake Charles	Sr. Operator-Shift		337-882-1541
Bryan	Winters	Lake Charles	Sr. Operator-Shift	770-754-8392	337-882-1711

(b) (6)

Colonial Pipeline Company

OTHER FEDERAL, STATE, AND LOCAL AGENCIES

Baton Rouge Junction

FEDERAL AGENCIES	TELEPHONE
Homeland Security	202-282-8000
National Response Center	800-424-8802
EPA – Region VI	214-665-2200
CN Railroad	225-746-2384

STATE AGENCIES	TELEPHONE
Louisiana State Police – Hazardous Materials hotline	225-925-6595
LADEQ – SPOC	225-219-3640
OSHA	225-298-5458 or 800-321-6742
USCG, Marine Safety Unit Baton Rouge	225-298-5400 24 hr. 504-365-2200

COUNTY/PARISH AGENCIES	TELEPHONE
W. Feliciana Emergency Planning Committee	225-635-6428
W. Feliciana Police Dept.	225-784-3136
Lane Memorial Hospital	225-658-4000
W. Feliciana Parish Hospital	225-635-3811

Hebert Station

FEDERAL AGENCIES	TELEPHONE
National Response Center	800-424-8802
OSHA	281-286-0583 or 281-591-2438 or 800-321-6742

STATE AGENCIES	TELEPHONE
Texas Water Commission	512-463-7727
Texas Dept. of Public Safety	409-898-0770
Texas General Land Office	409-835-2965

COUNTY/PARISH AGENCIES	TELEPHONE
Lower Neches Valley Authority (LNVA)	409-892-4011
(After Hours)	409-892-1805
Orange County Police & Fire HAZMAT Team	911
Water Treatment Plant	(24 Hrs) 409-880-3784

Colonial Pipeline Company
OTHER FEDERAL, STATE, AND LOCAL AGENCIES
Houston Station

FEDERAL AGENCIES	TELEPHONE
National Response Center	800-424-8802
OSHA	281-286-0583 or 281-591-2438 or 800-321-6742

STATE AGENCIES	TELEPHONE
Texas General Land Office	409-835-2965
Texas Emergency Spill Reporting	800-832-8224
TCEQ	512-463-7727

COUNTY/PARISH AGENCIES	TELEPHONE
Chambers County Sheriff – Old River Winfree, Mt Belvieu & <i>Part</i> of Baytown	800-645-5047
Galena Park Emergency Response (Fire Marshall)	713-330-1205
Harris County East (dispatch) Fire/EMS – Crosby, Highlands, Huffman	281-847-5544
Harris County Sheriff	713-221-6000
Pasadena Emergency Management Jennifer Hawes	713-475-5588

Lake Charles

FEDERAL AGENCIES	TELEPHONE
National Response Center	800-424-8802
OSHA	225-298-5458 or 800-321-6742
Coast Guard	337-433-3765

STATE AGENCIES	TELEPHONE
Louisiana Emergency Response (Solid Waste Div. & Water Pollution Control) (After Hours)	225-763-3908 225-925-6595
Church Point/Acadia Area – State Police	337-262-5880

COUNTY/PARISH AGENCIES	TELEPHONE
Opelousas – St. Landry Ambulance	911
Cities Service Guard	337-708-6230

Colonial Pipeline Company
OTHER FEDERAL, STATE, AND LOCAL AGENCIES
Mississippi

FEDERAL AGENCIES	TELEPHONE
National Response Center	800-424-8802 or 202-267-2675
OSHA - Mississippi	601-965-4606 or 800-321-6742
Coast Guard	337-491-7800
EPA – (Atlanta)	404-562-8700

STATE AGENCIES	TELEPHONE
Department of Wildlife	601-432-2400
Louisiana State Police – Troop L	985-893-6250
Highway Patrol – Brookhaven	601-833-7811
Highway Patrol – Hattiesburg	601-582-3529
Highway Patrol – Meridian	601-693-1926
OSHA - Mississippi	601-965-4606 or 800-321-6742

COUNTY/PARISH AGENCIES	TELEPHONE
Clinton, LA – Fire & Rescue	225-683-9375
Columbia Emergency Management (Civil Defense)	601-736-9627
Covington County Emergency Management (Greg Sanford)	(b) (6) (24hr Cell) 601-765-6687
Magnolia – Office of the Mayor	601-783-5211
Meridian - Office of the Mayor	601-485-1927
Prentiss - Office of the Mayor	601-792-5196

Alabama

FEDERAL AGENCIES	TELEPHONE
National Response Center	800-424-8802 or 202-267-2675
Coast Guard	337-491-7800
EPA – (Atlanta)	404-562-8700

STATE AGENCIES	TELEPHONE
ADEM (Ala Dept of Environmental Mgmt – Birmingham Office)	205-942-6168
State Warning Point (Alabama State Emergency Reporting Hotline)	800-443-0699

COUNTY/PARISH AGENCIES	TELEPHONE
Sumter County Emergency Management	205-652-6347
Margaret Bishop – Director (Personal Cell: (b) (6))	

Colonial Pipeline Company

OIL SPILL RESPONSE ORGANIZATIONS

Gulf Coast

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
(OMT) OilMop (OEI) Environmental Solutions www.omies.com	131 Keating Drive (Corp. Address) Belle Chasse, LA 70037	Kathy Woodruff	504-394-6110 800-645-6671 (24 Hrs)
	9625 Hwy 182 Morgan City, LA 70381	Terry Posey	(b) (6) (cell) 800-645-6671 (24 Hrs)
	5227 North River Rd. Port Allen, LA 77067	Ricky Howell Andre Paille – Mgr (apaille@omies.com)	225-388-9992 (b) (6) (cell) 800-645-6671 (24 Hrs)
	2308 W Fairmont Pkwy. LaPorte, TX 77571	Dan Lytle Tony Stamper	800-645-6671 (24 hrs) 281-470-2016
	1600 Inter-Coastal Drive Port Arthur, TX 77642	Jackie Smith Tony Waldrop	800-645-6671 (24 hrs) 409-962-7226 TW cell: (b) (6)
	Houma, LA	Ronald Johnson	985-226-9139
AMPOL (American Pollution Control) www.ampol.net	401 West Admiral Doyle Dr. New Iberia, LA 70560	Kirk Headley, Pres. Mike Watts, Operations Mgr.	800-482-6765 P: 337-365-7847 F: 337-365-8890
(ES&H) Environmental Safety & Health Consulting Services, Inc. www.esandh.com	1730 Coteau Rd Houma, LA 70364	Mike Oncale	985-851-5350 877-437-2634 (24 Hrs)
	203 Glaser Drive Lafayette, LA 70508	Kevin Lormand	337-839-0696 877-437-2634 (24 Hrs)
	4141 S. Beglis Pkwy Sulphur, LA 70663	Rick Carlton	337-558-7543 877-437-2634 (24 Hrs)
	2305 N. Concord Rd. Belle Chase, LA 70037	Robert Cannon	504-392-3801 877-437-2634 (24 Hrs)
	3189 Highway 70 Morgan City, LA 70380	Fabian Rodriguez	985-637-1938 877-437-2634 (24 Hrs)
	21148 Highway 1 Golden Meadow, LA 70357	Farrell Lafont	985-475-3030 877-437-2634 (24 Hrs)
(USES) United States Environmental Services www.usesgroup.com	6338 Hwy 73 Geismar, LA 70734	Eric Ramsey	Ph. 225-673-4200 225-677-9549
	42156 Hwy 23 South P.O. Box 830 Venice, LA 70091-0830	Nikki Reese	985-534-2744 (Office) 985-534-013 (Fax) 888-279-9930 (24 hrs)
	2809 E. Judge Perez Dr. P.O. Box 949 Meraux, LA 70075	Nikki Reese	504-279-9934 (Office) 504-279-7756 (Fax) 888-279-9930 (24 hrs)
	106 17th Street Golden Meadow, LA 70357	Don Warren	601-372-3232 (Office) 601-372-3556 (Fax) 888-279-9930 (24 hrs)

Colonial Pipeline Company

OIL SPILL RESPONSE ORGANIZATIONS

Gulf Coast

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
	13740 I-10 West Orange, TX 77632		409-745-9100 (Office) 409-745-9116 (Fax)
	950 Seaco Ave. Deer Park, TX 77536		281-867-4100 (Office) 281-867-4101 (Fax)
(MSRC) Marine Spill Response Corp. www.msrc.org	3838 N. Sam Houston Pkwy, East Suite 400 Houston, TX 77032	Theo Camlin	800-259-6772 281-776-4311 (Office) 281-227-6347 (Fax) (b) (6) (Cell)

Colonial Pipeline Company

PIPELINE REPAIR CONTRACTORS

Gulf Coast District

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE NUMBERS
Benton Equipment & Construction www.becpipe.com	4590 Chester Portie Rd. Sulphur, LA 70665	Judd Benton Tim Benton Brent Saltzman	JB Cell: (b) (6) W: 337-583-4943 H: (b) (6) C: (b) (6) BS Cell: (b) (6)
Boots Smith www.bootssmith.net	2501 Airport Dr. 39440 P.O. Drawer 1987 Laurel, MS 39441	Billy Nixon Kenneth Johnson Jason Smith	W: 601-649-1220 F: 601-649-3533
Capital Ultrasonics www.capitolut.com	3045 Choctaw Blvd. Baton Rouge, LA 70805	Answering Service	W: 225-357-3671
Central Testing centraltestingndt.com	146 S. Cities Service Hwy Sulphur, LA 70663	Chris Caldarera Kathy Caldarera	337-625-7750
DDS Enterprises www.ddsenderprise.com	87 Pickering Rd. Collins, MS 39428	Dan Saulters Jo Saulters	W: 601-765-0601 W: 601-765-9004 F: 601-765-0605 Jo Cell: (b) (6)
Don Miller & Associates www.don-miller.com	P.O. Box 15947 Baton Rouge, LA 70895	Leonard Coco Les Bente Thomas McCallum	LC Cell: (b) (6) LB Cell: (b) (6) Office: 225-275-2926 F: 225-275-5112 TM Cell: (b) (6)
InfraSource Pipeline Facilities, Inc. www.infrasourceus.com	11712 Statesville Rd. Huntersville, NC 28078	Mr. Dee Bradford Scott Rushing	W: 704-875-1341 W: 800-437-9306 F: 704-875-9842
JANX Services www.janxndt.com	377 Old Mill Road Suite F Cartersville, GA 30120	Jesse Smith	W: 678-721-6467
L.E. Bell le-bell.net	1226 County Rd. 11 Heflin, AL 36264	Dan Norton Larry E. Bell Steve Barker Cliff Wakefield	W: 800-472-9427 W: 256-253-2676 W: 256-253-2986 F: 256-253-2994
Louisiana Crane and Const. www.louisianacrane.com	1045 Hwy 190 West P.O. Box 1049 Eunice, LA 70535	Shara Perez	O: 337-550-6217 C: (b) (6)
Sprint Pipeline Services, LP www.sprintpipeline.com	1010 CR 59 Roshtron, TX 77583	Houston	281-431-5900
		Beaumont	409-794-9936
		West Lake	337-494-7514
Sunland Construction Company www.sunlandconstruction.com	2532 Aymond St. Eunice, LA 70535 P.O. Box 1087 (mail) Eunice, LA 70535		W: 800-299-6295 W: 337-546-0241 F: 337-546-0245

Colonial Pipeline Company

PIPELINE REPAIR CONTRACTORS

Gulf Coast District

T.K. Stanley, Inc. tkstanley.com	Hwy 184 West Waynesboro, MS 39367	Justin Creighton Dickey Dickerson	W: 800-477-2855 W: 601-735-2855 F: 601-735-2857
WHC, Inc www.whc-inc.com	300 Industrial Trace Broussard, LA 70518	Ricky Wyatt – Safety Lynn Fouret	W: 337-837-8765 F: 337-837-4500 C: (b) (6) lynn@whc-inc.com

Colonial Pipeline Company

ENVIRONMENTAL CONTRACTORS

Gulf Coast District

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
Clean Harbours	3201 Petro Drive Sulphur, LA 70665	Peri Bryan Don Caldera	800-645-8265 337-882-1028
	13551 Scenic Highway Baton Rouge, LA 70807		800-645-8265 225-778-3616
Combs Industrial Service	1501 Baptist World Center Dr. Nashville, TN 37207	Harvey Combs, Pres. Jennifer Saunders	615-228-3901
Complete Environmental	37 David Swann Lane Purvis, MS 39475	Chris Steward Jimmy Marshall	601-944-1050 800-980-9400
Charles Holston	P.O. Box 1014 Jennings, LA 70546	Person On Call	318-824-8184
Center for Toxicology & Environmental Health (CTEH)	5120 North Shore Drive North Little Rock, AR 72118	Cory Davis	P: 866-869-2834 (24 HR) P: 501-801-8500
Encos.	727 Highlandia Drive Baton Rouge, LA 70810	Paul Templet	W: 225-751-4200 F: 225-752-4208
Shaw Environmental Services Co. (formerly IT Group)	16406 US Rt. 224 E Finley, OH 45840		800-537-9540
Lo-Vac, Inc.	P.O.Box 69 Lottie, LA	Wayne Orillion – Gen'l Mgr.	W: 225-637-3634 (24 hr Phone) F: 225-637-2900
Miller Environmental	2208 Industrial Drive Sulphur, LA 70663	Matt Dartez	318-882-9800
Phoenix Environmental Svcs	2309 Hwy 81 South – Ste B Loganville, GA 30052	Richard Scruggs	770-466-0466
Clean Harbours Environmental	P.O. Box 5618, Hwy 73 Pt. Arthur, TX 77640	David McCoy	409-796-1388
Tri-State Bird Rescue & Research	110 Possum Hollow Rd. Newark, DE 19741		800-710-0695 800-710-0696
The Response Group	13939 Telge Rd. Cypress, TX 77429	Roy Barrett David Hill	281-880-5000 800-651-3942 (24 HR) 281-880-5005 (Fax)
Wildlife Rehab & Education Center	7007 Katy Rd. Houston, TX 77024	Sharon Schmalz Executive Director	281-731-8826

Colonial Pipeline Company

AERIAL RECONNAISSANCE CONTRACTORS

Gulf Coast

CONTRACTOR	ADDRESS	CONTACT	TELEPHONE
Texas			
Gulf Coast Helicopter, Inc.	4810 Comal Street Pearland, TX 77581	Mike Acuna or Ed Acuna	W: 281-485-7345 F: 281-485-7037 C: (b) (6) H: [REDACTED]
Louisiana			
Air Logistics, a Bristow Co.	4605 Industrial Dr. New Iberia, LA 70560	Kade Monlezun	W: 337-365-6671 F: 337-364-8222
Panther Helicopters (formerly Black Panthers Helicopters)	2017 Engineers Rd. Belle Chase, LA 70037	Myron Hillers Lance Palinto Hollie Brassette	W: 504-394-5803 F: 504-394-5869
ERA Helicopters	600 Airport Service Road P.O. Box 650 Lake Charles, LA 70605	Ext. 232 or 236	337-478-6131 800 655 1414
Helicopters, Inc	5000 Omega Dr. Cahokia, IL 62206	Jeff Lieber	800-466-2903 or 800-466-2904 or 618.337.2904
Industrial Helicopters	1915 Renaud Dr Scott, LA 70583 P.O. Box 90210 Lafayette, LA 70509	Michael Richard	337-233-3356 or 337-233-3357
Petroleum Helicopters	P.O. Box 90808 Lafayette, LA 70509	Amos Deroven Scheduling	W: 337-235-2452 or 800-235-2452 F: 337-235-7312
Southern Helicopters	1127 River Rd. Sunshine, LA 70780	Benjie Seale Mike Creamer	W: 225-642-0075 W: 1-877-456-0075 C: (b) (6) C: [REDACTED]

Colonial Pipeline Company

AERIAL RECONNAISSANCE CONTRACTORS

Gulf Coast

Mississippi			
Provine Flying Service	Rt. 1, Box 470 Greenwood, MS 38930	Michael McCool	W: 800-244-0942 or 601-453-9406 C: (b) (6)
Vortex Helicopters	1113 Vortex Drive New Iberia, LA 70560	Joe Sheeran	W: 337.364.8909 F: 337.364.8917 C: (b) (6)
Alabama			
Rotor Wing, Inc.	P.O. Box 130 Mt. Olive, AL 35117	Peter Basler	W: 205-631-6531 F: 205-631-6552
Shelby Air	265 Weather Vane Rd. Calera, AL 35040	Sid Morgan Kevin Lee	205-663-4805 Fax: (205) 663-4861
Georgia			
Augusta Aviation (Fixed Wing)	1775 Highland Ave. Augusta, GA 30904	Steve Gay	706-733-8970
Helicopters, Inc.	2003 Flightway Dr. Chamblee, GA 30341	Tom Wagner	770-454-6958
Prestige Helicopters	2001 Fightway Dr. Chamblee, GA 30341		770-458-6047
UK/USA Helicopters	570 Briscoe Blvd – Ste 5B Lawrenceville, GA 30045	Gary Dalton	W: 770-682-8911 C: (b) (6) F: 770-682-6606
South Carolina			
S.E. Helicopters	183 Saluda Airport Rd. Saluda. SC 29138	John Corley	W: 803-275-3180 F: 803 275 4718 H: (b) (6) C: (b) (6)
Tennessee			
Great Smoky Mountain Helicopter, Inc.	1101 Gov. Winfield Dunn Pkwy or 1227 Airport Rd Sevierville, TN 37862	Jim Garst	F: 865-429-2426 W: 865-908-4777
Helicopter Services, Inc.	371 Corinth Church Rd., SW McDonald, TN 37353	Lee Biessel	F: 423-476-2748
Helicorp	210 Tune Airport Drive Nashville, TN	Susan Reynolds	W: 800-803-9270 F: 615-350-5017
Zeller Helicopter Services	210 Tune Airport Drive Nashville, TN 37209	Mrs. Susie Zeller	615-350-5023

Colonial Pipeline Company

OTHER EMERGENCY RESPONSE EQUIPMENT SUPPLIERS

Gulf Coast District

COMPANY NAME	ADDRESS	CONTACT	TELEPHONE NUMBERS
Baker Tank	684 McEntire Lane Decatur, AL 35601	Rick Hayes Jimmy Register	256-355-1178
Baker Tank	35173 Hwy 30 Baton Rouge, LA 70734	Kristen Penn	225-677-8763
Boots Smith	2501 Airport Dr. Laurel, MS 39440	James Smith Jerry Broadway	601-649-1220 Fax: 601-649-8079
Basic Energy Services	P.O. Box 712 Dayton, TX 77535		936-258-2274 800-880-0903
	Hwy 124 Beaumont, TX	David Walton	409-842-6262
Charles Holsten, Inc.	2200 Hwy 90E Jennings, LA 70546	Brian Recatto	337-896-6664 888-319-5347
Dupree Transport	Nashville, TN Port Allen, LA	Howard Brown	800-865-7268 225-749-3800
Eagle Transport	4204 Winters Chapel Rd. Doraville, GA	Mackie Ramsey	770-457-8087
	Savannah, GA	Tim Crane	800-373-4736
	Belton, SC	Symuel Good	864-585-6336
	Spartanburg, SC	Symuel Good	800-776-9937
Florida Rock & Tank	2766 Woodwin Drive Doraville, GA 30360		800-600-2388 770-457-4457
Ferguson Harbour	65 Industrial Park Dr. Hendersonville, TN	Todd Robinson Mark Borfch - Jensen	615-822-3295 800-822-3295 (24 hrs)
Kenan Advantage Groupo, Inc.	Birmingham, AL	Rick Simmons	205-923-9476
	Augusta, GA	Bill Wilson	770-300-0177 (b) (6) (cell)
	Spartanburg, SC	Alonzo Jackson	800-343-1349
L.E. Bell Construction	County Road 11 Heflin, AL 36264	Larry Bell Dan Norton Cliff Wakefield	205-253-2676 205-253-2986 Fax: 205-253-2994
Lo-Vac Environmental Svcs	P.O. Box 69 Lottie, LA 70756		225-637-3634
Miller Transport	P.O. Box 15488 Hattiesburg, MS 39404	Brent Walters	601-582-8358
PSC (Phillips Service Corp.)	330 Walcot Rd Westlake, LA 70669	Alan Montgomery	337-882-1313
	36266 Hwy 30 Geismer, LA 70737		225-673-1000
Penn Tank	Knoxville, TN	Tim Collier	888-910-1017
	Atlanta, GA	Bill Notchdorf	888-447-7107
	Nashville, TN		888-910-1017
Quality Carriers, Inc.	1251 Battlecreek Road Jonesboro, GA 30236		800-759-8265 (24 hrs) 770-471-6577

Colonial Pipeline Company

OTHER EMERGENCY RESPONSE EQUIPMENT SUPPLIERS

Gulf Coast District

Robbie D. Wood, Inc	Birmingham, AL	Robbie D. Wood, Jr.	205-744-8440
COMPANY NAME	ADDRESS	CONTACT	TELEPHONE NUMBERS
T.K. Stanley, Inc.	Hwy 84 West Waynesboro, MS 39367	Mike Walters Curtis Pitts	800-477-2855 601-735-2855
	2508 Hwy 96, Fayette, AL		205-932-3213
Wade Services	Rt. 1, Box 303 Ellisville, MS 39437	Kenneth Fitzgerald	800-521-4167 601-477-3205
	Brookwood, AL	Wally McMillan	205-556-0048 800-365-7330
Shamrock Vacuum Service	11616 E. Hwy 90 Liberty, Texas 77575		936-549-1300
Gator Environmental Services	P.O. Box 74855 Baton Rouge, LA 70874	Port Allen Office	225-357-2800

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Gulf Coast

Equipment Rental & Pipe Supply Companies			
COMPANY	ADDRESS	CONTACT	TELEPHONE
AABCO Rental	3507 Hwy 31 South Pelham, AL	Dale Carter Brock Smitherman	205-664-1100
ABZ Rent All	1331 McFarland Blvd, N.E. Tuscaloosa, AL	Jim Crowe	205-759-5444
DP Enterprises, Inc.	320 Timesaver Ave. Harahan, LA 70123	John Davis	504-733-7100
Russell Building Supply	110 Wheat Street Harpersville, AL		205-672-2224
North Shore Supply	12944 Market St. P.O. Box 9940 Houston, TX 77213		713-453-3533
Omega Industrial Suppliers	P.O. Box 91149 Baton Rouge, LA 70821		225-749-9808
Partners Discount Home Center	9933 Plank Rd Clinton, LA 70722	Patrick	225-683-8384
Pasadena Honda	2901 Spencer Pasadena, TX 77504		713-941-5920 (Closed Sun. & Mon.)
Pat's Hardware	P.O. Box 488 St. Francisville, LA 70775		225-635-4523
Pelican State Supply Company	6150 Greenwell Springs Road Baton Rouge, LA 70819	Gene Engle	225-354-7916
Piping & Equipment Co.	P.O. Box 1448 110 N. 13 th St. Beaumont, TX 77704		409-838-6775
Redman Pipe & Supply	3051 Industrial Dr. Laurel, MS 39440	Larry Thompson Wes Bodberry	601-428-5281
Royal International Pipe	624 Howard Ave. Deer Park, TX 77536		281-476-5221
Sunbelt Rentals	2203 Industrial Drive Sulphur, LA 70665	Chad Clover	337-882-6914
	9991 Memorial Blvd Port Arthur, TX	Eric Gallier	409-724-7368
Stuart C. Irby, Co.	1314 W. Pine St. Hattiesburg, MS 39401	Scott Mercy	601-544-1611
	7984 S.Commerce Ave. Baton Rouge, LA 70805	Holly Hamilton	225-927-0500
United Rentals	111 Hamric Drive West Oxford, AL		256-835-9966
	13249 Airline Highway Gonzales, LA 70737		225-647-7592

Materials & Services			
COMPANY	ADDRESS	CONTACT	TELEPHONE
B & R Supply	2018 W. 10 th Laurel, MS 39440		601-649-4393
Eastex Rubber & Gasket	P.O. Box 1240 Hwy 69 Nederland, TX 77627		409-727-6800
W.W. Grainger	• National Account	Local Planner has	Info on this account.

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Gulf Coast

Lake Charles Rubber & Gasket	930 3 rd Avenue Lake Charles, LA		337-433-1002
Laurel Machine & Foundry	810 Front St. Laurel, MS 39441		601-428-0541
Laurel Rubber & Gasket	8 Donald Dr. Laurel, MS 39440		601-649-2020
Office Direct	14020 Plank Rd. Baker, LA 70714	Fax	225-774-8773 225-774-9824
TDW Services	2309 W. Fairmont Parkway LaPorte, TX 77571	Robert	281-470-0791 888-839-6766
Triangle Metals	P.O. Box 1266 Nederland, TX 77627	R. Sanders	409-724-2384
Verizon	100 Glenborough Suite 800 Houston, TX 77067		800-347-5665

Sanitation Supplies

COMPANY	ADDRESS	CONTACT	TELEPHONE
BFI	P.O. Box 78756 Phoenix, AZ 85062		713-948-7600
	3950 50 th Street, SW Birmingham, AL		205-925-1454 800-727-4234 (voicemail will page someone)

Dumpsters & Roll-Offs

COMPANY	ADDRESS	CONTACT	TELEPHONE
BFI	P.O. Box 78756 Phoenix, AZ 85062		713-948-7600
	3950 50 th Street, SW Birmingham, AL		205-925-1454 800-727-4234 (voicemail will page someone)
Waste Management	29375 Wiidside Drive, Walker, LA 70785	Kim Thomas Monica Friendman	225-667-9465 800-284-2451

Fuel Supplies

COMPANY	ADDRESS	CONTACT	TELEPHONE
Pumpelly Oil Company	1890 Swisco Road Sulphur, LA		337-625-1117

Safety & Personal Protection Equipment

COMPANY	ADDRESS	CONTACT	TELEPHONE
Dooley Tackaberry	1515 W. 13 th Street Deer Park, TX 77536		281-479-9700
Hagemeyer – North America	4300 Pasadena Freeway Pasadena, TX 77503 - 2336		713-456-1030
	5375 N Twin City Hwy. Nederland, TX 77627		409-749-3800
	804 Ppg Drive Westlake, LA 70669		337-708-2741

Colonial Pipeline Company

VENDOR SUPPORT & SUPPLIES

Gulf Coast

	5265 Gateway Dr. Geismar, LA 70734		225-673-5660
	95 W.L Runnels Industrial Dr. Hattiesburg, MS 39401		601-583-6196

Welding Supplies

COMPANY	ADDRESS	CONTACT	TELEPHONE
Air Products	7201 Hamilton Ave. Allentown, PA 18195-5329		800-273-9427 601-481-491
Mid-South Welding Supply	505 51 st St. Meridian, MS	Jerry Cooper Pager Buddy	601-483-9331 601-938-4139 601-938-4140
Mathison and Tri-Gas	2000 / 2018 Houston Ave. Houston, TX 77007		713-869-7351

Crane Rental

COMPANY	ADDRESS	CONTACT	TELEPHONE
Sunbelt Rental	160 Commerce Drive Pelham, AL		205-664-9500
Deep South Crane	15324 Airline Highway Baton Rouge, LA	Jeremy Landry	(b) (6) Cell
Louisiana Crane	1045 Hwy 190 West Eunice, LA	Sam Shart	337-789-5239

Electrical Repair & Supplies

COMPANY	ADDRESS	CONTACT	TELEPHONE
Red Stick Armature Works, Inc	P.O. Box 310 St. Francisville, LA 70775		225-635-0443
Stuart C. Irby Co.	1314 W. Pine St. Hattiesburg, MS 39401		601-544-1611
Speed Electric Motor Co.	511 North St. Hattiesburg, MS 39401	Day	601-583-0388

Dry Ice

COMPANY	ADDRESS	CONTACT	TELEPHONE
Air Gas	Hwy 31 Pelham, AL 35124		205-663-6545 256-249-3824
	40591 US Hwy 280 Sylacagua, AL		
Air Liquide America	P.O. Box 1059 LaPorte, TX 77572		281-474-8400
Air Products	1106 Howard Ave Deer Park, TX 77536		281-478-4827
Bama Ice Company	8705 Charlie Shirley Rd. Northport, AL		205-339-1090
Central Texas Ice	P.O. Box 345 Anderson, TX 77830		936-873-2842
Druid Ice	1536 25 th Ave. Tuscaloosa, AL	John Freeman Mark Freeman	205-349-4216 205-339-3806 (Fax)

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Presented below is a list of airports that have the greatest potential for emergency response purposes. This listing does not include all airports into which or from which the corporate aircraft can operate. Those listed have good instrument approaches that should enable their use during inclement weather and at night. The most restrictive limitation will be the availability of ground transportation. Most car rental companies are only open when scheduled commercial aircraft are due to arrive or depart. The best method of getting a rental car is to check with the Fixed Base Operator (FBO) listed for each airport.

ATLANTA AREA CHARTER SERVICES

Epps Aviation - Peachtree DeKalb Airport – 770-458-9851 – http://www.eppsaviation.com
Flight Charter: 678-539-6313 – www.hillaircraft.com
Flightworks – McCollum Field, Kennesaw – 800-255-1971 or 770-427-5660 – www.flightworks.com
Hill Aircraft & Leasing Corp – Fulton Co - Charlie Brown Airport - 404-691-3330 – www.hillaircraft.com
L. E. Bell – Heflin, AL - 800 472-9427 – www.admin@le-bell.net

MAINLINE AIRPORTS (West to East)

Houston, Texas
Hobby Airport - KHOU
Million Air - 713-640-4000
Hours of Operation - 24 hours
Runway 7,600 X 150 - ILS Approach

Rental Cars Available – Avis	713-649-5819
Enterprise	713-645-7222
Hertz (off-site)	713-948-5300
National	713-641-0533

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Beaumont, Texas
Jefferson County Airport -KBPT
Jefferson County – 409-719-4900 Hours of Operation - 24 hours
Hours of Operation - 24 hours
Runway 6,750 X 150 - ILS Approach

Rental Cars Available - Avis	409-722-0209
Hertz	409-727-2137
National	409-722-6111
Budget	409-727-2588

Lake Charles, Louisiana
Lake Charles Regional Airport -K LCH
Vision Aviation - 337-478-7722
Hours of Operation - 0530-2200 - after hours call 337-478-7772
Runway 6,500 X 150 - ILS Approach

Rental Cars Available -	Avis	337-477-9374
	Hertz	337-477-0616
	National	337-478-0083
	Budget	337-477-7991
	Enterprise	337-479-2447

Lafayette, Louisiana
Lafayette Regional Airport - KLFT
Hours of Operation - 24 hours 337-266-4400
Runway 8,040 X 150 - ILS Approach

Rental Cars Available -	Avis	337-234-3205
	Budget	337-233-8888
	Hertz	337-233-7010
	National	337-234-3170
	Enterprise	337-232-5493

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Baton Rouge, Louisiana
Metropolitan Airport - KBTR
Louisiana Aircraft - 225-356-1401
Hours of Operation – 24 hours
5625 Runway 7,000 X 150 - ILS Approach

Rental Cars Available -	Avis	225-355-4721
	Budget	225-355-0312
	Hertz	225-357-2867
	National	225-355-5651
	Enterprise	225-355-5157

Hattiesburg, Mississippi
Hattiesburg-Laurel Airport -K PIB
US Aviation - 601-554-0951
Hours of Operation - 0500-2030 – after hours call 601-583-9470 or 601-544-6926
Runway 6,502 X 150 - ILS Approach

Rental Cars Available – Enterprise	601-264-7184
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Meridian, Mississippi
Key Field - KMEI
Meridian Aviation - 601-693-7282
Hours of Operation - 0500-2300 – no after hours number
Runway 10,003 X 150 - ILS Approach

Rental Cars Available - Avis	601-483-7144	
	Hertz	601-485-4774

Tuscaloosa, Alabama
Municipal Airport - KTCL
Bama Air – 800-937-1716
Hours of Operation – 0500-2200
Runway 6,498 X 150 - ILS Approach

Rental Cars Available -	Avis	205-345-3333
	Enterprise	205-349-4446
	U-Save	205-349-6144

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Birmingham, Alabama
Birmingham International Airport - KBHM
Atlantic Aviation West Ramp – 205-849-5520
Hours of Operation - 24 hours
Runway 11,998 X 150 - ILS Approach

Rental Cars Available -	Avis	205-592-8901
	Hertz	205-591-6090
	National	205-592-7259
	Budget	205-591-6090

Anniston, Alabama
Metropolitan Airport - KANB
Anniston Executive Aviation - 256-831-4410
Hours of Operation - 0700-1800 M-F – 0800 – 1700 Sat, Sun – after hours call 256-831-6147 or 7297, 256-831-4410 (on-call person) and Scott Wallace cell (b) (6)
Runway 7,000 X 150 - ILS Approach

Rental Cars Available -	Avis	256-238-1261
	Enterprise	256-832-5455
	Hertz	256-831-6479
	Rental Express	256-831-2917

Atlanta, Georgia
Dekalb-Peachtree Airport - KPDK
Mercury Air Center - 770-451-7676
Hours of Operation - 24 hours
Runway 6,000 X 100 - ILS Approach

Rental Cars Available -	Auto-Save thru FBO	
	Avis	770-454-5000
	Enterprise	770-452-0010

Anderson, South Carolina
Anderson Reginal Airport - KAND
Anderson Aviation - 864-964-5656
Hours of Operation – 0730 am -1930 pm M-F, 900 am – 600 pm Sat. & Sun. – after hours call 864-260-4163 http://www.andersoncountysc.org/web/Transportation_01.asp
24 – Hours cell phone (b) (6)

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Runway 6,000 X 150 – ILS, VOR, GPS Approach

Rental Cars Available -	Budget	864-231-6226
	Enterprise	864-222-2775

Greenville, South Carolina (more than one listed)
Donaldson Center Airport – KGYH - 864-277-8184
Hours of Operation - 0600-1900 – 24 Hour on call
Runway 8,000 X 150 - ILS Approach
Air Charter Express –Craig Carter-Cell phone (b) (6)

Rental Cars Available -		
	Enterprise	864-297-0089

Greenville, South Carolina (more than one listed)
Greenville Downtown Airport – KGMU – 864-242-4777
Greenville Jet Center – 864-232-7100
Venture Aviation – 24-hour phone 864-270-3812
Hours of Operation - 0500-2200 M-F; 0600-2200 Sat; 0600-2200 Sun – no after hours number
Runway 5,393 X 150 - ILS Approach

Rental Cars Available -	Enterprise	864-233-8182
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Greer, South Carolina (more than one listed)
Greenville-Spartanburg Airport - KGSP
Stevens Aviation - 864-879-6155
Hours of Operation - 24 hours
Runway 11,001 X 150 – ILS, GPS, NDB Approach

Rental Cars Available -	Avis	864-877-6456
	Budget	864-879-2134
	Hertz	864-879-0181

Charlotte, North Carolina
Charlotte Douglas International Airport - KCLT
Wilson Air Center - 704-359-0440
Hours of Operation - 24 hours
Runway 10,000 X 150 - ILS Approach

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Rental Cars Available - Avis	800-831-2847
Enterprise	800-325-8007
Hertz	800-654-3131

Concord, North Carolina
Concord Regional Airport - KJQF
Concord Regional Airport - 704-920-5900
Hours of Operation - 24 hours
Runway 7,400 X 100 - ILS Approach Rental

Rental Cars Available – Avis	704-795-2880
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Greensboro, North Carolina
Piedmont Triad International Airport – KGSO
Atlantic Aero - 800-334-2001
Hours of Operation - 24 hours
Runway 10,000 X 150 - ILS Approach

Rental Cars Available - Avis	336-665-5700
Budget	336-665-5882
Hertz	336-668-7961

Danville, Virginia
Danville Regional Airport - KDAN
General Aviation - 434-793-7033
Hours of Operation – 0500-2400 – no after hours number
Runway 6,500 X 150 - ILS Approach

Rental Cars – Only through FBO	
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Lynchburg, Virginia
Regional/Glenn Field - KLYH
Virginia Aviation - 434-237-8420
Hours of Operation - 0500-2200 – After hours number 434-944-3056
Runway 5,800 X 150 - ILS Approach

Rental Cars Available - Avis	434-239-3622
Budget	434-237-1444
Hertz	434-237-6284
Enterprise	434-239-5785

Richmond, Virginia
Richmond International Airport - KRIC

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Million Air - 800-962-5262/804-222-3700
Hours of Operation - 24 hours
Runway 9,000 X 150 - ILS Approach

Rental Cars Available - Avis	804-222-7416
Hertz	804-222-7228
National	804-222-7477
Enterprise	804-222-0865

Charlottesville, Virginia
Charlottesville-Albamarle Airport - KCHO
Landmark Aviation - Corporate Jets - 434-978-1474
Hours of Operation – 24 Hours
Runway 6,000 X 150 - ILS Approach

Rental Cars Available - Avis	434-973-6000
Airport Auto Rental	434-974-6122
National	434-974-4664
Hertz	434-297-4288

Manassas, Virginia
Manassas Regional Airport - KHEF
APP Jetcenter – 866-459-5387
Hours of Operation- 0630-2230 - no after hours number
Runway 6,200 X 100 - ILS Approach

Rental Cars - Dudley Martin Chevrolet	703-368-2111
Enterprise	703-333-9696

Washington, D. C.
Dulles International Airport - KIAD
Landmark Aviation - 800-926-0150
Hours of Operation - 24 hours
Runway 11,500 X 150 - ILS Approach

Rental Cars Available - Avis	703-661-3504
Budget	703-437-9373
Enterprise	703-478-2300
National	703-471-5278

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Frederick, Maryland
Frederick Municipal Airport - KFDK
Landmark Aviation - 301-662-8156
Hours of Operation - 0700-2100 - no after hours number
Runway 5,200 X 100 - ILS Approach

Rental Cars Available - Budget	301-663-8255
Hertz	301-662-2626
Enterprise	301-695-8822
Westminister, Maryland	

Carroll County Regional Airport - KDMW
Skytech – 410-876-0353
Hours of Operation - 0700-2000 - after hours call 410-876-9885
Runway 5,100 X 100 - VOR Approach

Rental Cars Available - Budget	410-848-8011

Baltimore, Maryland
Baltimore-Washington International Airport - KBWI
Signature Flight Support - 410-859-8393
Hours of Operation - 24 hours
Runway 10,502 X 200 - ILS Approach

Rental Cars Available - Avis	410-859-1680
Budget	410-859-1050
Hertz	410-850-7400
National	410-859-8860

Baltimore, Maryland
Martin State Airport - KMTN
Martin State Airport - 410-682-8810
Hours of Operation - 0600-2300 - After hours number -410-682-8800
Runway 6,997 x 180

Rental Cars Available - Budget	410-282-4397
Enterprise	410-682-6474

Wilmington, Delaware
New Castle County Airport - KILG
Dawn Aeronautics - 302-328-9695
Hours of Operation - 0700-1900 - after hours answering service
Runway 7,100 X 150 - ILS Approach

Rental Cars Available - Avis	302-322-2092
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Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

	Budget	302-764-3300
	Enterprise	302-323-0850

Philadelphia, Pennsylvania
Philadelphia International Airport - KPHL
Atlantic Aviation - 215-492-2970
Hours of Operation - 24 hours
Runway 10,500 X 200 - ILS Approach

Rental Cars Available -	Avis	215-492-6523
	Budget	215-492-9447
	Hertz	215-492-2925
	National	215-492-2750

Trenton, New Jersey
Mercer County Airport - KTTN
Ronson Aviation - 609-771-9500
Hours of Operation - 24 hours
Runway 6,006 X 150 - ILS Approach
Rental Cars Available - Hertz at FBO 0700-2230 M-F; 0700-2130 S-S

Newark, New Jersey
Newark International Airport - KEWR
Signature Flight Support - 973-624-1660
Hours of Operation - 24 hours
Runway 9,300 X 150 - ILS Approach

Rental Cars Available -	Avis	973-961-4300
	Budget	973-961-2990
	Enterprise	973-242-3400
	Hertz	972-621-2000

STUBLINE AIRPORTS (West to East)

TENNESSEE LINES

Rome, Georgia
Richard B. Russell Airport - KRMG
Russell Airport - 706-295-7835
Hours of Operation - 0700-1930 – after hours call 911
Runway 6,000 X 150 - LOC/DME Approach

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Rental Cars Available -	Enterprise	706-290-1093
	Automax	706-295-7835

Chattanooga, Tennessee
Lovell Field - KCHA
TAC Air – 423-894-2739
Hours of Operation – 24 Hours
Runway 7,400 X 150 - ILS Approach

Rental Cars Available -	Avis	423-855-2232
	Budget	423-855-2224
	Hertz	423-855-8133
	National	423-855-2229
	Enterprise	423-855-2288

Nashville, Tennessee
Nashville International Airport - KBNA
Atlantic Aviation 615-360-8109
Hours of Operation – 24 Hours
Runway 11,030 X 150 - ILS Approach

Rental Cars Available -	Avis	615-361-1212
	Budget	615-366-0822
	Hertz	615-361-3131
	Thrifty	615-361-6050

Knoxville, Tennessee
McGhee Tyson Airport - KTYA
TAC Air 865-970-9000
Hours of Operation – 24 Hours
Runway 9,000 X 150 - ILS Approach

Rental Cars Available -	Avis	865-970-2985
	Budget	865-342-3220
	Hertz	865-970-3010
	National	865-970-2993
	Enterprise	865-970-9000

BAINBRIDGE LINE

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Rental Cars Available -	Avis	478-788-3840
	Hertz	478-788-3600

Macon, Georgia
Middle Georgia Regional Airport – KMCN
Lowe Aviation - 478-788-3491
Hours of Operation - 0500-2200 M-F; 0600-2200 S-S – after hours call Macon FSSK
Runway 6,500 X 150 - ILS Approach

Americus, Georgia
Souther Field - KACJ
Souther Field Aviation - 229-924-2813
Hours of Operation - 0800-Dusk - Varies
After hours call manager 229-928-2813
Runway 5,000 X 100 - LOC Approach

Rental Cars Available -	Enterprise	229-931-6508
	RDR	229-924-6330

Albany, Georgia
Southwest Georgia Regional Airport - KABY
Eagles of America -229-434-8787
Hours of Operation - 0530-2200
Runway 6,600 X 150 - ILS Approach

Rental Cars Available -	Avis	229-435-2404
	Hertz	229-235-1751

Bainbridge, Georgia
Decatur County Industrial Airport - KBGE
Decatur Co Aviation - 229-248-3004
Hours of Operation - 0700-1900 M-S
Runway 5,500 X 100 - VOR Approach

Rental Cars Available -	Enterprise	229-248-0448

AUGUSTA LINE

Augusta, Georgia
Bush Field - KAGS
Bush Field Aviation Services - 706-798-2656
Hours of Operation - 24 hours
Runway 8,000 X 150 - ILS Approach

Rental Cars Available -	Avis	706-798-1383

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

	Budget	706-790-6902
	Hertz	706-798-3970
	National	706-798-5835

SELMA LINE

Raleigh-Durham, North Carolina
Raleigh-Durham International Airport - KRDU
TAC Air - 919-840-2200
Hours of Operation - 24 hours
Runway 10,000 X 150 - ILS Approach

Rental Cars Available -	Avis	919-840-4750
	Budget	919-840-4775
	National	919-840-4350
	Hertz	919-840-4875

Fayetteville, North Carolina
Grannis Field - KFAY
Landmark Aviation – 910-321-7540
Hours of Operation - 0600-0000 - no after hours number
Runway 7,710 X 150 - ILS Approach

Rental Cars Available -	Avis	910-484-7985
	Budget	910-484-1483
	Enterprise	910-484-2888
	National	910-485-2133

Smithfield, North Carolina

Johnston County Airport - KJNX

Johnston County Airport - 919-934-0992

Hours of Operation - 0700-1900 - after hours call 919-553-7025 or 919-203-8103

Runway 5,500 X 100 - LOC/DME Approach

Rental Cars Available -	Pipen Mtrs	919-934-2183
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ROANOKE LINE

Lynchburg, Virginia
Regional/Glenn Field - KLYH
Virginia Aviation – 434-237-8420
Hours of Operation – 0500-2359 – after hours call 804-239-3089 or 804-384-5681

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Runway 7,100 X 150 - ILS Approach

Rental Cars Available -	Avis	434-239-3622
	Budget	434-237-1444
	Enterprise	540-563-8055
	Hertz	434-237-6284

Roanoke, Virginia

Regional Airport - KROA

Landmark Aviation - 540-563-4401

Hours of Operation – Continuous

Runway 6,800 X 150 - ILS Approach

Rental Cars Available -	Avis	540-366-2436
	Budget	540-362-1654
	Hertz	540-366-3421
	National	540-563-5050

NORFOLK LINE

Richmond, Virginia

Richmond International Airport - KRIC

Million Air - 800-222-3700

Hours of Operation – Continuous

Runway 9,000 X 150 - ILS Approach

Rental Cars Available -	Avis	804-222-7416
	Budget	804-222-2491
	Hertz	804-222-7228
	Thrifty	877-283-0898
	Dollar	804-222-9416
	Enterprise	804-222-0865
	National	804-222-7477

Newport News, Virginia

Williamsburg International Airport - KPHF

Rick Aviation – 757-874-6415

Hours of Operation - Continuous

Runway 8,000 X 150 - ILS Approach

Rental Cars Available -	Avis	800-831-2847
	Thrifty	800-847-4389

Colonial Pipeline Company

AIRPORTS, FIXED BASE OPERATORS, & CHARTER SERVICES

Norfolk, Virginia
Norfolk International Airport - KORF
Landmark Aviation – 800-486-4041
Hours of Operation - Continuous
Runway 9,000 X 150 - ILS Approach

Rental Cars Available -	Avis	800-831-2847
	Thrifty	757-855-5900
	National	757-855-2037
	Hertz	757-857-1261

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Gulf Coast

Baton Rouge

SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne	1478 Highway 61 Jackson, LA 70748	Manager: Rob Enfinger Phone: 225-658-2563 Cell: (b) (6) Fax: 225-654-2565

SHIPPER	ADDRESS	TELEPHONE
Marathon Pipeline – Zachary Terminal	Highway 61 Jackson, LA 70748	Operations Supervisor: Doug Barnes Phone: 225-654-8854 X 207 24 Hr Ops: 800-422-6990 Cell: (b) (6) Email: ddbarnes@marathonpetroleum.com Area Manager – Offices in Garyville, LA – Tara Hensley Office Phone: 985-535-6127 X203 Cell Phone: (b) (6) Email: thensley@marathonpetroleum.com

Hebert Station

SHIPPER	ADDRESS	TELEPHONE
Shell Pipeline Company	P.O. Box 5519 1825 H.O. Mills Rd. Pt. Arthur, TX 77640	Manager: Wylie J. Stice Phone: 409-984-7003 Cell: (b) (6)

SHIPPER	ADDRESS	TELEPHONE
Total <i>Alternate: Tank Farm Mgr – Ralph Jordan</i> <i>Office: 409-985-0627</i>	P.O. Box 849 Hwy 366 @ 32 nd St. Pt. Arthur, TX 77642	Manager: Toni Newton Phone: 409-985-0474 Nigel Tranter – 409-985-0478

SHIPPER	ADDRESS	TELEPHONE
Exxon-Mobil Pipeline Company	Rt. 4, Box 327 A Beaumont, TX 77705	Manager: Ryan Beaver Phone: 409-842-7961 Cell: (b) (6)

SHIPPER	ADDRESS	TELEPHONE
Exxon-Mobil Refinery	P.O. Box 3311 Beaumont, TX 77704	Manager: Parene Dougle Phone: 409-757-3114 Cell: (b) (6)

SHIPPER	ADDRESS	TELEPHONE
Motiva Enterprises	P.O. Box 712 Port Arthur, TX 77651	Manager: Jimmy Orr Phone: 409-989-7841 Cell: (b) (6)

SHIPPER	ADDRESS	TELEPHONE
Valero	P.O. Box 909 Port Arthur, TX 77941-0909	Manager: Bobby Wilson Phone: 409-985-1405 Cell: (b) (6)

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Gulf Coast

SHIPPER	ADDRESS	TELEPHONE
Enterprise (NPA)	P.O. Box 21220 Beaumont, TX 77720-1220	North Port Arthur Beaumont Area Manager: Steve Bowlin Phone: 409-736-4002 Cell: (b) (6) Email: sbowlin@eprod.com Jeff Myers Phone: 409-736-4006 Cell: (b) (6)

SHIPPER	ADDRESS	TELEPHONE
Enterprise (Old TEPPCO)	P.O. Box 21220 Beaumont, TX 77720-1220	Manager: Mike Lester Phone: 409-719-4003 Cell: (b) (6)

Houston Station

SHIPPER	ADDRESS	TELEPHONE
Shell – Colex (Downtown) – East West – 713-906-6387 Local Colex West Terminal Manager - Gerald Yandell	P.O. Box 1358 Pasadena, TX 77501	Manager: Jim Jacobs Phone: 713-241-9429 Cell: (b) (6) Fax: 713-473-7918

SHIPPER	ADDRESS	TELEPHONE
Pasadena Refining	P.O. Box 1759 Houston, TX 77251	Blender Supervisor: Doyle Black Phone: 713-920-4513 Cell: (b) (6)

SHIPPER	ADDRESS	TELEPHONE
Explorer Pipeline Company	15003 Moore Rd. Houston, TX 77049	Manager: Rick Wright Phone: 918-591-3122 Cell: (b) (6) Fax: 918-496-7269

SHIPPER	ADDRESS	TELEPHONE
Exxon-Mobil	P.O. Box 6032 Pasadena, TX 77501	Manager: Robert Thompson Phone: 713-475-0106 Cell: (b) (6) Fax: 713-589-1584

SHIPPER	ADDRESS	TELEPHONE
Kinder-Morgan	P.O. Box 6351 Pasadena, TX 77506	General Manager: Jeff Hersper Phone: 713-450-7481 Cell: (b) (6)
Control Center: Marlin Collins		Phone: 713-920-8439 Cell: (b) (6) Fax: 713-473-0155
Terminal Mgr. Dave Nevada		Phone: 713-450-0409 Cell: (b) (6)

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Gulf Coast

SHIPPER	ADDRESS	TELEPHONE
HRL Houston	1221 Mckinney St. Suite 700 Houston, TX 77010	Operation Coord: John Allen Phone: 713-309-4819
Alternate: Edward Garcia		Cell: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
LDH- Cedar Bayou		Jason Ilg – Field Supervisor Cell (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Marathon – Ashland Pipeline, LLP	P.O. Box 1795 Pasadena TX 77501	Manager: Steve Taggart Phone: 713-472-3625 x4421 Cell: (b) (6) Fax: 713-472-3626
Operations Manager: Derrick Rankin		Office: 713-920-4423 Cell: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Phillips Pipeline	P.O.Box 1839 Pasadena, TX 77501	Manager: Bobby Thomas Phone: 713-456-1402 Cell: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Magellan Terminals (Williams)	P.O. Box 52 Galena Park, TX 77547	Manager: Cindy Kraft Phone: 713-330-2716 Cell: (b) (6) Fax: 713-330-2705
Alternate: John Lawton		Work: 713-330-2704 Cell: (b) (6)
Lake Charles Station		
SHIPPER	ADDRESS	TELEPHONE
Lake Charles Pipeline Company	1851 Clifton Ridge Rd. Sulphur, LA 70665	Manager: Dave Bryant Phone: 337-882-1521 Cell: (b) (6) Email: david.a.bryant@pgg.com
SHIPPER	ADDRESS	TELEPHONE
Buckeye	5507 Hwy 182 Opelousas, LA 70570	Manager: Gary Soileau Phone: 337-948-8243 Cell: (b) (6) Fax: 337-942-8648
Mississippi and Epes		
SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne	P.O. Box 689 Purvis, MS 39475	Manager: Bobby Layton Phone: 601-794-6031 or 601-765-6631 Cell: (b) (6) Fax: 601-794-6707

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Gulf Coast

SHIPPER	ADDRESS	TELEPHONE
Trans-Montaigne – BR Southeast Terminals	1401 65 th Ave. S. Meridian, MS 39307	Manager: Dale Polk Phone: 601-482-0832 Cell: (b) (6) Pager: n/a Home: (b) (6) Fax: 601-482-8918
SHIPPER	ADDRESS	TELEPHONE
Maples Gas	181 65 th Ave Meridian, MS 39307	Manager: Clay Smith Phone: 601-693-1280 Cell: (b) (6)
Alternate: Anthony Bender		Cell: (b) (6) Fax: 601-693-1240
SHIPPER	ADDRESS	TELEPHONE
Chevron-Exaco	P.O. Box 1597 Collins, MS 39428	Manager: Jeff Walls Phone: 601-765-4483, ext. 223 Cell: (b) (6) Fax: 601-765-4068
Alternate: Joe McQueen, Head Operator		Phone: 601-765-4483, ext. 225 Home: (b) (6) Cell: (b) (6)
Alternate: Clay Owens, Operator		Phone: 601-765-4483, ext. 224 Home: (b) (6) Cell: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Citgo Petroleum	180 65 th Ave. Meridian, MS 39307	Manager: Glenn Harper Phone: 601-483-9891 Cell: (b) (6) Pager: 1-601-881-6143 Home: (b) (6) Fax: 601-693-0335
Alternate: Larry Shaw, Asst. Terminal Manager		Cell: (b) (6) Hom: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Collins Pipeline (Exxon-Mobil) T & M Terminal	P.O. Box 1027 Collins, MS 39428	Field Supervisor: Jim Sanders Phone: 601-765-6593 Cell: (b) (6) Hom: (b) (6) Fax: 601-765-8648
SHIPPER	ADDRESS	TELEPHONE
Murphy Oil	6540 North Frontage Rd. Meridian, MS 39307	Terminal Manager: Roger Leder Phone: 601-482-7121 Cell: (b) (6) Fax: 601-482-5141
SHIPPER	ADDRESS	TELEPHONE

Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Gulf Coast

Motiva Mr. John DuFrense – Manager Kenner, LA	21 Kola Road Collins, MS 39428	Lead Terminal Operator: Gary Collins Phone: 601-765-4335 Cell: (b) (6) Pager: Fax: 601-765-1157
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Colonial Pipeline Company

LOCAL TERMINAL MANAGERS & ADJACENT PIPELINES

Gulf Coast

SHIPPER	ADDRESS	TELEPHONE
Plantation Pipeline Company	P.O. Box 1297 Collins, MS 39428	Manager: Steve Polk Phone: 601-698-3921 Cell: (b) (6) Home: [REDACTED] Fax: 601-698-3950
Alternate: Jeff Ford		Phone: 601-698-3922 Cell: (b) (6)
SHIPPER	ADDRESS	TELEPHONE
Southeast Terminal	P.O. Box 1596 Collins, MS 39428	Manager: John Speed Phone: 601-765-6878 Home: (b) (6) Fax: 601-765-0446
Alternate: John Speed		Cell: (b) (6) Hom: [REDACTED]

Colonial Pipeline Company

GULF COAST RESPONSE ZONE

EMERGENCY CARE FACILITIES

(Facilities listed are located along Colonial Pipeline's ROW)

Facility Name	Address	City, State, Zip Code	Telephone No.	Longitude	Latitude
<i>Mississippi Area</i>					
Regency Hospital Co-Meridian	1020 22nd Ave	Meridian, MS 39301-5001	(601)485-4567	(b) (7)(F), (b) (3)	
Highland Community Hospital	801 Goodyear Blvd	Picayune, MS 39466-3221	(601) 798-4711		
Pearl River County Hospital	305 W Moody St	Poplarville, MS 39470-7338	(601) 795-4543		
South Central Regional Medical Center	1220 Jefferson	Laurel, MS 39441	(601) 426-4000		
Forrest General Hospital	6051 U S Highway 49	Hattiesburg, MS 39401	(601) 288-7000		
Wesley Medical Center	5001 Hardy St	Hattiesburg, MS 39402-1308	(601) 268-8000		
Covington County Hospital	701 S Holly Ave	Collins, MS 39428-3894	(601) 765-6712		
Jefferson Davis County Hospital Clinic	1102 Rose St	Prentiss, MS 39474-5200	(601) 792-4276		
Vital Care	1170 NE Industrial Park Rd	Meridian, MS 39301-1100	(601) 482-7420		
Walthall County General Hospital	100 Hospital Dr	Tylertown, MS 39667-2099	(601) 876-2122		
Beacham Memorial Hospital	205 N Cherry St	Magnolia, MS 39652-2819	(601) 783-2351		
<i>Louisiana</i>					
Ochsner	1514 Jefferson Hwy	Jefferson, LA 70121-2483	(504) 842-4025		
Ochsner Medical Center-Kenner	180 West Esplanade Ave N	Kenner, LA 70065	(504) 464-8054		
St John Parish Health Unit	473 Central Ave	Reserve, LA 70084-5509	(985) 536-2128		
St James Parish Hospital Rehab	1645 Lutchter Ave	Lutchter, LA 70071-5150	(225) 869-5512		
ST Elizabeth Hospital	1125 W Highway 30	Gonzales, LA 70737-5004	(225) 647-5000		
Ochsner Health Center	16260 Airline Hwy # A	Prairieville, LA 70769-4271	(225) 761-5211		
Ochsner Health Center	30819 La Highway 16	Denham Springs, LA 70726-8905	(225) 664-2029		
St Helena Parish Hospital	16874 Highway 43	Greensburg, LA 70441-4834	(225) 222-6111		
Earl K Long Medical Center	5825 Airline Hwy	Baton Rouge, LA 70805-2498	(225) 358-1000		
Lane Memorial Hospital	6300 Main St	Zachary, LA 70791-4037	(225) 658-4578		
Pointe Coupee General Hospital	2202 False River Dr	New Roads, LA 70760-2614	(225) 638-6331		
Doctors' Hospital	3972 I 49 S Service Road	Opelousas, LA 70570	(337) 948-2100		
Acadian Medical Center	3501 Highway 190	Eunice, LA 70535-5129	(337) 580-7500		
Allen Parish Hospital	108 N 6th St	Kinder, LA 70648-3519	(337) 738-2527		
Lake Charles Memorial Hospital	1900 West Gauthier Road,	Lake Charles, LA 70605	(337)480-7000		
Christus St Patrick Health	524 S Ryan St	Lake Charles, LA 70601-5725	(337) 436-2511		
Lake Charles Memorial Hospital	1701 Oak Park Blvd # 4	Lake Charles, LA 70601-8911	(337) 494-3000		

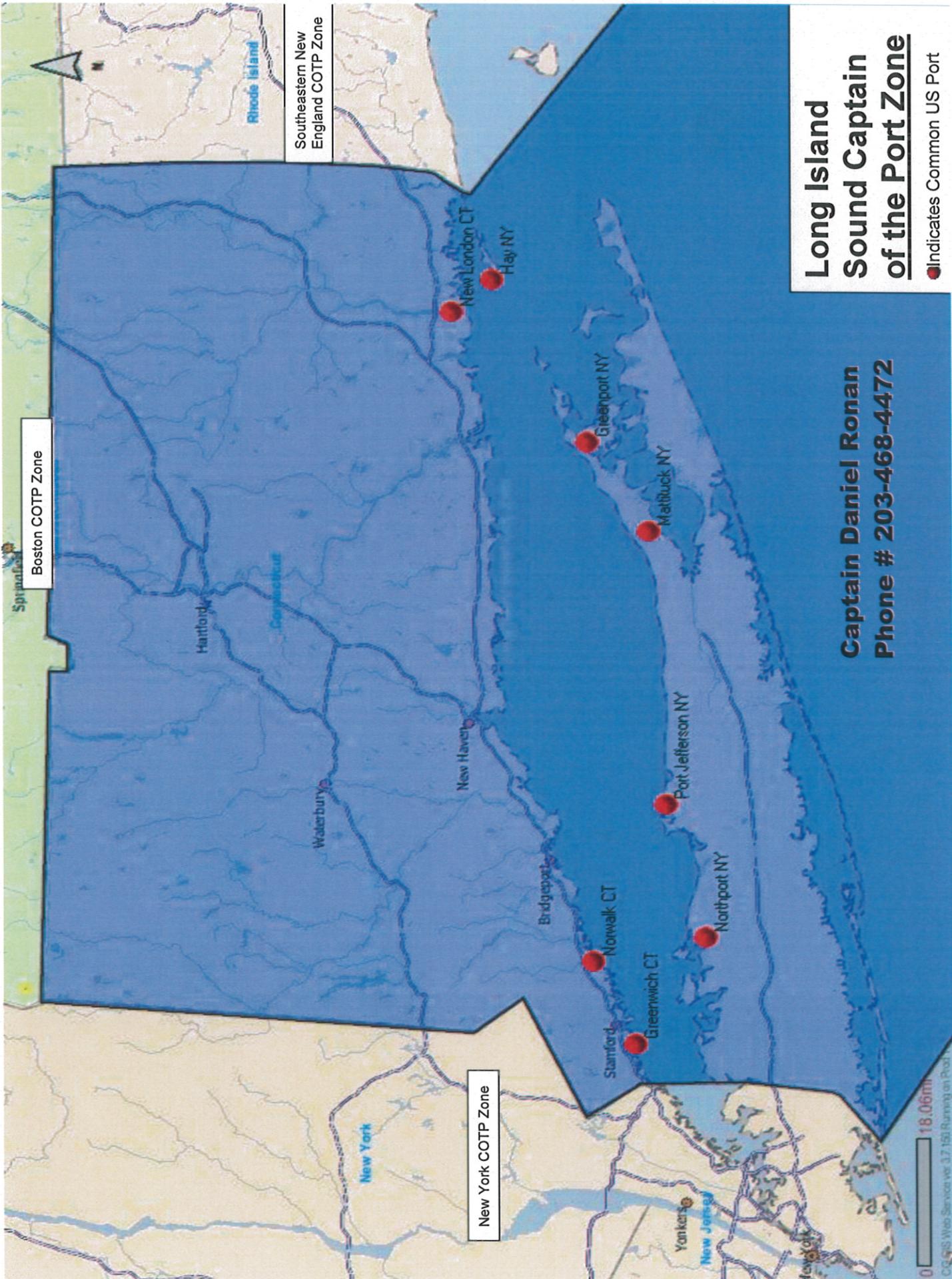
Colonial Pipeline Company

GULF COAST RESPONSE ZONE

EMERGENCY CARE FACILITIES

(Facilities listed are located along Colonial Pipeline's ROW)

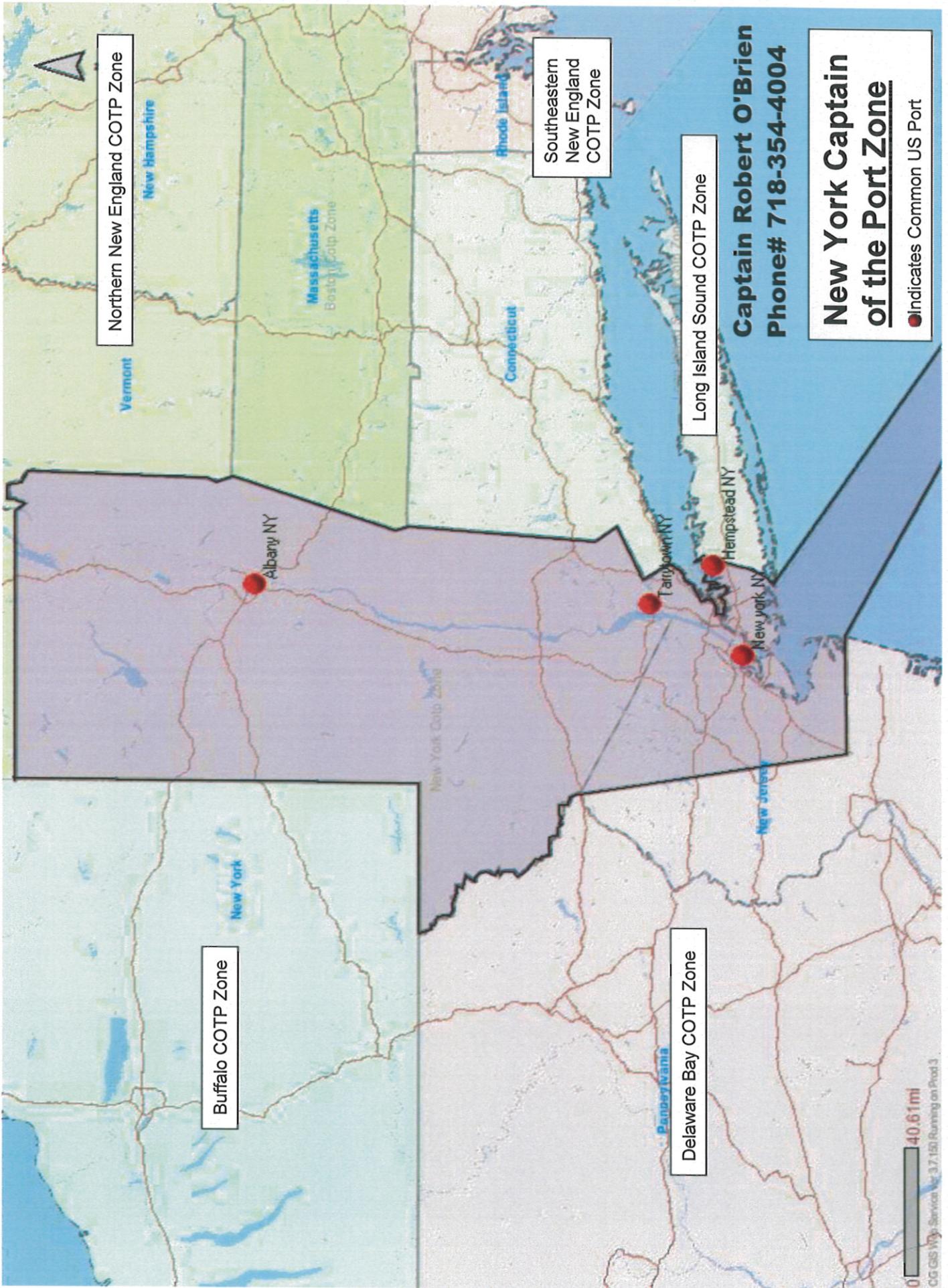
Facility Name	Address	City, State, Zip Code	Telephone No.	Longitude	Latitude
<i>Texas</i>					
The Medical Center of Southeast Texas	2555 Jimmy Johnson Blvd	Port Arthur, TX 77640-2007	(409) 724-7389	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Harris County Hospital District	925 Shaw Ave	Pasadena, TX 77506-1430	(713) 740-8180	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
East Houston Regional Medical Center	13111 East Fwy	Houston, TX 77015-5803	(713) 393-2000	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Community Hospital Foundation	13301 East Fwy	Houston, TX 77015-5801	(713) 450-3457	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
West Chambers Clinic	9825 Eagle Dr	Baytown, TX 77523-9847	(281) 576-0670	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Winnie Community Hospital	538 Broadway	Winnie, TX 77665-7600	(409) 296-6000	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Promise Healthcare	2600 Highway 365	Nederland, TX 77627-6237	(409) 726-8700	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Baptist Orange Hospital	608 Strickland Dr	Orange, TX 77630	(409) 883-9361	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Heliport: San Jacinto Methodist Hospital	4401 Garth Rd	Baytown, TX 77521-2122	(713) 420-8765	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
San Jacinto Methodist Hospital	4401 Garth Rd	Baytown, TX 77521-2122	(281) 420-8600	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
West Calcasieu-Cameron Hospital (Cal-Cam)	701 Cypress Street	Sulphur, LA 70663	(337) 527-7034	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
St. Elizabeth – Christus	2830 Calder Street	Beaumont, TX 77702	(409) 892-7171	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)
Baptist Hospital – Memorial Hermann	3080 College Street	Beaumont, TX 77701	(409)212-5000	(b) (7)(F), (b) (3)	(b) (7)(F), (b) (3)

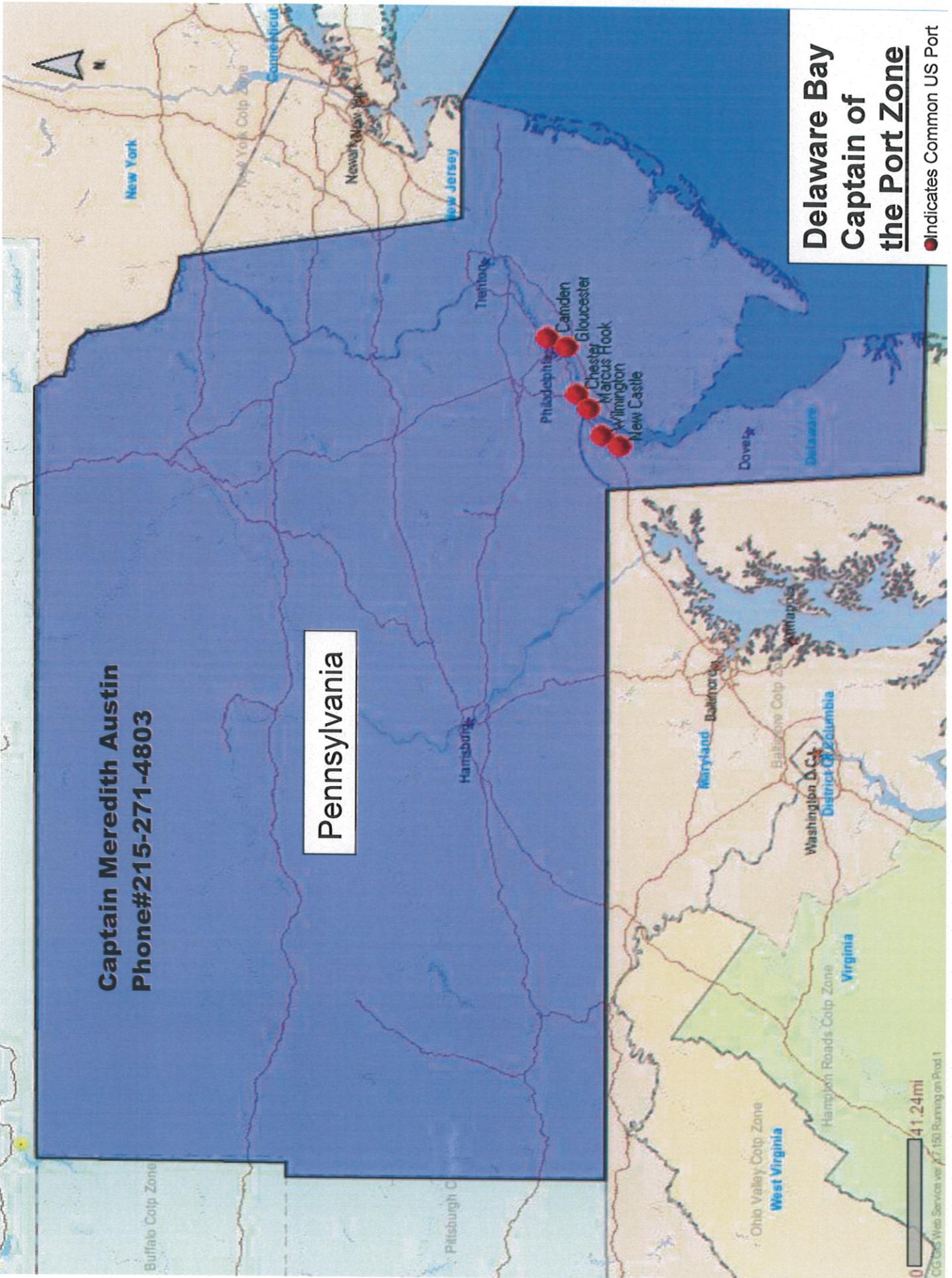


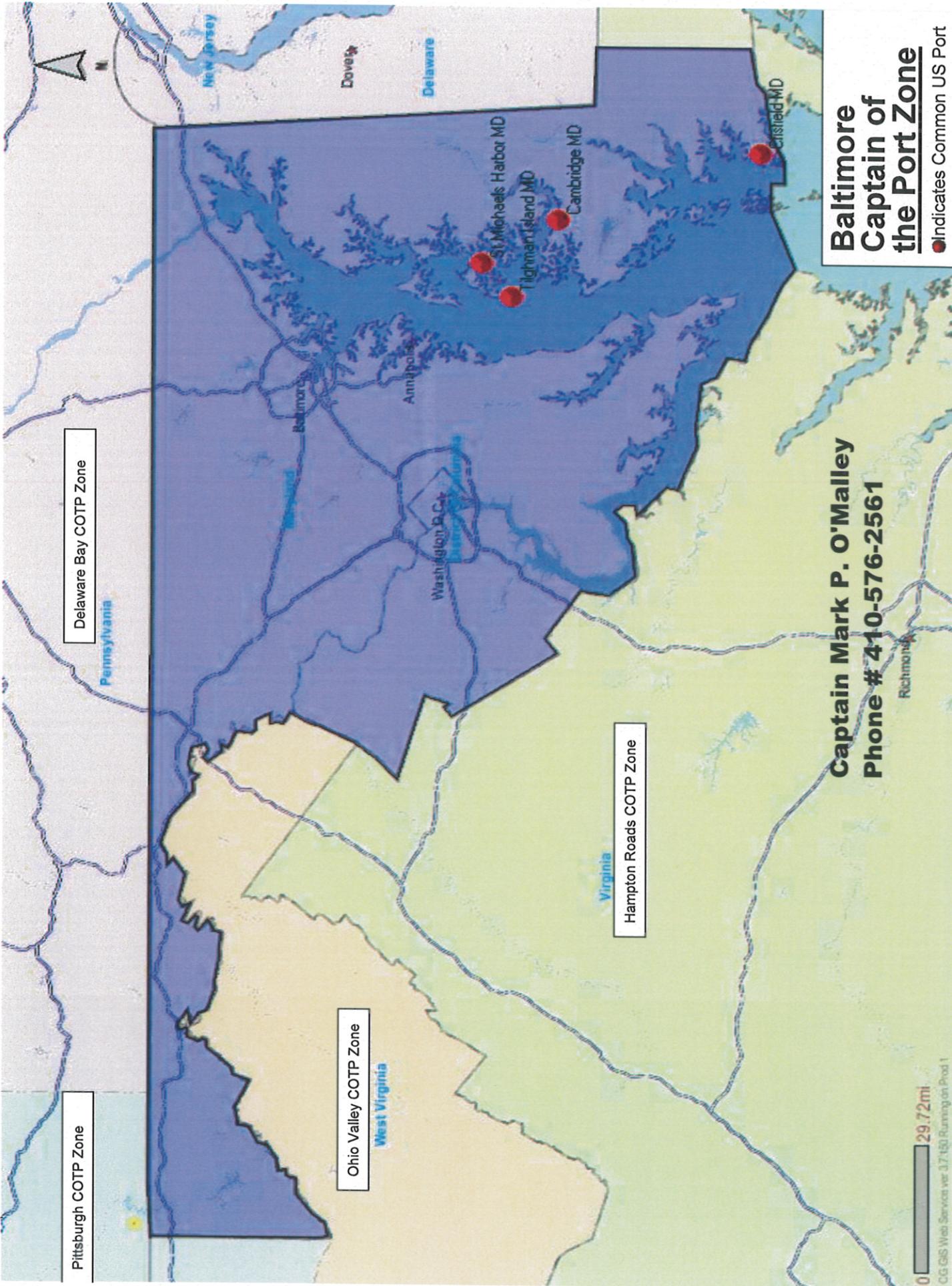
Long Island Sound Captain of the Port Zone

● Indicates Common US Port

Captain Daniel Ronan
Phone # 203-468-4472



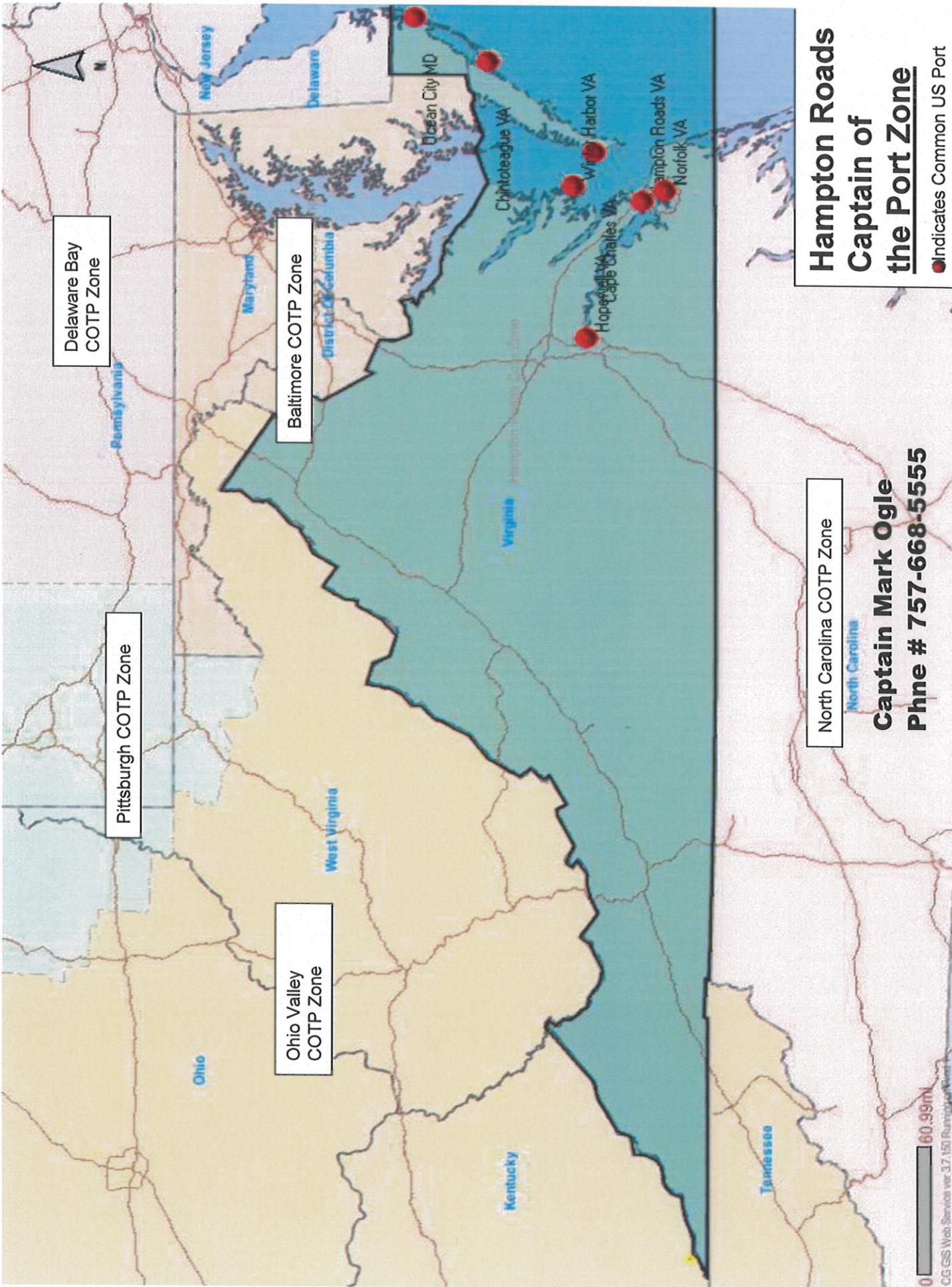




**Baltimore
Captain of
the Port Zone**

● Indicates Common US Port

Captain Mark P. O'Malley
Phone # 410-576-2561



Delaware Bay
COTP Zone

Baltimore COTP Zone

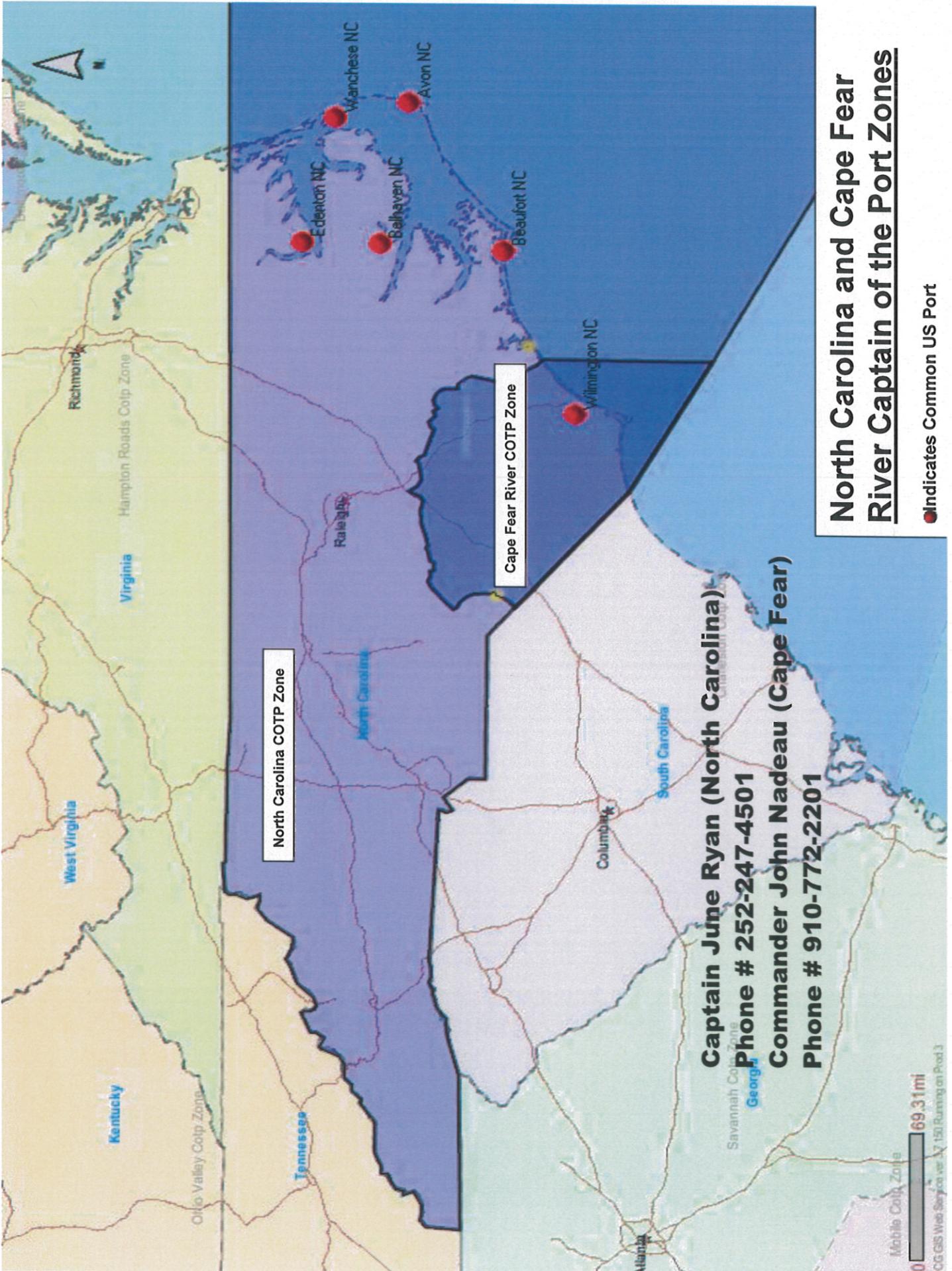
Pittsburgh COTP Zone

Ohio Valley
COTP Zone

North Carolina COTP Zone

Captain Mark Ogle
Phne # 757-668-5555

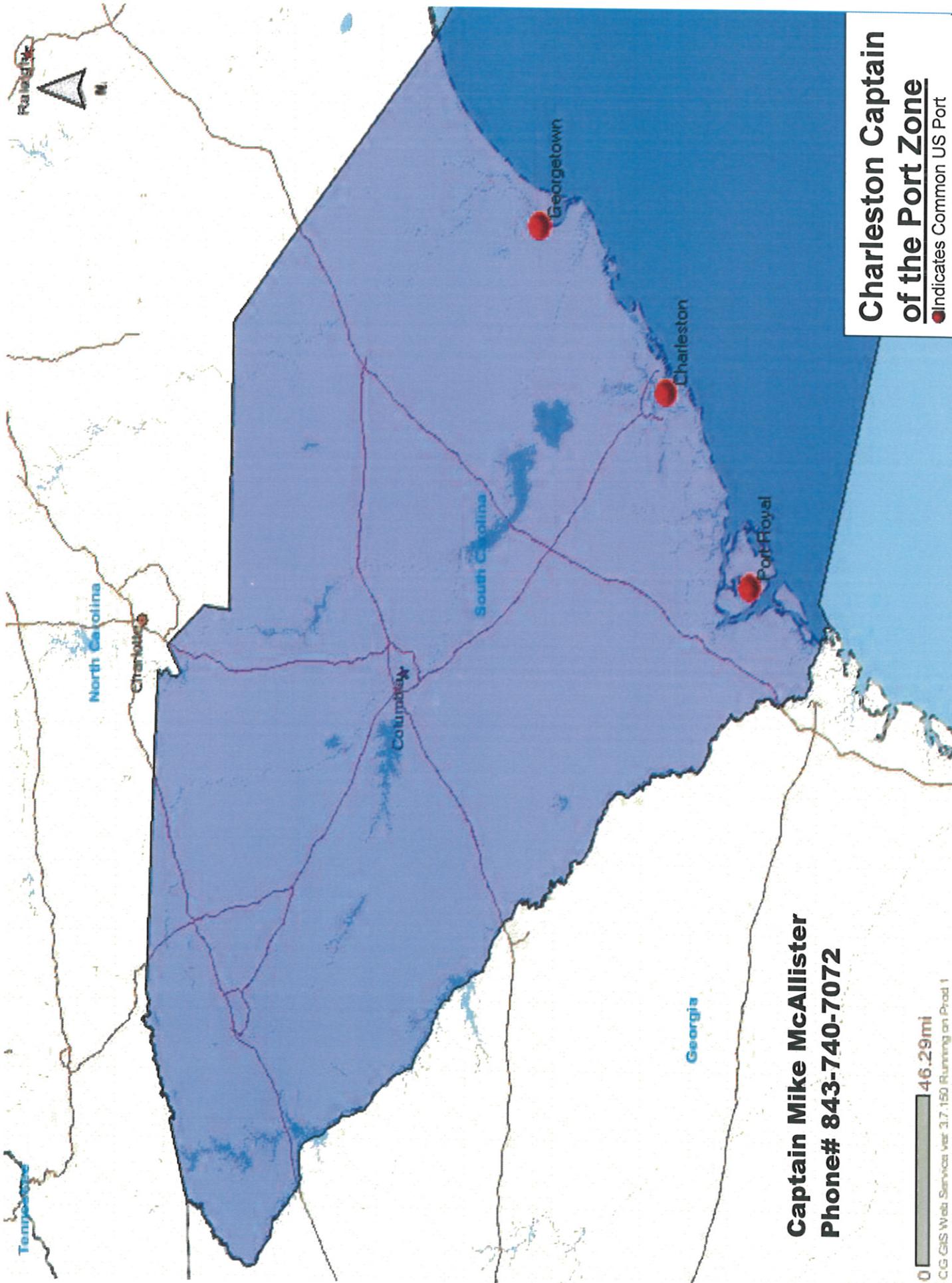
**Hampton Roads
Captain of
the Port Zone**
● Indicates Common US Port



North Carolina and Cape Fear River Captain of the Port Zones

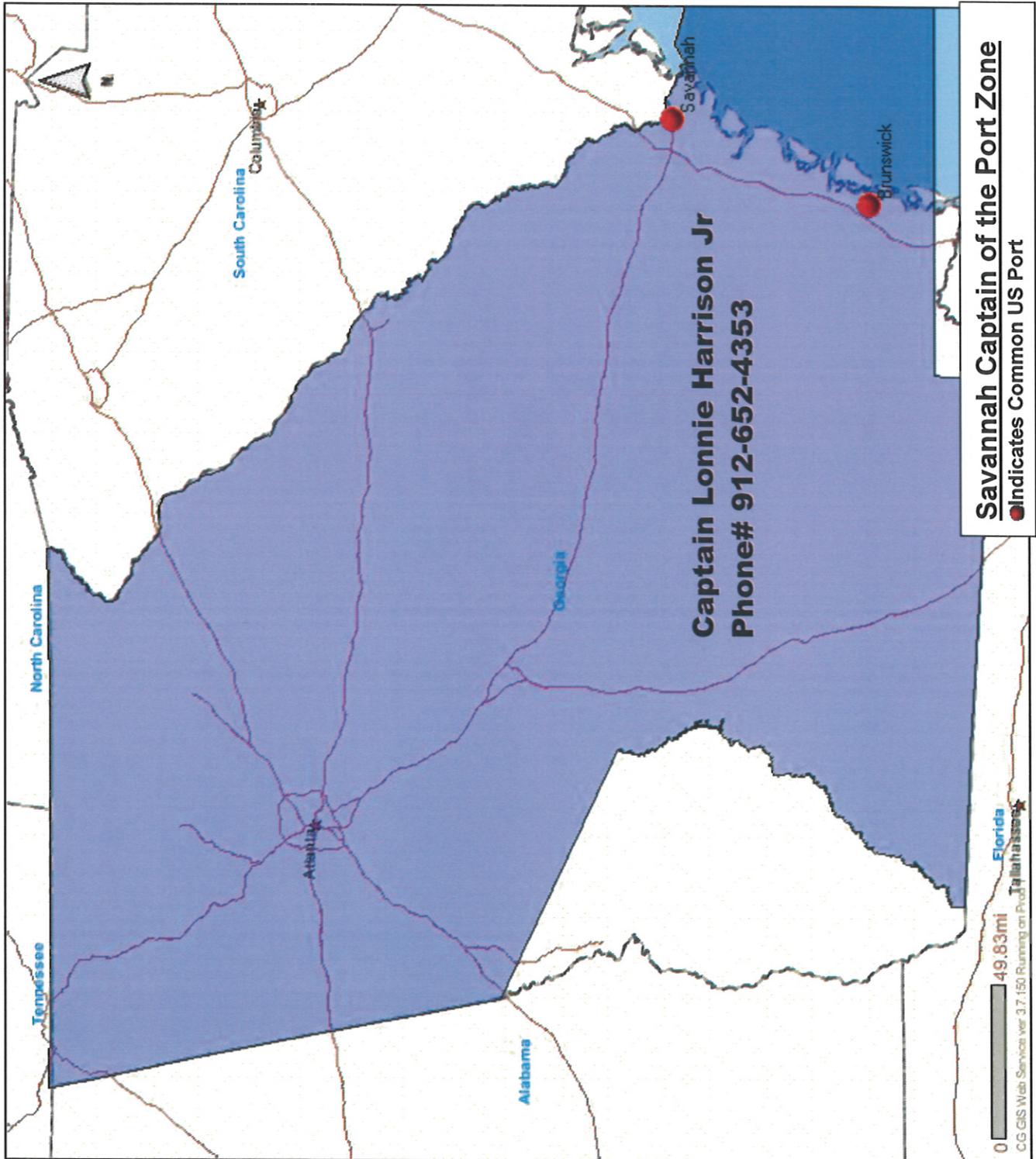
● Indicates Common US Port

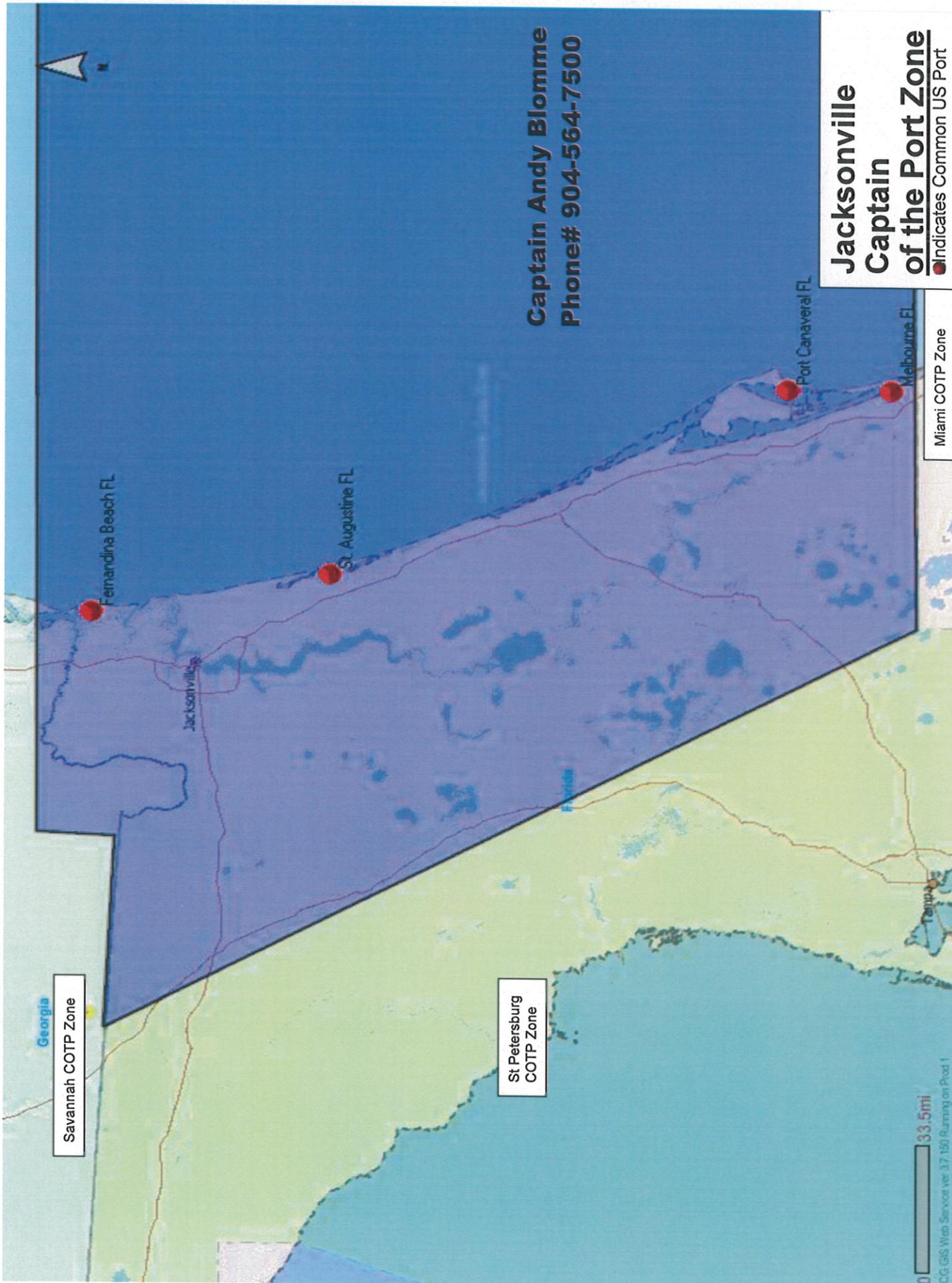
Captain June Ryan (North Carolina)
Phone # 252-247-4501
Commander John Nadeau (Cape Fear)
Phone # 910-772-2201



**Charleston Captain
of the Port Zone**
● Indicates Common US Port

Captain Mike McAllister
Phone# 843-740-7072





Savannah COTP Zone

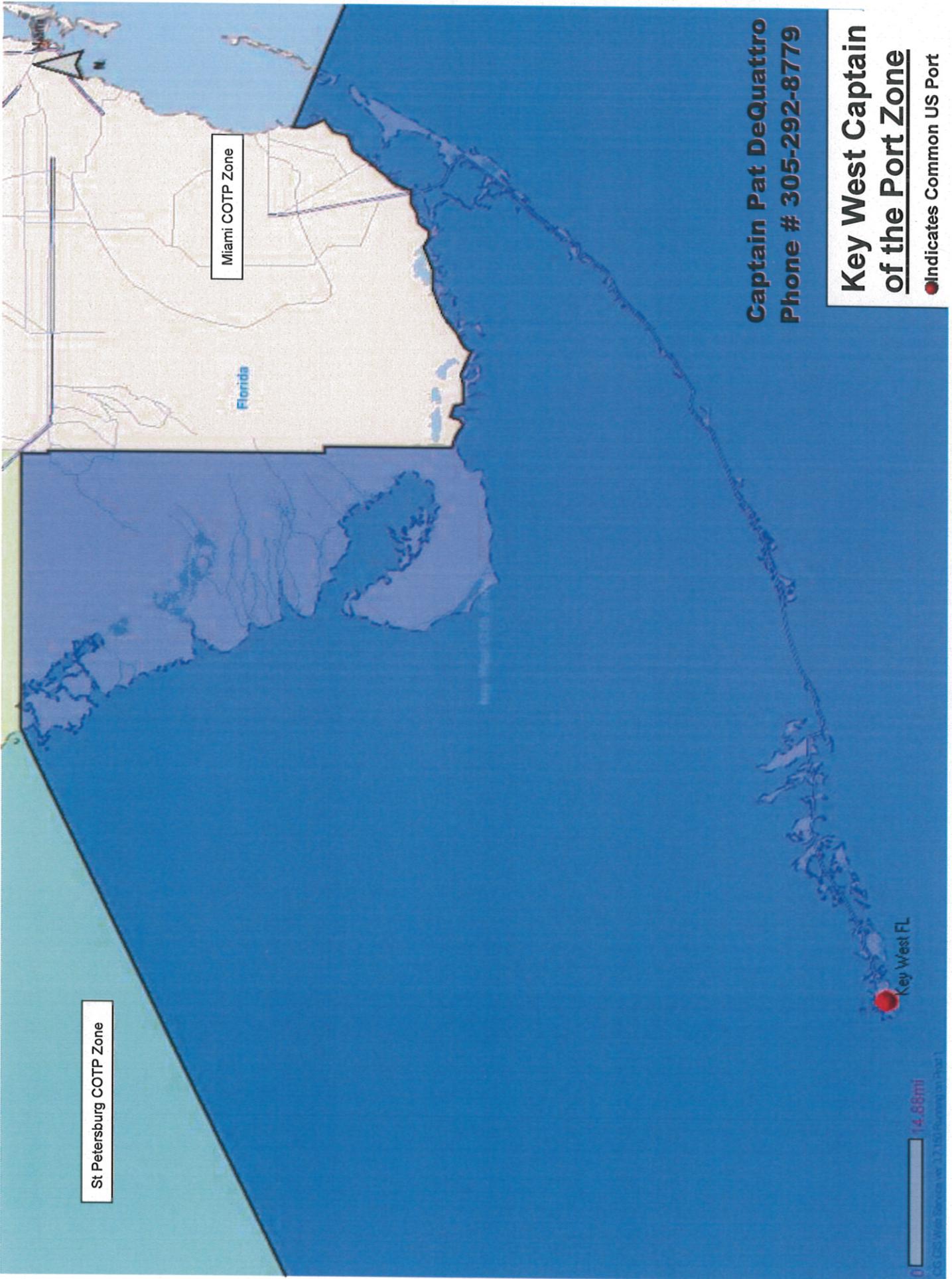
St Petersburg COTP Zone

0 33.5mi
CG GIS Web Service ver 3.7.150 Running on Prod 1

Captain Andy Blomme
Phone# 904-564-7500

Jacksonville
Captain
of the Port Zone
● Indicates Common US Port

Miami COTP Zone



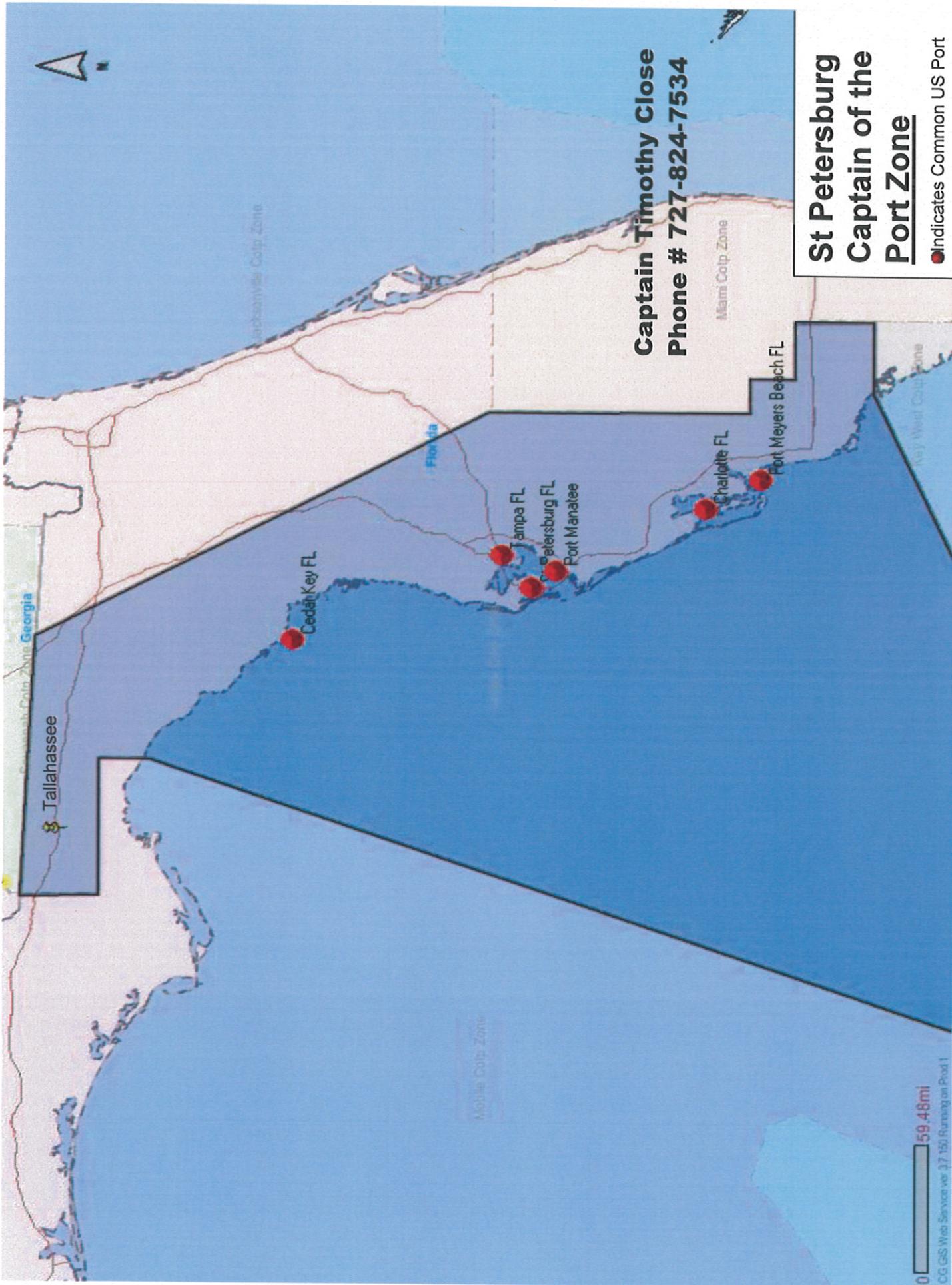
Captain Pat DeQuattro
Phone # 305-292-8779

**Key West Captain
of the Port Zone**

● Indicates Common US Port

0 14.88mi

U.S. Coast Guard Auxiliary, Inc. 2013

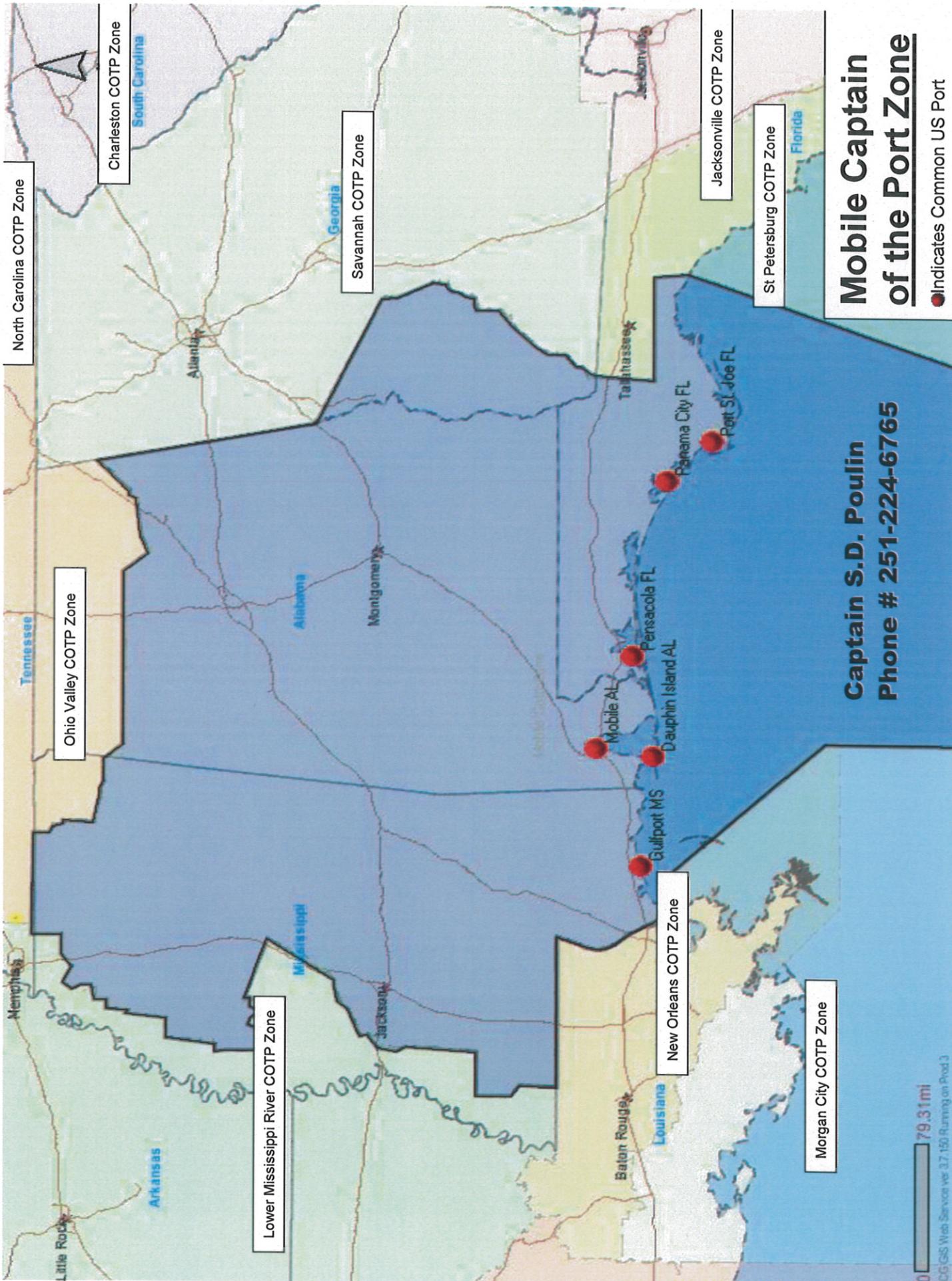


Captain Timothy Close
Phone # 727-824-7534

St Petersburg
Captain of the
Port Zone

● Indicates Common US Port

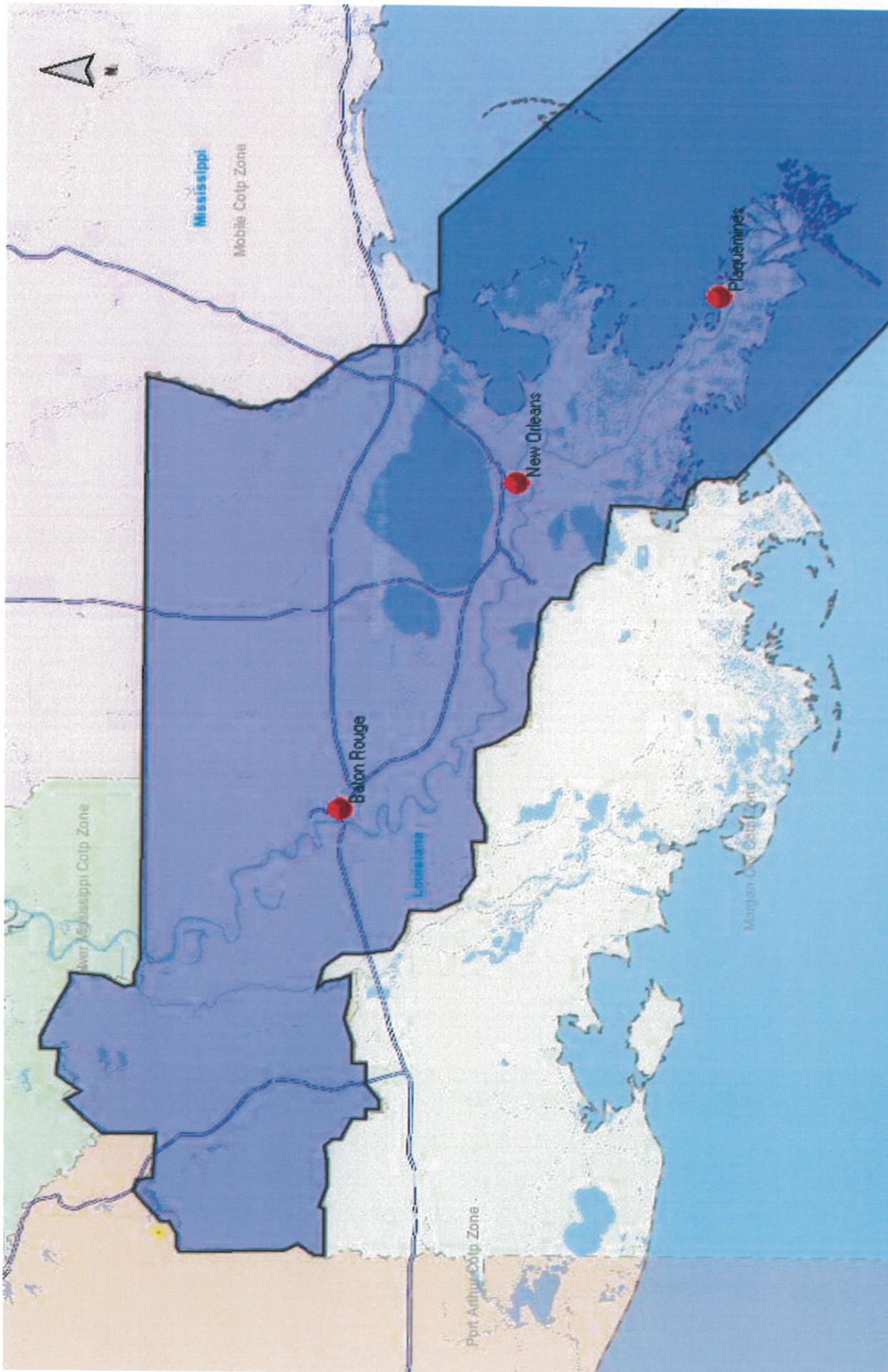
0 59.48mi
 CG GIS Web Service ver. 3.7.150 Running on Prod 1



Mobile Captain of the Port Zone

● Indicates Common US Port

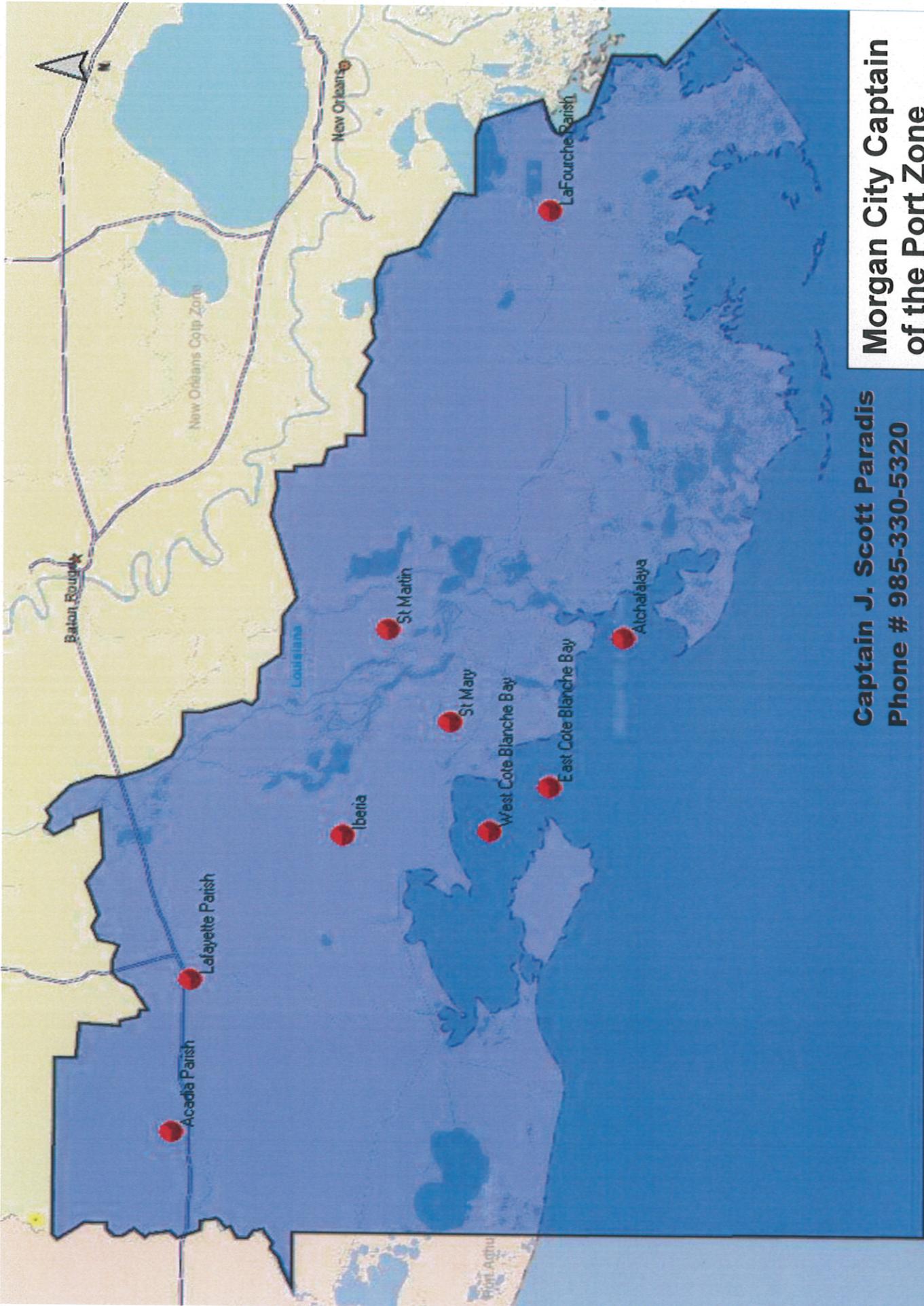
Captain S.D. Poulin
Phone # 251-224-6765



**New Orleans Captain
of the Port Zone**

● Indicates Common US Port

**Captain Edwin M. Stanton
Phone # 504-589-6196**



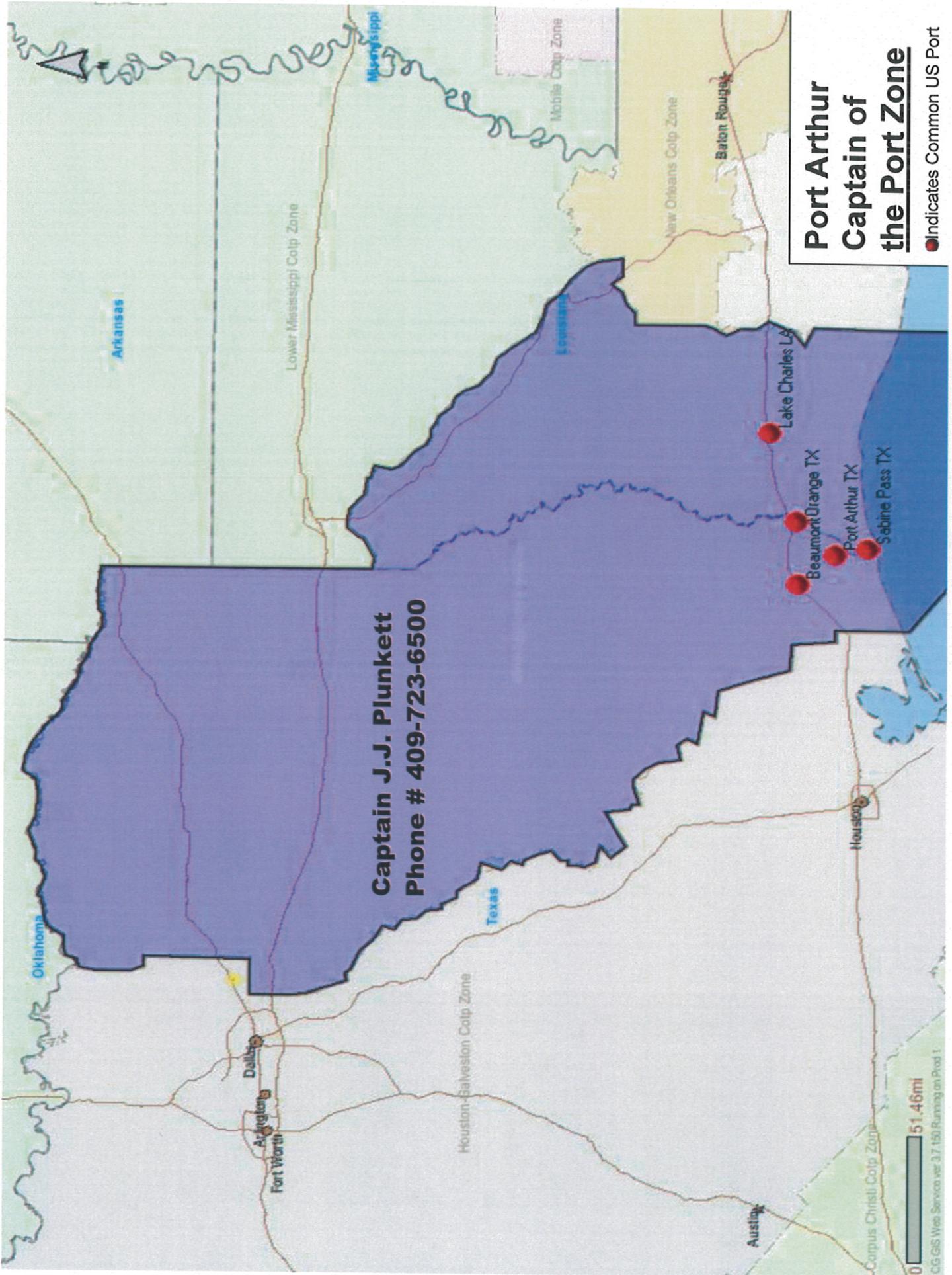
Captain J. Scott Paradis
Phone # 985-330-5320

Morgan City Captain
of the Port Zone

● Indicates Common US Port

0 19.78mi

CG GIS Web Service ver 3.7.150 Running on Prod 1

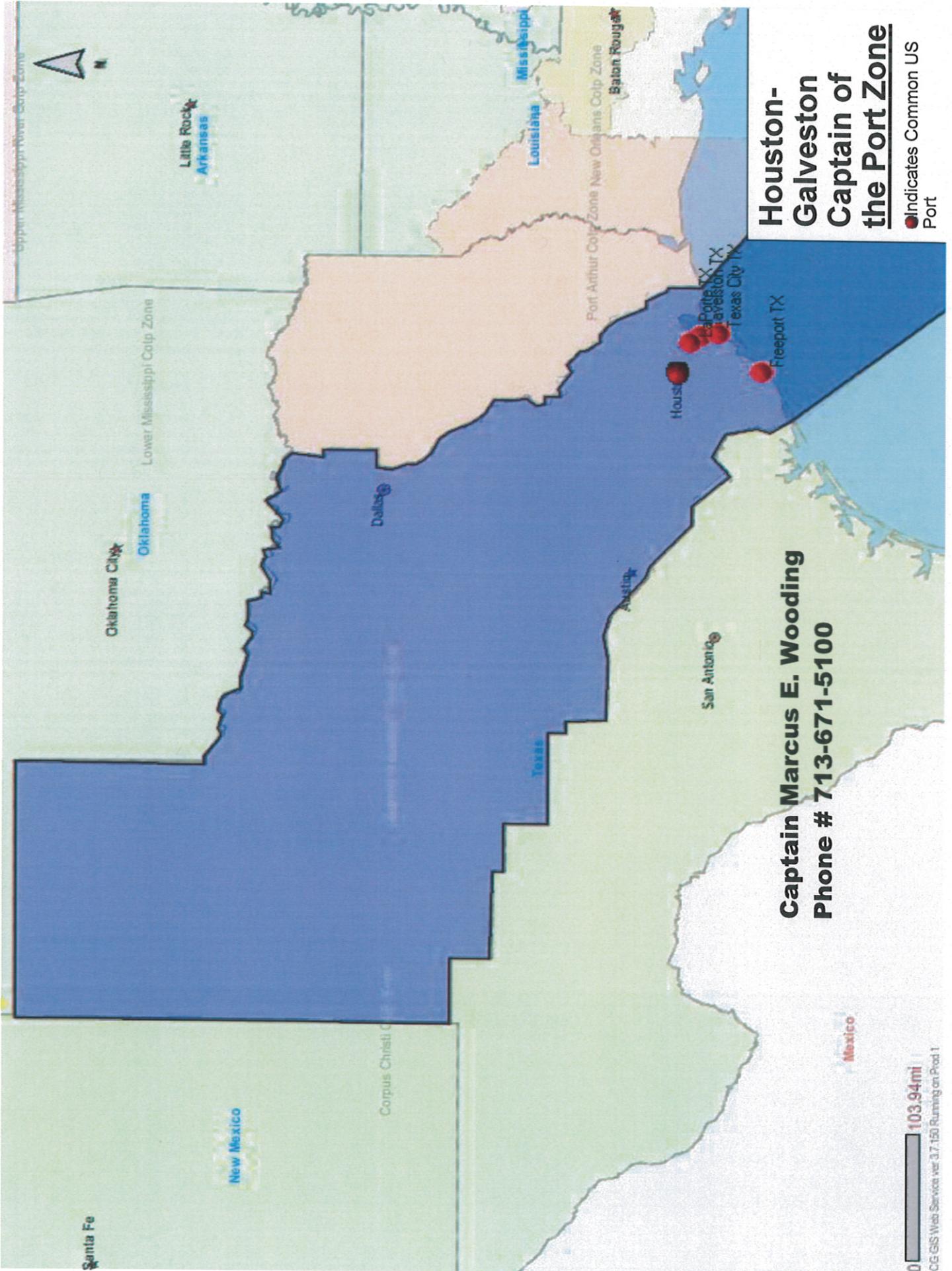


Captain J.J. Plunkett
Phone # 409-723-6500

**Port Arthur
 Captain of
 the Port Zone**

● Indicates Common US Port

0 51.46mi
 CG GIS Web Services ver 3.7.150 Running on Prod 1



**Houston-
Galveston
Captain of
the Port Zone**

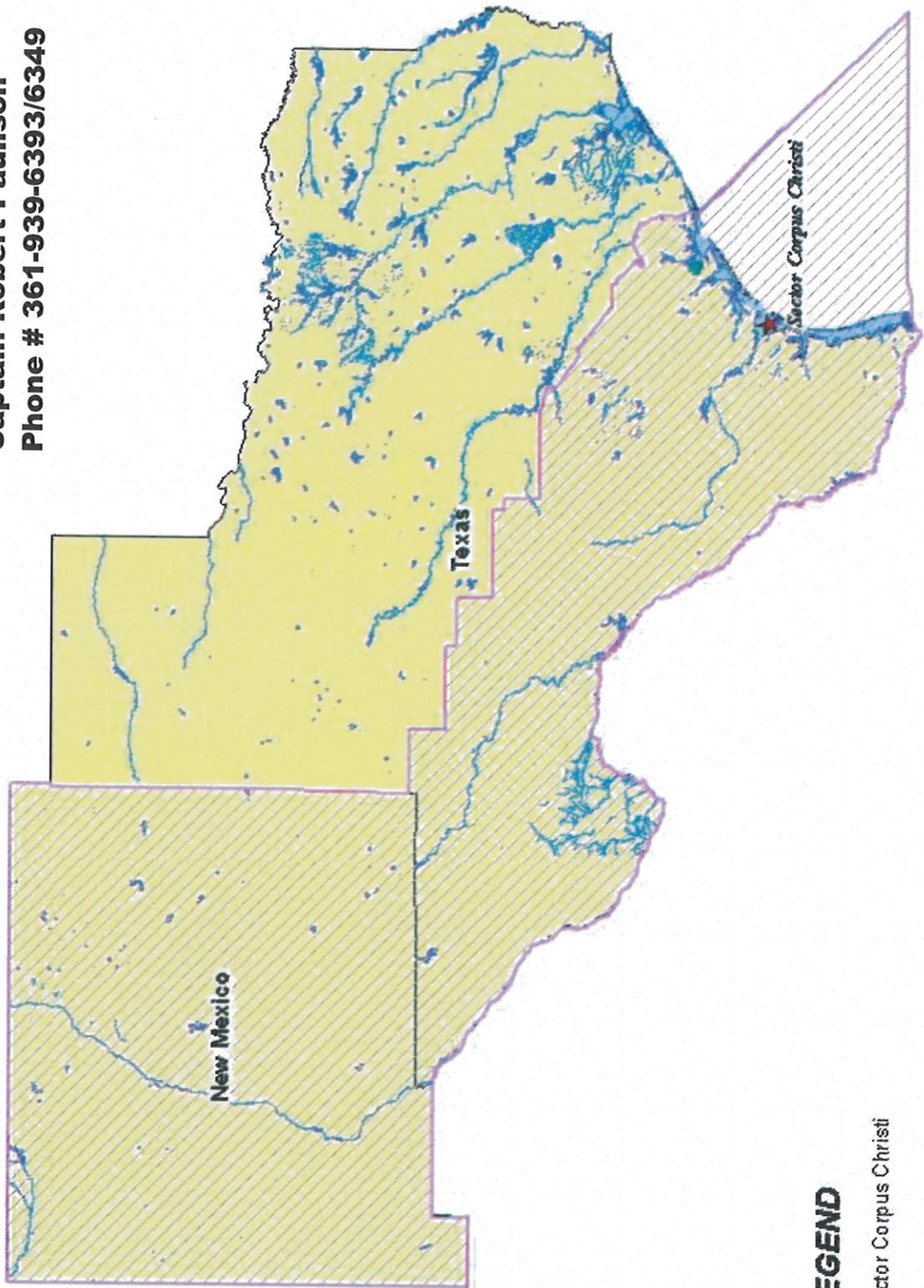
● Indicates Common US Port

**Captain Marcus E. Wooding
Phone # 713-671-5100**



Sector Corpus Christi

Captain Robert Paulison
Phone # 361-939-6393/6349



LEGEND
Sector Corpus Christi



Colonial Pipeline Company

TRAINING

Colonial personnel who are likely to respond to an emergency situation will be trained commensurate to the responsibilities that are assigned to them. Listed below are the training requirements for spill response. The potential need for additional training or adjustments to the current training curriculum will be addressed during post exercise and response evaluations of Colonial's response effectiveness as described in Sections 4.04 and 7.01.

Hazwoper Training

OSHA 29 CFR 1910.120(q) regulations (the OSHA Standard) cover employees who are engaged in emergency response. It is important to distinguish the difference between an incidental and emergency spill. The following guidance is provided by OSHA regarding this distinction:

"An incidental release is a release of a hazardous substance which does not pose a significant safety or health hazard to employees in the immediate vicinity or to the employee cleaning it up, nor does it have the potential to become an emergency within a short timeframe. Incidental release are limited in quantity, exposure potential, or toxicity and present minor safety or health hazards to employees in the immediate work area or those assigned to clean them up. An incidental spill may be safely cleaned up by employees who are familiar with the hazards of the chemicals with which they are working."¹ "Incidental releases of hazardous substances where the substance can be absorbed, neutralized, or otherwise controlled at the time of the release by employees in the immediate release area, or by maintenance personnel, are not considered to be emergency responses within the scope of the standard."²

¹ <http://www.osha.gov/html/faq-hazwoper.html>

² http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=INTERPRETATIONS&p_id=24759

Most relatively small spills at our facilities, especially those not involving gasoline, qualify as incidental releases. Responders to such spills are not required to be hazwoper trained.

Employees that respond to emergency release sites must receive hazwoper training before they can participate in emergency operations. There are 5 levels of hazwoper training:

- 1st Responder Awareness Level – First responders at the awareness level are individuals that are likely to discover a spill and who have been trained to notify proper authorities of the release. They take no further action beyond notification.
- 1st Responder Operations Level – First responders at the operations level are individuals that respond for the purpose of protecting nearby persons, property, or the environment from the effects of the release. They take defensive actions from a safe distance to contain an uncontrolled release to keep it from spreading and prevent exposures. They do not enter the danger area in attempt to stop a release.
- Hazardous Materials Technician Level – Hazardous materials technicians are individuals who respond for the purpose of stopping the release. They will approach the point of the release in order to plug, patch, or otherwise stop the release. They have the potential to be in the hot zone.
- Hazardous Materials Specialist Level – Hazardous material specialists provide support to hazardous material technicians. Their duties require more specific knowledge of the

Colonial Pipeline Company

TRAINING

substances they are called upon to contain. This level of training does not apply to Colonial employees.

- On Scene Incident Commander - Incident commanders assume control of the incident. They delegate responsibility for performing various tasks. Incident commanders require more extensive training in general matters and in command/response management.

The table on page 4 identifies the minimal training requirements for the various positions of Colonial's incident command structure. Many of Colonial's emergency response positions (especially in the command center) will not require the individuals to work in areas where there is a safety or health threat. Such responders, with the exception of the incident commander, are not covered by the OSHA Standard if they will not enter the danger area. They must, however, understand their roles & responsibilities, the incident command structure, and Colonial's emergency response plan. The matrix also provides Colonial's training requirements, many of which exceed the minimum OSHA requirements. All Colonial employees with assigned emergency response roles besides administrative assistants shall receive initial training on the incident command system and emergency response (ICS/ER). This can be obtained by attending an 8-hour hazwoper classroom "refresher" training session.

Refresher Training

All emergency response positions must attend annual refresher training to maintain required competency to perform their assigned responsibilities.

Individuals in positions covered by the OSHA Standard must complete the required 8-hour hazwoper refresher training within 12 months of the date the training was last taken. An employee who misses the 12 month date shall attend the next practicably available refresher class. If an employee does not complete refresher training by the end of the calendar year in which refresher training is due, he/she is subject to retake the 24-hour initial class. If, extenuating circumstances exist to prevent an employee from completing refresher training within the calendar year as prescribed, the HSS Leader will review a request for a waiver before an employee is required to retake the 24-hour initial hazwoper class. This waiver request would be on a case-by-case basis. Any decision about retraining would consider carefully that individual's previous levels of hazwoper training, actual experience, and demonstrated competence, to ensure they're able to perform their job absolutely safely. The decision will be documented and kept in the employee's file for 3 years.

For individuals in positions covered by the OSHA Standard, 8-hour annual hazwoper refresher training can be satisfied by - attending a hazwoper classroom refresher training session.

Annual refresher training for positions that only require (ICS/ER) training can be satisfied by:

- 1) Attending a hazwoper classroom refresher training session
- 2) Attending Strike Team classroom training
- 3) Taking a web-based refresher training course in which there is a means to ascertain and document the individual's competency

First Responder Awareness Level refresher training for non-administrative field personnel can be satisfied by the annual one-day safety class required for field personnel which includes awareness refresher curriculum.

Colonial Pipeline Company

TRAINING

Firefighting Training

Firefighting training requirements to satisfy PHMSA 49 CFR 194.117 and 195.403 regulations depend on the emergency response position.

Portable fire extinguisher training will suffice for responders whose emergency response role has them assigned to the incident command center.

The following emergency response positions require the more in depth hands-on (includes simulator) type fire training:

- All non-admin field personnel
- Safety/Security Officer – Field
- Staging Area Mgr
- Branch Director
- Wildlife Unit Leader
- Salvage/Source Control Unit Leader
- Observer

Training Opportunities

Colonial offers a variety of emergency response training opportunities, including 24-hr hazwoper, 8-hr hazwoper awareness/operations/refresher, and fire training. Information on in-house training events can be obtained from the Learning Management System. There are also external training opportunities such as the “Inland Oil Spill Control Course” conducted by Texas A&M University. This course emphasizes control of oil spills on rivers, small streams, and land.

Training Records

Training records are maintained in the Learning Management System. These records are maintained for the term of employment for all Colonial personnel and are updated after satisfactory completion of training occurs. Individual training records can be accessed via Colonial’s intranet by Training Services personnel.

Colonial Pipeline Company

TRAINING

Emergency Response Position	Associated Hazwoper Designation (if any)	OSHA Minimum Requirements		CPC Requirements	
		Initial	Refresher	Initial	Refresher
Incident Commander	Incident Commander	24 hrs – B&D	Yes	24 hrs – B&D	Yes
Government Liaison		NA	NA	ICS/ER	Yes
Safety/Security - Command	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Safety/Security - Field	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Public Information Officer		NA	NA	ICS/ER	Yes
Operations Chief		NA	NA	24 hrs - B	Yes
Staging Area Mgr		NA	NA	ICS/ER	Yes
Branch Director	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Air Operations Unit Leader		NA	NA	ICS/ER	Yes
Wildlife Branch Leader		NA	NA	ICS/ER	Yes
Salvage/Source Control Unit Leader	1st Responder Operations	24 hrs - B	Yes	24 hrs - B	Yes
Operations Admin Assistant		NA	NA	NA	Yes
Planning Section Chief		NA	NA	24 hrs - B	Yes
Environmental Unit Leader	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
Situation Unit Leader		NA	NA	ICS/ER	Yes
Field Observer	1st Responder Operations	8 hrs - B	Yes	24 hrs - B	Yes
GIS/Trajectory		NA	NA	ICS/ER	Yes
Resource Unit Leader		NA	NA	ICS/ER	Yes
Documentation Unit Leader		NA	NA	ICS/ER	Yes
Logistics Section Chief		NA	NA	ICS/ER	Yes
Food Unit Leader		NA	NA	ICS/ER	Yes
Support/Services Branch Leader		NA	NA	ICS/ER	Yes
Communications Unit Leader		NA	NA	ICS/ER	Yes
Logistics Admin Support		NA	NA	NA	Yes
Finance Chief		NA	NA	ICS/ER	Yes
Claims/Insurance/ROW Unit Leader		NA	NA	ICS/ER	Yes
All non-admin field personnel	1st Responder Awareness	A	Yes	A	Yes

Colonial Pipeline Company

TRAINING

Notes:

NA = Not Applicable

ICS/ER = Incident Command System/Emergency Response

Competencies:

- **A = Awareness Level**
 - An understanding of what hazardous substances are, and the risks associated with them in an incident
 - An understanding of the potential outcomes associated with an emergency created when hazardous substances are present.
 - The ability to recognize the presence of hazardous substances in an emergency.
 - The ability to identify the hazardous substances, if possible
 - An understanding of the role of the first responder awareness individual in the employer's emergency response plan including site security and control and the U.S. Department of Transportation's Emergency Response Guidebook
 - The ability to realize the need for additional resources, and to make appropriate notifications to the communication center

- **B = 1st Responder Operations Level**
 - Knowledge of the basic hazard and risk assessment techniques
 - Know how to select and use proper personal protective equipment provided to the first responder operational level
 - An understanding of basic hazardous materials terms
 - Know how to perform basic control, containment and/or confinement operations within the capabilities of the resources and personal protective equipment available with their unit
 - Know how to implement basic decontamination procedures
 - An understanding of the relevant standard operating procedures and termination procedures

- **C = Hazardous Materials Technician Level**
 - Know how to implement the employer's emergency response plan.
 - Know the classification, identification and verification of known and unknown materials by using field survey instruments and equipment.
 - Be able to function within an assigned role in the Incident Command System.
 - Know how to select and use proper specialized chemical personal protective equipment provided to the hazardous materials technician.
 - Understand hazard and risk assessment techniques.
 - Be able to perform advance control, containment, and/or confinement operations within the capabilities of the resources and personal protective equipment available with the unit.
 - Understand and implement decontamination procedures.
 - Understand termination procedures.
 - Understand basic chemical and toxicological terminology and behavior

- **D = Incident Commander**
 - Know and be able to implement the employer's incident command system.
 - Know how to implement the employer's emergency response plan.
 - Know and understand the hazards and risks associated with employees working in chemical protective clothing.
 - Know how to implement the local emergency response plan.
 - Know of the state emergency response plan and of the Federal Regional Response Team.
 - Know and understand the importance of decontamination procedures

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Exercise Program

Oil spill exercises and preparedness activities should be conducted in a manner consistent with the applicable PHMSA Part 194 and 195 regulations. Colonial's Emergency Preparedness and Response Program follows the triennial cycle set forth in the PREP (Preparedness for Response Exercise Program) guidelines. Description, scheduling, and documentation requirements for this program are listed below. Additionally, lessons learned from the exercises will be addressed and incorporated into future drills, exercises, and training. Exercise evaluations will include a review with personnel of their performance in meeting the objectives of the emergency response training program. The Director of Health, Safety, Security and Environmental (Director HSSE) is responsible for planning, facilitating, and monitoring the exercise program(s) in conjunction with District/Response Zone Leadership.

Internal Notification Exercises

Objectives:

Demonstrate the ability to contact the Qualified Individual(s) and other Spill Management Team members.

Requirements:

- Group 4 notification exercises will be conducted quarterly and consist of sending unannounced text messages and emails with the expectation that responders will call or email the Control Center to advise that they received the notification. At least one of the exercises per year will be conducted outside of normal business hours.
- While not required, it is a good practice to also conduct quarterly Group 8 notification exercises for District response personnel.

Facilitation, Evaluation, and Certification

- The Control Center Operations Manager (CCOM) will initiate Group 4 notification exercises, document the results, and send them to the Director of Health and Environmental (Director HSSE).
- The Director HSSE will evaluate the results and certify the Group 4 notification exercises.
- The District Administrative Assistant initiates Group 8 notification exercises, receives the responses, documents the results, and sends documentaton to the Director of Operations for evaluation. The Group 8 results may be stored in the Spill and Drill Repository.

Documentation

- Documentation will be retained electronically in the Spill and Drill Repository located on the Emergency Response SharePoint site for 3 years. The Environmental Coordinator (EC) manages this site.

Emergency Operating Procedure Drills

Objectives:

- Build proficiency in responding to abnormal and emergency conditions.
- Demonstrate and develop consistency in the performance of routine operations.
- Evaluate operational readiness and training needs.

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Exercise Program

Requirements:

- Expectations for these annual drills are contained in the Opex Drills and Preplanned Observations section of the Conduct of Operations Manual.

Facilitation, Evaluation, and Certification

- The Drill Coordinator as designated by the Operations Manager (OM) will facilitate the drills and perform post drill critiques with participants to determine the effectiveness of an Emergency Operating Procedure (EOP) that has been activated during a drill. The OM will evaluate and certify the exercises.

Documentation

- The EOP exercise evaluation form contained in Section 7.02 is recommended for use
- Documentation will be retained electronically in the Spill and Drill Repository for 3 years.
- The OM ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.

District Spill Management Team Tabletop Exercises

Objectives:

- District Spill Management Team members demonstrate their ability to organize, communicate, and make strategic decisions to protect human health and the environment, particularly during the initial stages of a response.
- Demonstrate the ability to organize team members to effectively interface with a unified command.

Requirements:

- At least one tabletop exercise will be conducted by the District Spill Management Team each year.
- The exercise should involve personnel for the positions identified in the district response team incident command structure (see Section 4.02).

Facilitation, Evaluation, and Certification

- The District Environmental Manager (DEM) facilitates the exercise.
- The response team conducts a post-exercise evaluation of the exercise to identify lessons learned and needed corrective actions.
- The DEM ensures that corrective actions are entered into OPIS.
- The Director of Operations (DO) certifies the exercise.

Documentation

- ICS forms will be used during the exercise.
- The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for 3 years.
- The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
- The DO ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
- Corrective Actions are entered and tracked in OPIS.

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Strike Team Tabletop Exercise

Objectives:

- Strike Team members demonstrate their knowledge of the contents of the ERP and the Planning Cycle process and their ability to apply them in a manner that would protect human health and the environment.
- Demonstrate the ability to organize team members to effectively interface with a unified command.

Requirements:

- A tabletop exercise will be conducted by the Strike Team each year on a worst case type discharge scenario
- The scenario location will rotate each year such that the scenario is within each district once every 3 years.

Facilitation, Evaluation, and Certification

- The Director HSSE facilitates the tabletop exercise.
- The response team conducts a post-exercise evaluation of the exercise to identify lessons learned and needed corrective actions.
- The Emergency Response Program Specialist ensures that corrective actions are entered into OPIS.
- The Director HSSE certifies the exercises that engage both district and Strike Team responders.

Documentation

- ICS forms will be used during the exercise.
- The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for 3 years.
- The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
- The Director HSSE ensures the records are entered into the Spill and Drill Repository.
- Corrective Actions are entered and tracked in OPIS.

Equipment Deployment Exercises – Colonial Equipment

Colonial equipment is not used for responding to a worst-case discharge scenario. The equipment is intended to be used only for maintenance activities or to supplement OSRO equipment if needed.

Equipment Deployment Exercises – OSRO Equipment

Objectives:

- To validate that the OSRO-owned equipment is appropriate for the operating environment in which it is intended to be used.
- Operating personnel are trained and capable of its deployment and operation.

Requirements:

- A representative amount of OSRO equipment must be deployed annually. The OSRO must demonstrate its ability to deploy and operate the equipment. OSROs that have completed the required equipment deployment elsewhere do not need to be exercised by Colonial if we have

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adequate documentation of the completed exercises.

Facilitation, Evaluation, and Certification:

- The DEM facilitates the conduct of OSRO exercises at Colonial facilities, evaluation of the exercises for lessons learned/corrective actions; and certifies such exercises.
- The DEM ensures that corrective actions are entered into OPIS.
- Where OSROs have fulfilled the equipment deployment elsewhere, either the relevant records from such exercises or a PREP-compliance certification from the OSRO shall be obtained by the Procurement Administrator.

Documentation

- If an OSRO performs equipment deployment during a Colonial exercise, an electronic copy of the exercise summary, evaluation, certification, and other relevant documentation generated shall be entered into the Spill and Drill Repository for 3 years. The DEM ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
- OSRO PREP-compliance certifications or records from OSRO deployments elsewhere will be maintained for 3 years in the OSRO section of the Procurement SharePoint site.
- Corrective Actions are entered and tracked in OPIS.

District Unannounced Exercises

- At least one tabletop or equipment deployment exercise in each district must be unannounced each year. This is not an additional exercise to the above described tabletop and equipment deployment exercises.
- An unannounced exercise is where the exercise participants do not have prior knowledge of the exercise, as would be the situation in an actual spill event.
- Credit for an unannounced exercise can be taken for an actual spill that has been properly evaluated.

Facilitation, Evaluation, and Certification:

- The DEM facilitates the conduct of the exercise and its evaluation for lessons learned and corrective actions.
- The DEM ensures that corrective actions are entered into OPIS.
- The DEM certifies the exercise.

Documentation

- The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for 3 years.
- The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
- The DEM ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
- Corrective Actions are entered and tracked in OPIS.

Unannounced, Full Scale, Equipment Deployment Drills

Colonial may elect to periodically conduct an unannounced, full scale drill that includes equipment deployment with the purpose of testing the ability to exercise the entire emergency response plan using an as near to real life scenario as possible. These drills include actual notification, mobilization, and deployment of appropriate Colonial and OSRO equipment and resources

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necessary to respond to the scenario in question. Additionally, the Atlanta Control Center may conduct a mock shut down of the affected pipeline segment. These drills would be designed to meet the criteria of both "Unannounced" and "Triennial" drill requirements exercising all 15 elements of the PREP guidelines.

Facilitation, Evaluation, and Certification:

- The Emergency Response Program Specialist facilitates the conduct of the exercise and its evaluation for lessons learned and corrective actions.
- The Emergency Response Program Specialist ensures that corrective actions are entered into OPIS.
- The Director HSSE certifies the exercise.

Documentation

- The exercise summary, evaluation, certification, and other relevant documentation generated will be retained electronically in the Spill and Drill Repository for 3 years.
- The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
- The Emergency Response Program Specialist ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository.
- Corrective Actions are entered and tracked in OPIS.

Area Exercises/Unannounced RSPA Exercises

Colonial will participate in Area Exercises as requested by the "Initiating Authorities" (Federal, State, and Local Government, and Industry). These will be managed by the Director of Operations or Director HSSE.

Credit for Actual Spill Responses

Credit may be taken for actual responses to satisfy the requirements of the District Spill Management Team tabletop exercise, Strike Team tabletop exercise, or an equipment deployment exercise if the following conditions are met:

- District Spill Management Team tabletop exercise
 - an ICS structure is established with the relevant positions filled
 - an Incident Action Plan is prepared
 - a post response evaluation is conducted and documented
- Strike Team tabletop exercise
 - a significant volume of oil is spilled and/or there is a significant environmental threat
 - an ICS structure is established
 - the Strike Team is mobilized
 - an Incident Action Plan is prepared
 - a post response evaluation is conducted and documented
- Equipment Deployment
 - the minimum amount of Colonial or OSRO equipment is deployed
 - a post response evaluation is conducted and documented

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Certification

The Incident commander for the actual response must certify that the response meets the credit requirements for the identified exercises and plan components.

Documentation

- The Post Emergency Response Review – Significant Spill or Exercise form contained in Section 4.04.1 or equivalent must be completed.
- For equipment deployment credit, the Equipment Deployment Exercise Evaluation form contained in Section 7.02 must be completed.
- An electronic copy of the exercise summary, evaluation, certification, and other relevant documentation generated shall be entered into the Spill and Drill Repository and retained for 3 years.
- The exercise is recorded on the Triennial Cycle Documentation Form (ERP 7.02.01).
- The Incident Commander ensures the records are sent to the EC or are entered directly into the Spill and Drill Repository. Corrective Actions are entered and tracked in OPIS.

Triennial Cycle

The above defined frequency of exercises will meet the PREP triennial cycle requirements. Each of the following 15 components of the response plan must be exercised at least once during the rolling 3 year cycle:

1. Notification
2. Staff mobilization
3. Ability to operate within the response management system of the ERP
4. Discharge control
5. Assessment of discharge
6. Containment of discharge
7. Recovery of spilled material
8. Protection of sensitive areas
9. Disposal of recovered material and contaminated debris
10. Communications
11. Transportation
12. Personnel support
13. Equipment maintenance and support
14. Procurement
15. Documentation

The Triennial Cycle Documentation Form that is to be completed for each district is contained in Section 7.02.

Certification Requirements

Proper documentation for self-certification for each exercise should include the:

- Type of exercise
- Date of exercise
- Description of the exercise

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Exercise Program

- Objectives met in the exercise
- Components of the response plan exercised
- Components of the 15 PREP components exercised
- Lessons learned

The document must be “signed” by the individual authorized above for each type of exercise. Documentation forms are contained in Section 7.02. Signing can consist of the authorized person entering his/her name and position on the electronic document.

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EXERCISE DOCUMENTATION

All notification, tabletop, and equipment deployment exercises must be documented, evaluated and self-certified to ensure all objectives have been met. The documentation is to be maintained in the Drill and Spill Repository located in the Emergency Response SharePoint site for 3 years. Hard copy documentation should be retained at least until it is verified that all information has been stored in the Drill and Spill Repository. Contained in this section are copies of the following forms that are to be used in order to provide adequate documentation to meet the regulatory requirements:

- Internal Notification Exercises
- Emergency Operating Procedure Exercise Evaluation
- Post Tabletop Exercise Evaluation
- Equipment Deployment Exercise
- Triennial Cycle Documentation

The electronic version of each of these forms can be accessed via the link on the Emergency Response Plan SharePoint site. The Triennial Cycle Documentation spreadsheet for each Response Zone should be completed appropriately for each exercise during the three year cycle.

Triennial Cycle Documentation Form

_____ Response Zone

Compliance Cycle: 2010 - 2012

	Exercise Category						Core Components															
	QI Notification Emergency	Procedures	SMT, Tablettop Equipment	Deployment	Gov't Unannounced	Full Scale	Notification	Staff Mobilization	Operate in RMS	Discharge Containment	Assessment	Containment	Recovery	Protection	Disposal	Communications	Transportation	Personnel Support	Equipment Maintenance	Procurement	Documentation	
2010																						
1st Qtr.																						
2nd Qtr.																						
3rd Qtr.																						
4th Qtr.																						
2011																						
1st Qtr.																						
2nd Qtr.																						
3rd Qtr.																						
4th Qtr.																						
2012																						
1st Qtr.																						
2nd Qtr.																						
3rd Qtr.																						
4th Qtr.																						

For each quarter in which an exercise was completed, mark the exercise category with an "x", then mark each core component(s) tested during the exercise with an "x".

All information related to a given exercise should be stored in the Drill and Spill Repository located on the Emergency Response SharePoint site in accordance with the documentation plan (See ERP Section 7.01).

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INTERNAL NOTIFICATION EXERCISE DOCUMENTATION - GROUP 4

Internal Notification Exercise - Group 4

Date/time notification initiated:

Learnings/corrective actions required:

Strike Team

Name	respond w/in 15 minutes	respnd to 15 minute follow up	back up called	back up respond	notes

Non Primary

Name	respond w/in 15 minutes	respnd to 15 minute follow up	back up called	back up respond	notes

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Post Tabletop Exercise Evaluation

(Provide an explanation for answers that are not affirmative)

Date:

Location:

Attach listing of participants

Description of scenario:

Significant difficulties encountered during this response? (If yes, briefly describe)

Lessons learned:

Areas for improvement:

Corrective actions to be taken (also enter corrective actions into OPIS):

Core Response Components Evaluation (provide an explanation for answers that are not affirmative)

1) Notifications

Test the notifications procedures identified in the ERP

- Were required federal, state, and local agency notifications completed in a timely manner?
- Were spill management team call-out procedures effectively executed?
- Were notifications and responses properly documented?
- Were shippers notified as appropriate?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute notification procedures?

2) Staff Mobilization

Demonstrate the ability to assemble the spill response organization identified in the ERP

- Was an initial Strike Team conference call effectively initiated within an hour?
- Was there adequate coverage in key positions by Colonial and contractor to mount an acceptable initial response?
- Did we utilize pre-determined command center and staging locations?
- Was the command center adequately equipped?
- Were adequate directions provided for those unfamiliar with the area to find the command center and staging area?
- Did personnel initially report thru Staging if not members of the IC?
- Were there effective transitions when initial responders were relieved by pre-assigned personnel?
- Any changes need to be made to current procedures being used or the ERP?

3) Ability to Operate Within the Response Management System Described in the ERP

Demonstrate the ability of the Spill Management Team work within the Incident Command System as defined in the response plan to effectively address the event

Initial Response Management

- Were appropriate emergency shutdown actions taken by the control center and/or local operations in a timely manner?

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- Did initial responders perform a thorough initial assessment and size-up of the incident (e.g., spill volume, product type and hazards, including consideration of environmental conditions.)?
- Was an acceptable Site Safety & Health Plan quickly developed and implemented in the field?
- Were Initial Strategic Objectives quickly identified and implemented?
- Was an effective Unified Command established?
- Were initial responders familiar with their responsibilities?
- Comments/Lessons Learned/Recommendations

Incident Command Staff

- Was staff familiar with the ICS Planning Cycle and able to effectively apply it?
- Did the staff develop and prioritize overall incident objectives and assess if current and planned actions were consistent with those objectives?
- Did the staff establish operational periods, meeting schedules, and approve an IAP?
- Did the incident commander establish a link with CMT/Situation Room in Alpharetta office; complete the Spill Situation Status Summary and Crisis Management Assumed Consequences forms; and set up a communication cycle to keep appropriate information flow between IC and CMT?
- Did the incident commander effectively delegate duties?
- Was there good information flow within the within and between sections?
- Was there adequate administrative support?
- Were there enough adequately trained (hazwoper and functionally proficient) internal and contractor personnel to fill the required positions for two shifts for a sustained response?
- Was a shift change schedule established and was there an effective plan for making the transitions?
- Were effective briefing meetings held at appropriate intervals?
- Comments/Lessons Learned/Recommendations

Safety

Demonstrate the ability to monitor all field operations and ensure compliance with safety standards

- Were field operations adequately monitored to ensure compliance with safety standards, especially with respect to proximity of pipeline repair and recovery activities to water?
- Was a Site Safety & Health Plan prepared and updated?
- Were pre-work safety briefings held at all work sites?
- Were safety zones established?
- Were safety and health hazards adequately assessed to plan for effective protection?
- Comments/Lessons Learned/Recommendations

Operations

Demonstrate the ability to coordinate or direct operations related to the implementation of action plans

- Were tactical assignments appropriate to the overall incident objectives and strategies?
- Was there effective coordination with Planning, Staging, and Logistics Sections to develop resource status tracking and documentation?
- Was a communications schedule established at all recovery sites to report on progress and issues encountered that need attention?
- Were sufficient personnel available to effectively manage all field operations?
- Comments/Lessons Learned/Recommendations

Planning

Demonstrate the ability to develop short-range tactical plans for the operations section and specific long-range strategic plans

- Was an incident action plan effectively developed using the IAP forms?
- Was an appropriate meeting schedule established to prepare the action plan?
- Was the Command Post Situation Display prepared and maintained?

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- Was a master list of all resources checked in at incident including check-in, status, current location, estimated time of deployment, etc maintained?
- Were the spill response activities (i.e., utilizing a historian, use of proper forms, etc.) adequately documented?
- Comments/Lessons Learned/Recommendations

Logistics

Demonstrate the ability to provide the necessary support of both short-term and long-term action plans

- Was there effective integration of Logistics, Staging, and the Resource Unit sections?
- If Logistics did not immediately mobilize to the command center was there a smooth transition planned for when the move was made to join the command center?
- Comments/Lessons Learned/Recommendations

Finance

Demonstrate the ability to document the daily expenditures of the organization and provide cost estimates for continuing operations

- Was a claims phone number posted and processing system established?
- Were daily committed cost estimates documented and provided to IC?
- Was it confirmed that all contractors responding had valid contracts with CPC?
- Were contracts promptly established/adjusted for contractors without valid contracts?
- Was it quickly determined if a 3rd party cost monitoring contractor was needed?
- Comments/Lessons Learned/Recommendations

Public Information/Liaison

Demonstrate the ability to form a joint information center and provide the necessary interface between unified command and the media

- Was an initial press release issued within an appropriate time frame?
- Was a protocol established for authorizing release of information to media?
- Was a schedule prepared for regular progress reports on the spill cleanup efforts to be distributed to local officials, citizens, and the media?
- Were email updates on response progress prepared for employees?
- Comments/Lessons Learned/Recommendations

4) Source Control

Demonstrate the ability of the spill response organization to control and stop the discharge at the source

- Was the spill location confirmed in a timely manner?
- Were control measures effectively executed to stop/minimize the discharge at the source (effective station shut-down and valve closures)?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute source control procedures?

5) Assessment

Demonstrate the ability of the response organization to provide an initial assessment of the discharge and provide continuing assessments of the effectiveness of tactical operations

- Were weather and trajectory information obtained/determined?
- Were estimates of initial spill volume and potential drain down determined?
- Were recon teams (ground and air) dispatched in a timely fashion and did they provide needed information to Planning to identify effective recovery locations?
- Were NRDA implications considered and acted upon to collect time sensitive information?
- Any changes need to be made to current procedures being used or the ERP?

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- Are personnel adequately trained to successfully execute assessment procedures?

6) Containment

Demonstrate the ability of the spill response organization to contain the discharge at the source or in various locations for recovery operations

- Were timely/effective actions taken to minimize product from entering creek?
- Was the “last stand” recovery point identified and boom deployed in advance of the product leading edge?
- Was there sufficient equipment available for all containment sites?
- Did contractors demonstrate adequate expertise in booming strategy and timely deployment?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute containment procedures?

7) Recovery

Demonstrate the ability of the response organization to recover, mitigate, and remove the discharged product

- Were skimmers adequately deployed and operational?
- Was there adequate on-site storage capacity available (vac trucks, tank trucks, frac tanks) to accommodate recovered volumes?
- Were arrangements made to provide adequate offloading capabilities and off-site storage capacity to hold recovered product?
- Were there appropriate means to track volume of recovered product and distinguish between volume discharged from the environment and volume collected from the pipe?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute recovery procedures?

8) Protection

Demonstrate the ability of the response organization to protect the environmentally and economically sensitive areas identified in the ACP and ERP.

- Were sensitive areas identified and prioritized?
- Did action plan adequately address protective booming strategies?
- Were potentially affected water intakes quickly identified and were measures taken to provide appropriate protection?
- Were wildlife protection areas at risk identified and were effective protective measures included in the action plan?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute protection procedures?

9) Disposal

Demonstrate the ability of the spill response organization to dispose of the recovered material and contaminated debris

- Was an adequate waste minimization plan (i.e. segregation of contaminated soil/debris) prepared?
- Was an adequate waste disposal plan prepared?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute waste management procedures?

10) Communications

Demonstrate the ability to establish an effective communications system for the spill response organization

Colonial Pipeline Company

- Were there adequate communications capabilities available between the incident command center, recon, staging, logistics (if off-site), containment/recovery sites, and Alpharetta situation room?
- Did the command center have adequate internet access?
- Did command center and staging make arrangements to acquire hard-wired phones?
- Were satellite phones brought to the site and were they ready for use?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute communication procedures?

11) Transportation

Demonstrate the ability to provide effective transportation to facilitate response activities.

- Was thought given to traffic flow and how to integrate support from local authorities?
- Was the acquisition of required road permits for heavy equipment and supplies adequately addressed?
- Comments/Lessons Learned/Recommendation

12) Personnel Support

Demonstrate the ability to provide the necessary support of all personnel with the response.

- Was there adequate overnight accommodations provided for on a continuing basis for a sustained response?
- Were suitable feeding arrangements made for response personnel?
- Were emergency services for response personnel made available?
- Were adequate portable toilets facilities mobilized?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute support procedures?

13) Equipment Maintenance & Support

Demonstrate the ability to maintain and support all equipment associated with the response

- Were there adequate capabilities provided to maintain response equipment?
- Are personnel adequately trained to successfully execute maintenance procedures?
- Comments/Lessons Learned/Recommendations

14) Procurement

Demonstrate the ability to establish an effective procurement system to obtain the necessary personnel, equipment, and supplies for a sustained response

- Were needed equipment and supplies secured in a timely manner?
- Was a linkage established with corporate Procurement to provide assistance for difficult to obtain items?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute procurement procedures?

15) Documentation

Demonstrate the ability of the spill response organization to document all operational and support aspects of the response and provide detailed records of decisions and actions taken

- Did we record the salient information?
- Were the appropriate ICS forms completed?
- Any changes need to be made to current procedures being used or the ERP?
- Are personnel adequately trained to successfully execute documentation procedures?

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Equipment Deployment Exercise Evaluation

Date:

Location:

Type of event (exercise or actual response):

Announced or unannounced:

Description of scenario:

Deployment location(s):

Attach listing of participating OSRO/contractor and Colonial personnel.

Attach listing of equipment deployed.

Was at least the minimum amount of required deployed?

Was equipment in good operating condition?

Overall execution performance of personnel deploying and managing the equipment deployment:

Significant difficulties encountered during the exercise? (if yes, briefly describe)

Lessons learned

Areas for improvement

Corrective actions to be taken (also enter corrective actions into OPIS)

Exercise Objectives Met? (yes/no)

Certifying individual and date:

This record is to be maintained in the Emergency Response SharePoint site

Emergency Operating Procedure (EOP) Exercise Evaluation

Date: Location: Description of scenario:

EOP(s) activated: K01 – Leak K02 -Tank Overflow K20 -Evacuation K30 – Complete Loss of Communication K40 – Natural Disasters K50 – Fire or Explosion K60 – Security Threat

Were all immediate and subsequent actions identified in the EOP performed (yes or no)? Overall effectiveness of the EOP:

Overall execution of personnel performing the EOP:

Significant difficulties encountered during the response? (if yes, briefly describe)

Lessons learned

Areas for improvement

Corrective actions to be taken (also enter corrective actions into OPIS)

Exercise Objectives Met? (Yes/No) Certifying

individual and date:

Colonial Pipeline Company

PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

The Emergency Response Plan for each Response Zone will be reviewed and updated as necessary, at a minimum of once every **five years**, to reflect any changes in operations that would affect Colonial's response organization. These revisions will be submitted to PHMSA for approval within thirty (30) days from the date of the revision.

Additionally, the plan will be revised if any of the following should occur:

- Extension of an existing pipeline, construction of a new pipeline, or purchase of pipeline in an area not covered under the existing Response Plan
- Relocation or replacement of a pipeline segment that would affect the information contained in the Response Plan
- Changes in the type of product transported, if it would affect the type of response efforts described in the existing plan
- Changes in either Colonial or contract resources that would adversely affect response efforts
- Changes in emergency response procedures or organization
- Changes in either the National Contingency Plans or applicable Area Contingency Plans
- Changes to the job title or position of the Director of Operations, which is by definition a "Qualified Individual"
- Ownership change
- Change in worst case discharge scenarios

These response plans have been developed for use in the three Colonial Pipeline Company Response Zones and much of the information included is facility or Response Zone specific. The distribution and control procedures of the Plan are described in detail in *Section 8.02, Document Control Procedures*. It is the responsibility of the Director of Operations to ensure that all emergency contact telephone numbers and ICS organization charts are accurate. In addition, the District Project Leader, or his designee, will ensure that the oil spill response organization's (OSROs) data are accurate.

It is expected that the plan will be reviewed and updated annually due to personnel changes and continuous improvements in communication processes. At a minimum, the appropriate personnel will review the Plan for accuracy and completeness. Upon such review, the appropriate personnel will certify that he/she reviewed the plan and submitted the necessary changes and/or noted no changes need to be made. The form to be used for the review certification follows the updating responsibility chart below.

Changes in a Director of Operations requires immediate notification to the Director Health, Safety, Security, and Environmental. PHMSA will be notified within 30 days of changes in a Director of Operations since they are identified in the Plan as a Qualified Individual.

The District Environmental Manager, Operations Manager, District Project Leader, or Director of Operations, must immediately notify the Director Health, Safety, Security, and Environmental if their contact information changes.

Colonial Pipeline Company

PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

In addition, the District Administrative Assistants will update the following Sections of the Plan and notify response personnel within 30 days of a change in an Operations Manager, a District Project Leader, a District Environmental Manager, or a Director of Operations, (including contact information).

Section 2.03 Emergency Notification Flowchart

Section 4.02 Incident Command System and Structure (if applicable)

Oil Spill Notification and Air Pollution Control Device Malfunctions are to be updated each year by the Environmental Coordinator. This documentation is located in Corporate Procedure 30.

The review and update of the OPA 90 portions of this ERP is the responsibility of the Environmental personnel assigned to the task of emergency preparedness coordination, which may vary depending on Response Zones. Post-drill and post-incident evaluations will be conducted to identify the need to incorporate changes into Colonial's response procedures.

This Plan is the guidebook for all of Colonial's spill response actions. It will be amended as needed based on the learnings gained from exercises and/or actual responses to spills. Consequently, reviewing and critiquing Colonial's field response activities can also improve the Plan.

Plan Accountabilities

Individual Responders

- Understand your assigned emergency response roles and responsibilities and obtain necessary training to be able to proficiently perform these duties
- Ensure access to an updated Emergency Response Plan
- Actively participate in annual HAZWOPER refresher training
- Participate in tabletop drills and other exercises, as required
- Update the People Soft database if there are changes in your contact information
- Obtain response equipment required for pre-assigned position(s), maintain it in good working order (e.g. LEL meter, flashlight, etc.), and have it readily available for use

Director of Operations / Qualified Individuals

- Keep Response Zone incident command system organizational structure up to date
- Ensure Response Zone spill management and response teams are adequately trained to respond to an emergency
- Ensures the Group 8 Notification List is maintained and approves any additions or deletions to Group 8 Notification List
- Conduct periodic notification tests, tabletops exercises, and/or equipment deployment drills to ensure district response team is prepared to promptly and effectively respond to emergencies (coordinate activities with the Environmental Coordinator for documentation and compliance tracking)
- Ensure the district has an adequate cadre of approved spill response contractors under contract and vendors to supply the needed personnel and equipment resources to effectively manage a worst case discharge for the district (coordinate OSRO verification and approval with the District Project Leader)
- Develop and maintain a positive working relationship with key response contractors

Colonial Pipeline Company

PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

- Ensure all employees within the district with emergency response duties attend annual HAZWOPER refresher training
- Ensure Response Zone Emergency Response Plan is kept up to date
- Ensure post exercise and actual response critiques are promptly conducted and that all action items assigned to district personnel are completed

District Project Leaders

- Ensure all Colonial spill response equipment, including communications equipment, is maintained in good working condition and that appropriate supplies are adequately stocked
- Ensure direct reports with assigned emergency response duties attend annual HAZWOPER refresher training and that they have received adequate training to perform their assigned duties
- Ensure all direct reports are trained in, and capable of, executing the emergency notification procedures
- Develop and maintain a positive working relationship with response contractors
- Ensure latest versions of maps (alignment sheets, USGS quadrangles) are readily available
- Maintain PHMSA required documentation for non-USCG approved oil spill response contractors (OSROs) included in our Emergency Response Plan Section 5.05 (coordinate with the Environmental Coordinator)

Operations Managers

- Ensure direct reports with assigned emergency response duties attend annual HAZWOPER refresher training and are adequately trained to respond to an emergency
- Make certain that all direct reports are trained and capable of executing the emergency notification procedures
- Participate in periodic notification tests, tabletops exercises, and/or equipment deployment drills to ensure local responders are prepared to promptly and effectively respond to emergencies (coordinate with the Director of Operations and the Environmental Coordinator)
- Make sure that local information contained in the Emergency Response Plan is kept up to date
- Develop and maintain a positive working relationships with oil spill response contractors and local emergency response agencies

District Environmental Managers

- Provide guidance on state spill notification requirements (coordinate with the Environmental Coordinator)
- Ensure direct reports with assigned emergency response duties attend annual HAZWOPER refresher training and that they have received adequate training to competently perform their assigned duties
- Ensure all direct reports are trained in, and are capable of, executing the emergency notification procedures

Director of Health, Safety, Security, and Environmental

- Keep track of any relevant changes to spill response regulations, communicate changes to affected personnel, and ensure appropriate amendments are made to Emergency Response Plan to maintain regulatory compliance
- Ensures the Group 4 Notification List is maintained and approves any additions or deletions

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PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

to Group 4 Notification List

- Maintain positive working relationship with PHMSA representatives who administer regulatory compliance program for pipelines
- Ensure PHMSA required corporate notification and spill drills are conducted
- Ensure appropriate auditing is conducted to identify and correct compliance gaps
- Ensure direct reports with emergency response duties attend annual HAZWOPER refresher training as required and that they have received adequate training to competently perform their assigned duties

Environmental Coordinator

- Ensure proper maintenance of the electronic version of the Emergency Response Plans
- Coordinates with the Director Health, Safety, Security and Environmental to ensure the Group 4 Notification List is revised and updated as necessary
- Coordinate with each Response Zone to track compliance activities and associated documentation (Coordinate with Director of Operations and Operations Managers)
- Coordinate with the Director Health, Safety, Security, and Environmental to ensure that compliance requirements are met and that the response plans are revised and updated as necessary

All Supervisors

- Ensure direct reports with emergency response duties receive training needed for them to competently perform their assigned roles and that appropriate personnel attend annual HAZWOPER refresher training
- Ensure direct reports who have emergency response responsibilities have access to an updated Emergency Response Plan
- Ensure prompt consideration of emergency response and notification duties for new reports and that necessary training is provided

Administrative Staff Assigned ERP Update Responsibilities

- Coordinate as necessary with the Environmental Coordinator to ensure updates are communicated and implemented properly.

Spill Management Team Members

- Ensure access to an updated Emergency Response Plan
- Actively participate in annual HAZWOPER refresher training, Spill Management Team training, and attend other training as needed to maintain competency in assigned duties

Colonial Pipeline Company

PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

Updating Table

Please refer to this table to identify your areas of responsibility for updates to this document.

ERP Update Responsibilities

Owner	Section	District/Generic	Contents
Director of Operations	1.05	District	Certification
Director of Operations	1.06.01,2,3	District	Worst case discharge
Director of Operations	4.02	District	ICS structure
District Administrative Coordinator	1.02	District	Information summary
District Administrative Coordinator	1.03	District	Response zone maps & line segments
District Administrative Coordinator	5.03	District	District employee phone list
District Administrative Coordinator	5.04	District	Other federal, state, & local agencies
District Corrosion Project Manager	9.04	District	Rectifier locations
District Environmental Manager	5.07	District	Environmental contractors
District Environmental Manager	5.08	District	Aerial recon contractors
District Environmental Manager	9.02	District	Release response strategies
District Environmental Manager	9.06	District	Water intake locations
District Logistic Section Chiefs	5.13	District	Local Emergency Care Facilities
District Logistics Section Chiefs	5.09	District	Other response equipment suppliers
District Logistics Section Chiefs	5.10	District	Vendor support supplies
District Logistics Section Chiefs	5.11	District	Airports & FBOs
District Project Leader	1.06.04	District	Minimum response resources
District Project Leader	4.03.04	District	Responsibility checklist – Operations
District Project Leader	5.05	District	OSROs
District Project Leader	5.06	District	Pipeline repair contractors
Emergency Response Program Spec	9.05	District	Environmentally sensitive areas
Environmental Coordinator	1.00	Generic	Table of Contents
Environmental Coordinator	1.01	Generic	Purpose & consistency with other cont plans
Environmental Coordinator	1.04	Generic	Significant & substantial harm determination
Environmental Coordinator	1.06	Generic	Worst Case Discharge - Introduction
Environmental Coordinator	1.06.01	Generic	Worst Case Discharge - Tankage
Environmental Coordinator	2.01	Generic	Notification and Mobilization Procedures
Environmental Coordinator	2.02	Generic	Communication Methods and Equipment
Environmental Coordinator	2.04	Generic	Crisis Management Communication
Environmental Coordinator	3.01	Generic	Leak detection & emergency procedures
Environmental Coordinator	4.01	Generic	Initial roles & responsibilities
Environmental Coordinator	4.03.01	Generic	Responsibility checklist – Common ICS Responsibilities
Environmental Coordinator	4.03.02	Generic	Responsibility checklist - Command
Environmental Coordinator	4.03.03	Generic	Responsibility checklist - Finance
Environmental Coordinator	4.03.04	Generic	Responsibility checklist - Operations
Environmental Coordinator	4.03.05	Generic	Responsibility checklist - Planning
Environmental Coordinator	4.03.06	Generic	Responsibility checklist - Logistics
Environmental Coordinator	4.04.00	Generic	Post Emergency Response Reviews

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PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

Owner	Section	District/Generic	Contents
Environmental Coordinator	4.04.01	Generic	Post Emergency Response Reviews – Significant Spill
Environmental Coordinator	5.01	Generic	Spill Management Team contact phone list
Environmental Coordinator	5.02	Generic	Hazwoper trained personnel
Environmental Coordinator	5.14	Generic	USCG Captain of the Ports contacts
Environmental Coordinator	6.01	Generic	Training courses & requirements
Environmental Coordinator	7.01	Generic	Exercise program
Environmental Coordinator	7.02	Generic	Exercise documentation
Environmental Coordinator	7.02.01	Generic	Triennial cycle documentation spreadsheet
Environmental Coordinator	7.02.02	Generic	Internal notification exercise documentation - Group 4
Environmental Coordinator	7.02.03	Generic	Post tabletop exercise evaluation
Environmental Coordinator	7.02.04	Generic	Equipment deployment exercise evaluation
Environmental Coordinator	7.02.05	Generic	Equipment deployment exercise - Participants
Environmental Coordinator	7.02.06	Generic	Equipment deployment exercise - Equipment
Environmental Coordinator	7.02.07	Generic	Emergency operating procedures exercise evaluation
Environmental Coordinator	8.01	Generic	Response plan review, update procedures accountability
Environmental Coordinator	8.02	Generic	On-line usage & document control procedures
Environmental Coordinator	9.02	Generic	Response strategies
Operation Managers	2.03	District	Emergency notification flow charts
Operation Managers	5.12	District	Local terminal mgrs & adjacent pipelines
Operation Managers	9.03	District	Block valve locations
Safety & Security Leader	9.01	Generic	Product characteristics & MSDS Sheets

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PLAN REVIEW, UPDATE PROCEDURES, AND ACCOUNTABILITY

Emergency Response Plan Annual Review Acknowledgement Form

This form or equivalent must be completed and returned to the District Administrative Coordinator along with any applicable updates. This form will be maintained by the District Administrative Coordinator until the next update. The District Administrative Coordinator will have the responsibility of recording the date of receipt in the appropriate at the bottom of this form.

The Environmental Coordinator shall complete this form or equivalent for the generic section of the Emergency Response Plan.

I hereby acknowledge that I have reviewed the sections of Colonial Pipeline's Emergency Response Plan for which I am held accountable for updating as identified in ERP Section 8.01.

Effective ERP Update Date (month/year): _____

Section Number	Changes Submitted	No Changes Necessary

(Please list each section for which you are held accountable for updating in the "Section Number Column." For each section; you are held accountable, place a check mark in either the "Changes Submitted" column or the "No Changes Necessary" column)

Name: _____

Title: _____

Date: _____

<i>For District Office Use Only</i>	
<i>(to be completed by the District AA)</i>	
<i>Date Received</i>	

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Document Control Procedures

The Emergency Response Plans contained within the ERP SharePoint site are the official manuals for each Response Zone and supersede any printed copy.

The Environmental Team maintains the Emergency Response Plans for all Response Zones. Any questions or concerns regarding any document contained within this SharePoint site should be directed to the Environmental Team.

All original documents are archived in the ERP SharePoint Site. Editing these documents will require them to be checked out. Please note that these documents are only accessible by the Director of Health, Safety, Security and Environmental, the Environmental Coordinator, or his/her designee. The documents displayed in this SharePoint site are Adobe Acrobat files created from these original documents.

In the event that all or part of an ERP has been revised the following events shall occur:

- Upon completing a revision to an original ERP document an Adobe file will be created to replace the one posted on the ERP SharePoint site. Note that revision data appears in the footer of all documents declaring the month and year of the latest revision. The Environmental Coordinator is the web-master for this site and will coordinate replacing documents.
- The original ERP document will be checked back into the Environmental SharePoint site immediately upon completion of the above step.

If significant revisions are made to the ERP (as described in *Section 8.01, Response Plan Review, Update Procedures, and Accountability*) the following events shall occur in addition to the above-mentioned actions:

- If warranted, an updated copy of the complete ERP shall be submitted to the Pipeline and Hazardous Materials Safety Administration (PHMSA) for approval within 30 days of the revisions.
- After the SharePoint site has been properly updated an e-mail will be sent to all employees stating the following:
 - Section No. and document name affected.
 - A summary of the revisions made
- A revision history will be maintained and made available on the SharePoint Site. This document will begin with the date the ERP was introduced on-line and will continue forward.

Hardcopy updates will no longer be disseminated from the Environmental Team. Therefore it is the responsibility of the individual employee to maintain and update any hardcopies of the ERP in his/her possession. Any hardcopies not properly maintained should be discarded to avoid inadvertent use of misleading or outdated information during an emergency response.

To ensure regulatory compliance as stipulated under 49 CFR 194.111 each Operations Manager must make certain that the ERP is available at each facility. This can be accomplished by performing one or more of the following:

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Document Control Procedures

- Downloading to at least one station computer your Response Zone's ERP. This will ensure that the information is accessible even if the network is not.
- Printing a copy of your Response Zone's ERP and placing it in an easily accessible location.
- Store an electronic copy of the ERP on a media that can be read from the facilities computer (i.e. CD-ROM, ZIP Disk, External hard drive, etc.) This media must be stored in a conspicuous location and labeled as:

Emergency Response Plan
(District Name) Response Zone
(date of last revision)

Select employees must have a copy of the ERP in their custody. Others are strongly encouraged to maintain a copy (hardcopy or electronic) of the ERP in the event of a drill or actual incident. Those required to maintain a copy of the ERP are:

- Director of Operations
- Operations Managers (e.g. Tank Farms, Stations and Facilities that are under your supervision)
- Director of Health, Safety, Security and Environmental

Those recommended to maintain a copy of the ERP are:

- Operations Managers & Associate OM's
- Project Leaders
- Project Managers & Associate PM's
- ROW Team
- Safety Team
- Corrosion Team
- Environmental Team
- Sr. Controller (Atlanta Office)

When significant changes are made to the ERP those listed above will be asked to reply to an e-mail notification acknowledging that the changes to the documents have been received and confirming that copies within their custody have been updated.

OIL AND GASOLINE SPILL BEHAVIOR ON LAND, WATER

The ability to predict how a product spill behaves on land or water can increase efficiency of control, containment and recovery action. An understanding of the characteristics of petroleum products is essential for these purposes. Three major types of refined petroleum products are shipped in the Colonial Pipeline system. These include gasoline, kerosene and No. 2 fuel oil.

The possibility of fire is one of the first concerns in a spill situation. The flash point of a product is the minimum temperature at which the product will ignite when it comes in contact with an open flame or spark.

FLASH POINT OF REFINED PRODUCTS

<u>Product</u>	<u>Minimum Flash Point Range, F</u>
Gasoline	Ambient Temperature
Kerosene	113-123
No. 2 Fuel Oil	125-140
JP-8	100-200

Kerosene and No. 2 fuel oil are comparatively safer to handle than gasoline. **HOWEVER, STRINGENT SAFETY MEASURES SHOULD BE OBSERVED WITH ANY SPILL.**

Contamination of water is also a prime consideration. Refined products contain fractions that are soluble in water. These fractions are offensive to taste and smell and make water undesirable for domestic use. Long before oil contaminated water reaches toxic levels, people will usually refuse to drink it due to its bad taste and odor. However, livestock may continue to drink it.

Immediate Measures

Contain the escaping product and accomplish the line repairs as quickly as possible, with safety foremost in mind. This concern for safety is not only for those at work in the area but also for anyone who may be in the area for other reasons. Where there is danger of third party ignition sources, the following should be enforced:

Refined product vapors are heavier than air. Vapor testers are required on site and should be used until the area is safe and free of vapors. Never approach a hazardous area from a lower level or from the downwind side. If the wind changes, cease all work and shut down equipment until the area is free of vapors.

Keep equipment with internal combustion engines on the windward side of leak site or containment area and at a safe distance.

Fire extinguishers and first aid equipment should be readily available.

Take necessary steps to warn or stop all traffic (foot, motor or rail) in the hazardous area. Residents in the hazardous area should be warned or evacuated. If necessary, contact local or state law enforcement officials and fire departments to seal off the area and ensure that pilot lights and any other hazardous appliances or equipment are turned off and rendered non-operable.

Product Movement on Land

When a product spill occurs on land, immediate action is required to prevent the petroleum product from harming ground or surface water, human life, wildlife and highly sensitive environmental areas. Product behaves similarly to water. The relative velocities across the soil surface depend on the slope of the terrain, the dimensions of a channel, the soil permeability, the depth of flow, and viscosity and weight of the fluid. Water generally moves with a velocity of two feet per second in well-defined channels with moderate slopes. Petroleum products behave in the same way.

Vertical Movement through Soil

On undisturbed soil, product will move downward under the force of gravity, while spreading laterally. The rate of movement depends on the viscosity of the product and the permeability of the soil. Downward movement

eventually will be interrupted by one of three events: Flow of the product is stopped; the product reaches an impervious soil stratum; or the product reaches the local water table. As the product moves downward, small amounts will attach to soil particles and remain behind the main body.

Horizontal Movement of Product on Land

If a petroleum product is not immediately contained, it will tend to flow into existing drainage ditches, storm sewers and surface water.

Advance knowledge of existing locations of storm sewers, sanitary sewers, water intakes, and their destinations should be obtained. These structures should be immediately protected when there is a product spill.

Product Movement on Water

Product on water moves as a result of wind or current velocity; a useful approximation is that a product slick moves with the wind at about 3 to 4% of the wind velocity.

Properties of Refined Petroleum Products that Affect Recovery

Of the different ways product may interact with the environment, the rate of spreading is one of the most important. One factor that controls the product spread rate is the viscosity of the product (the degree to which a fluid resists flow under an applied force). The less viscous products will spread faster than the more viscous oils. Viscosity increases as temperatures drop. When the temperature is very low, fuel oil spilled on the ground will not penetrate the soil as quickly or spread as rapidly over the surface as it would in the summer. Winter temperatures do not drop low enough to significantly affect the penetration or spread of gasoline or kerosene.

Volatility is another important characteristic because it governs the rate of evaporation of spilled product. Distillation ranges for the various refined products are as follows:

DISTILLATION RANGES OF REFINED PRODUCTS

<u>Product</u>	<u>Distillation Range, F</u>
Gasoline	90-430
JP-5	220-572
Kerosene	220-572
No. 2 Fuel Oil	350-670

Gasoline has a lower distillation range and will evaporate more readily than kerosene or No. 2 fuel oil. The amount of evaporation depends upon exposed surface area, wind conditions, humidity, temperature, wave action on water, and soil permeability on land.

Evaporation can result in the loss of a significant portion of the spilled product.

All refined petroleum products shipped by Colonial's system are less dense than water and will float on the surface.

DENSITY OF REFINED PRODUCTS

<u>Product</u>	<u>API Gravity</u>	<u>Specific Gravity</u>	<u>Density lbs/gal.</u>
Gasoline	62.0	0.73	6.08
Kerosene	42.5	0.813	6.77
Fuel Oil	33.0	0.860	7.16
Water	10.0	1.0	8.33

A small amount of product will dissolve or emulsify into water and is non-recoverable. Studies have shown that water under an oil slick may contain five to ten parts per million (ppm) of dissolved product, but as soon as the

spill breaks up the level drops to about one ppm or less. Less than one percent of spilled product is lost by dissolving or emulsifying into the water.

Weathering and Degradation

Weathering (evaporation) and biodegradation are two natural processes that affect the behavior of a product spill on a long term basis. When exposed to air or water, petroleum products begin to evaporate, and/or dissolve, with the lighter distillates evaporating first. The heavier components are the least biodegradable products and form the most stable water/oil emulsions.

Weathering decreases when a product is absorbed or covered by snow, or when the surface area exposed to wind is otherwise reduced. Burning or sorbent effectiveness also decrease with weathering.

Biodegradation results in the breakdown of oil by microorganisms. This process is active in terrestrial and aquatic environments. It usually progresses more rapidly in terrestrial than in aquatic habitats. As with weathering, the lighter products biodegrade quickly; the heavier components take more time. The rate of biodegradation decreases with lowering temperatures and virtually stops in freezing temperatures. However, it has been shown that careful application of fertilizer and the use of tilling can speed up biodegradation.

SAFETY DATA SHEETS

Generic Safety Data Sheets (SDS) for the product shipped through Colonial's system including transmix are contained in the following pages. Safety Data Sheets for products that may be used or stored in a particular facility are contained in the SDS Binder at the facility.

SAFETY DATA SHEET

Gasoline (all grades)

SAFETY DATA SHEET

Gasoline (all grades)



Section 1. Identification

Product identifier used on the label : Gasoline (all grades)

Other means of identification : Regular Unleaded Gasoline, Midgrade Unleaded Gasoline, Premium Unleaded Gasoline, Pre-certified Gasoline.

Product type : Liquid.

Recommended use and restrictions

Identified uses

Fuel.

Supplier/Manufacturer : Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: <http://www.colpipe.com/>

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 1
SKIN CORROSION/IRRITATION - Category 2
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION [Fertility] - Category 2
TOXIC TO REPRODUCTION [Unborn child] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [central nervous system (CNS)] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC TOXICITY (ACUTE) - Category 3
AQUATIC TOXICITY (CHRONIC) - Category 2

Ingredients of unknown toxicity : Not applicable.

Ingredients of unknown ecotoxicity : Not applicable.

GHS label elements



Section 2. Hazards identification

Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	<p>Extremely flammable liquid and vapor.</p> <p>Causes skin irritation.</p> <p>May cause genetic defects.</p> <p>May cause cancer.</p> <p>Suspected of damaging fertility or the unborn child.</p> <p>May be fatal if swallowed and enters airways.</p> <p>May cause damage to organs if inhaled. (central nervous system (CNS))</p> <p>May cause damage to organs through prolonged or repeated exposure.</p> <p>Toxic to aquatic life with long lasting effects.</p>
Precautionary statements		
General	:	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	:	Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Avoid release to the environment. Do not breathe vapor.
Response	:	IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Storage	:	Keep cool.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	:	Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Other means of identification	:	Regular Unleaded Gasoline, Midgrade Unleaded Gasoline, Premium Unleaded Gasoline, Pre-certified Gasoline.

CAS number/other identifiers

CAS number	:	Not applicable.
EC number	:	Mixture.
Product code	:	Not available.

Ingredient name	%	CAS number
Gasoline, natural	100	8006-61-9
Contains:		
Xylene	10 - 30	1330-20-7
Toluene	10 - 30	108-88-3
n-Hexane	1 - 5	110-54-3
Benzene	1 - 5	71-43-2
1,2,4-Trimethylbenzene	1 - 5	95-63-6
Ethylbenzene	1 - 5	100-41-4
Naphthalene	1 - 5	91-20-3



Section 3. Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause damage to organs following a single exposure if inhaled.
- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations



Section 4. First aid measures

- Ingestion** : Adverse symptoms may include the following:
 nausea or vomiting
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Indication of immediate medical attention and special treatment needed if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.

- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Extremely flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.



Section 6. Accidental release measures

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name

Exposure limits

Gasoline, natural

OSHA PEL 1989 (United States, 3/1989).

STEL: 1500 mg/m³ 15 minute(s).

STEL: 500 ppm 15 minute(s).

TWA: 900 mg/m³ 8 hour(s).

TWA: 300 ppm 8 hour(s).

Xylene

ACGIH TLV (United States, 1/2011).

STEL: 651 mg/m³ 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 434 mg/m³ 8 hour(s).

TWA: 100 ppm 8 hour(s).

Toluene

OSHA PEL (United States, 6/2010).

TWA: 100 ppm 8 hour(s).

TWA: 435 mg/m³ 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 560 mg/m³ 15 minute(s).

STEL: 150 ppm 15 minute(s).

TWA: 375 mg/m³ 10 hour(s).

TWA: 100 ppm 10 hour(s).

n-Hexane

OSHA PEL Z2 (United States, 11/2006).

AMP: 500 ppm 10 minute(s).

CEIL: 300 ppm

TWA: 200 ppm 8 hour(s).

ACGIH TLV (United States, 1/2011).

TWA: 20 ppm 8 hour(s).

ACGIH TLV (United States, 2/2010). Absorbed through skin.

TWA: 50 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

TWA: 180 mg/m³ 10 hour(s).

TWA: 50 ppm 10 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 1800 mg/m³ 8 hour(s).

TWA: 500 ppm 8 hour(s).

Benzene

ACGIH TLV (United States, 2/2010). Absorbed through skin.

STEL: 8 mg/m³ 15 minute(s).

STEL: 2.5 ppm 15 minute(s).

TWA: 1.6 mg/m³ 8 hour(s).

TWA: 0.5 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 1 ppm 15 minute(s).

TWA: 0.1 ppm 10 hour(s).

OSHA PEL (United States, 6/2010).

STEL: 5 ppm 15 minute(s).

TWA: 1 ppm 8 hour(s).

OSHA PEL Z2 (United States, 11/2006).

AMP: 50 ppm 10 minute(s).

CEIL: 25 ppm

TWA: 10 ppm 8 hour(s).

1,2,4-Trimethylbenzene

ACGIH TLV (United States, 1/2011).

TWA: 123 mg/m³ 8 hour(s).

TWA: 25 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

TWA: 125 mg/m³ 10 hour(s).

TWA: 25 ppm 10 hour(s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 25 ppm 8 hour(s).

TWA: 125 mg/m³ 8 hour(s).

Ethylbenzene

ACGIH TLV (United States, 1/2011).

TWA: 20 ppm 8 hour(s).

NIOSH REL (United States, 6/2009).

STEL: 545 mg/m³ 15 minute(s).

STEL: 125 ppm 15 minute(s).

TWA: 435 mg/m³ 10 hour(s).

TWA: 100 ppm 10 hour(s).

OSHA PEL (United States, 6/2010).

TWA: 435 mg/m³ 8 hour(s).

TWA: 100 ppm 8 hour(s).

Naphthalene

ACGIH TLV (United States, 1/2011).



Section 8. Exposure controls/personal protection

STEL: 79 mg/m³ 15 minute(s).
 STEL: 15 ppm 15 minute(s).
 TWA: 52 mg/m³ 8 hour(s).
 TWA: 10 ppm 8 hour(s).
NIOSH REL (United States, 6/2009).
 STEL: 75 mg/m³ 15 minute(s).
 STEL: 15 ppm 15 minute(s).
 TWA: 50 mg/m³ 10 hour(s).
 TWA: 10 ppm 10 hour(s).
OSHA PEL (United States, 6/2010).
 TWA: 50 mg/m³ 8 hour(s).
 TWA: 10 ppm 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.



Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Colorless.
Odor	: Gasoline
Odor threshold	: 0.06 to 0.08 ppm
pH	: Not applicable.
Melting point/freezing point	: Not available.
Boiling point/boiling range	: 26.667 to 225°C (80 to 437°F)
Flash point	: Closed cup: -42.778°C (-45°F)
Evaporation rate	: <1 (Ethyl Ether = 1)
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 1.4% Upper: 7.6%
Vapor pressure	: 26.7 to 93.3 kPa (200 to 700 mm Hg) [20°C]
Vapor density	: 3 to 4 [Air = 1]
Relative density	: 0.7 to 0.77
Solubility	: Very slightly soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 257.22°C (495°F)
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Kinematic (37.8°C (100°F)): 0.00216 cm ² /s (0.216 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Xylene	LC50 Inhalation Gas. LD50 Oral	Rat Rat	5000 ppm 4300 mg/kg	4 hours -
Toluene	LC50 Inhalation Vapor LD50 Oral	Rat Rat	49 g/m3 636 mg/kg	4 hours -
n-Hexane	LC50 Inhalation Gas. LD50 Oral	Rat Rat	48000 ppm 15840 mg/kg	4 hours -
Benzene	LD50 Oral	Rat	930 mg/kg	-
1,2,4-Trimethylbenzene	LC50 Inhalation Vapor LD50 Oral	Rat Rat	18000 mg/m3 5 g/kg	4 hours -
Ethylbenzene	LD50 Dermal LD50 Oral	Rabbit Rat	>5000 mg/kg 3500 mg/kg	- -
Naphthalene	LD50 Dermal LD50 Oral	Rabbit Rat	>20 g/kg 490 mg/kg	- -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Gasoline, natural	Eyes - Mild irritant	Human	-	8 hours 140 ppm	-
	Eyes - Moderate irritant	Man	-	1 hours 500 ppm	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Toluene	Skin - Moderate irritant	Rabbit	-	100%	-
	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Mild irritant	Rabbit	-	870 µg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 µL	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	500 mg	-
n-Hexane	Eyes - Mild irritant	Rabbit	-	10 mg	-
Benzene	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

Sensitization

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification



Section 11. Toxicological information

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Gasoline, natural	-	2B	-	+	-	-
Xylene	A4	3	-	-	-	-
Toluene	A4	3	-	-	-	-
Benzene	A1	1	-	+	Proven.	+
Ethylbenzene	A3	2B	-	None.	-	-
Naphthalene	A4	2B	-	None.	Possible	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 2 Category 3	Inhalation Not determined	central nervous system (CNS) Respiratory tract irritation
n-Hexane 1,2,4-Trimethylbenzene	Category 3 Category 3	Inhalation Not determined Not determined	Narcotic effects Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
n-Hexane Benzene	Category 2 Category 1	Not determined Not determined	Not determined Not determined

Aspiration hazard

Name	Result
Gasoline, natural Toluene n-Hexane Benzene	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : May cause damage to organs following a single exposure if inhaled.
- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:
 pain or irritation
 watering
 redness

Inhalation

Skin contact
 : Adverse symptoms may include the following:
 irritation



Ingestion : Adverse symptoms may include the following:
 nausea or vomiting
 reduced fetal weight
 increase in fetal deaths
 skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : May cause damage to organs through prolonged or repeated exposure.
Carcinogenicity : May cause cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity : May cause genetic defects.
Teratogenicity : Suspected of damaging the unborn child.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	24747.5 mg/kg
Dermal	7407.4 mg/kg
Inhalation (gases)	30303 ppm
Inhalation (vapors)	204.1 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Gasoline, natural	Acute EC50 17.5 mg/L Marine water	Crustaceans - Artemia sp. - Nauplii - es7:k56s:7pt	48 hours
	Acute EC50 1.5 mg/L Marine water	Daphnia - Daphnia magna - Neonate - <24 hours	48 hours
Xylene	Acute IC50 10 mg/L	Algae	72 hours
	Acute LC50 8500 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
Toluene	Acute LC50 3300 to 4093 ug/L Fresh water	Fish - Oncorhynchus mykiss - 0.6 g	96 hours
	Acute EC50 12500 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 ug/L Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult - 9 mm - 0.017 g	48 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
n-Hexane	Acute LC50 5500 ug/L Fresh water	Fish - Oncorhynchus kisutch - Fry - 1 g	96 hours
	Chronic NOEC mg/L Fresh water	Daphnia - Daphnia magna	21 days
	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours
Benzene	Acute EC50 29000 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1600000 ug/L Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 9230 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 21000 ug/L Marine water	Crustaceans - Artemia salina - Nauplii	48 hours



Section 12. Ecological information

1,2,4-Trimethylbenzene	Acute LC50 5.28 ug/L Fresh water Chronic NOEC 1.5 to 5.4 ug/L Marine water	Fish - Oncorhynchus gorbuscha - Fry Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 18.1 cm - 3.39 g	96 hours 4 weeks
Ethyl benzene	Acute LC50 4910 ug/L Marine water	Crustaceans - Elasmopus pectinicus - Adult	48 hours
Naphthalene	Acute LC50 7720 to 8280 ug/L Fresh water	Fish - Pimephales promelas - 34 days	96 hours
	Acute EC50 4600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
Naphthalene	Acute EC50 6530 ug/L Fresh water	Crustaceans - Artemia sp. - Nauplii - es7:k56s:7pt	48 hours
	Acute EC50 2970 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 4200 ug/L Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 1600 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
Naphthalene	Acute LC50 2350 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 ug/L Fresh water	Fish - Melanotaenia fluviatilis - Larvae - 1 days	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene	3.16	-	low
Toluene	2.69	8.317637711	low
n-Hexane	3.9	-	low
Benzene	2.13	4.265795188	low
1,2,4-Trimethylbenzene	3.8	120.226443461	low
Ethylbenzene	3.1	-	low
Naphthalene	3.3	85.11380382	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.



Gasoline (all grades)

Section 14. Transport information

	DOT	IMDG	IATA
UN number	UN1203	UN1203	UN1203
UN proper shipping name	GASOLINE, Marine pollutant (Gasoline, natural)	GASOLINE, Marine pollutant (Gasoline, natural)	GASOLINE, Marine pollutant (Gasoline, natural)
Transport hazard class(es)	3 II 	3 II 	3 II 
Packing group			
Environmental hazards	Yes.	Yes.	Yes.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	<u>Limited quantity</u> Yes. <u>Packaging instruction</u> Passenger aircraft Quantity limitation: 5 L Cargo aircraft Quantity limitation: 60 L <u>Special provisions</u> 139, B33, B1, T8	-	<u>Passenger and Cargo Aircraft</u> Quantity limitation: 5 L <u>Cargo Aircraft Only</u> Quantity limitation: 60 L <u>Limited Quantities - Passenger Aircraft</u> Quantity limitation: 1 L

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations : TSCA 8(a) PAIR: Naphthalene
 TSCA 8(a) IUR Exempt/Partial exemption: Not determined
 United States inventory (TSCA 8b): All components are listed or exempted.
 SARA 302/304/311/312 extremely hazardous substances: No products were found.
 SARA 302/304 emergency planning and notification: No products were found.
 SARA 302/304/311/312 hazardous chemicals: Gasoline, natural; Xylene; Toluene; n-Hexane; Naphthalene; 1,2,4-Trimethylbenzene; Ethylbenzene; Benzene
 SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Gasoline, natural: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Xylene: Fire hazard, Immediate (acute) health hazard, Delayed

Gasoline (all grades)

(chronic) health hazard; Toluene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; n-Hexane: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Naphthalene: Fire hazard, Immediate

**Section 15. Regulatory information**

(acute) health hazard, Delayed (chronic) health hazard; 1,2,4-Trimethylbenzene: Fire hazard, Delayed (chronic) health hazard; Ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Benzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: Toluene; Benzene; Ethylbenzene; Naphthalene

Clean Water Act (CWA) 311: Xylene; Toluene; Benzene; Ethylbenzene; Naphthalene

- Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)** : Listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Listed

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5
Supplier notification	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

- Massachusetts** : The following components are listed: Gasoline, natural; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene
- New York** : The following components are listed: Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; Naphthalene
- New Jersey** : The following components are listed: Gasoline, natural; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene
- Pennsylvania** : The following components are listed: Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene

California Prop 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Gasoline (all grades)

Section 15. Regulatory information

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
Ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.
Naphthalene	Yes.	No.	Yes.	No.

Section 16. Other information**History**

Date of issue mm/dd/yyyy : 07/15/2012
Version : 1
Prepared by : KMK Regulatory Services Inc.

**Key to abbreviations**

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Conforms to HazCom 2012/United States

SAFETY DATA SHEET

Diesel Fuel (All Grades)

SAFETY DATA SHEET



Diesel fuel (all grades)

Section 1. Identification

- Product identifier used on the label** : Diesel fuel (all grades)
- Other means of identification** : Ultra Low Sulfur Diesel (ULSD), Low Sulfur Diesel, Motor Vehicle Diesel Fuel, Diesel Fuel #2, Dyed Diesel Fuel, Off-road Diesel, Locomotive and Marine Diesel Fuel, Tax-exempt Diesel Fuel, Fuel Oil
- Product type** : Liquid.

Recommended use and restrictions

Identified uses

Fuel.

- Supplier/Manufacturer** : Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: <http://www.colpipe.com/>
- Emergency telephone number (with hours of operation)** : CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards identification

- Classification of the substance or mixture** : FLAMMABLE LIQUIDS - Category 3
CARCINOGENICITY - Category 2

Ingredients of unknown toxicity : Not applicable.

Ingredients of unknown ecotoxicity : Not applicable.

GHS label elements

Hazard pictograms



Signal word : Warning

Hazard statements : Flammable liquid and vapor.
Suspected of causing cancer.

Precautionary statements

General : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.



Section 2. Hazards identification

- Prevention** : Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.
- Response** : IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- Storage** : Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

Other hazards which do not result in classification : Not available.

Section 3. Composition/information on ingredients

- Substance/mixture** : Substance
- Other means of identification** : Ultra Low Sulfur Diesel (ULSD), Low Sulfur Diesel, Motor Vehicle Diesel Fuel, Diesel Fuel #2, Dyed Diesel Fuel, Off-road Diesel, Locomotive and Marine Diesel Fuel, Tax-exempt Diesel Fuel, Fuel Oil

CAS number/other identifiers

- CAS number** : 68476-30-2
- EC number** : Not available.
- Product code** : Not available.

Ingredient name	%	CAS number
Fuel oil no. 2	60 - 100	68476-30-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.



Section 4. First aid measures

- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : No known significant effects or critical hazards.

Indication of immediate medical attention and special treatment needed if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
Unsuitable extinguishing media : Do not use water jet.

- Specific hazards arising from the chemical** : Flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

- Hazardous thermal decomposition products** : No specific data.

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.



Section 5. Fire-fighting measures

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.



Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Fuel oil no. 2	ACGIH TLV (United States, 2/2010). Absorbed through skin. TWA: 100 mg/m ³ , (measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.



Section 8. Exposure controls/personal protection

- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

- Appearance**
- Physical state** : Liquid.
- Color** : Straw.
- Odor** : Petroleum-like
- Odor threshold** : Not available.
- pH** : Not applicable.
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : 320 to 670°C (608 to 1238°F)
- Flash point** : Closed cup: 43.33°C (110°F)
- Evaporation rate** : <1 (Ethyl Ether = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 0.6%
Upper: 7.5%
- Vapor pressure** : 6.9 kPa (51.6 mm Hg) [20°C]
- Vapor density** : 8 [Air = 1]
- Relative density** : 0.87
- Solubility** : Very slightly soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 260°C (500°F)
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Kinematic (40°C (104°F)): 0.019 to 0.041 cm²/s (1.9 to 4.1 cSt)

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid** : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
- Incompatible materials** : Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition products

- : Under normal conditions of storage and use, hazardous decomposition products should not be produced.



Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fuel oil no. 2	LD50 Oral	Rat	12 g/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fuel oil no. 2	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Fuel oil no. 2	A3	3	-	-	-	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

There is no data available.

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.

Inhalation Skin contact Ingestion

: No known significant effects or critical hazards.

: No known significant effects or critical hazards.

: No known significant effects or critical hazards.



Section 11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects : No known significant effects or critical hazards.
- Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects : No known significant effects or critical hazards.
- Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

- General : No known significant effects or critical hazards.
- Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity : No known significant effects or critical hazards.
- Teratogenicity : No known significant effects or critical hazards.
- Developmental effects : No known significant effects or critical hazards.
- Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

- Soil/water partition coefficient (K_{oc}) : There is no data available.

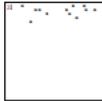
- Other adverse effects : No known significant effects or critical hazards.



Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	IMDG	IATA
UN number	NA1993	NA1993	NA1993
UN proper shipping name	Fuel oil no. 2	Fuel oil no. 2	Fuel oil no. 2
Transport hazard class(es)	3 	3 	3 
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations : **TSCA 8(a) IUR Exempt/Partial exemption:** All components are listed or exempted.
United States inventory (TSCA 8b): All components are listed or exempted.

Section 15. Regulatory information

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Fuel oil no. 2

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
Fuel oil no. 2: Fire hazard, Immediate (acute) health hazard

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : None of the components are listed.

Pennsylvania : The following components are listed: Fuel oil no. 2

California Prop. 65

No products were found.

Section 16. Other information

History

Date of issue mm/dd/yyyy : 07/15/2012

Version : 1

Prepared by : KMK Regulatory Services Inc.

**Key to abbreviations**

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

SAFETY DATA SHEET

Kerosene (all grades)

Conforms to HazCom 2012/United States

SAFETY DATA SHEET

Kerosene (all grades)

Section 1. Identification

Product identifier used on the label : Kerosene (all grades)

Other means of identification : Kerosine, Jet Fuel, Aviation Jet Fuel, AvJet, Kero, Military Jet Fuel

Product type : Liquid.

Recommended use and restrictions

Identified uses

Fuel.

Supplier/Manufacturer : Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: <http://www.colpipe.com/>

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
ASPIRATION HAZARD - Category 1

Ingredients of unknown toxicity : Not applicable.

Ingredients of unknown ecotoxicity : Not applicable.

GHS label elements

Hazard pictograms :



Signal word :

: Danger

Hazard statements :

: Flammable liquid and vapor.
May be fatal if swallowed and enters airways.

Precautionary statements

Prevention :

: Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment.



Section 2. Hazards identification

- Response** : IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- Storage** : Keep cool.
- Disposal** : Not applicable.

Other hazards which do not result in classification : Not available.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Kerosine, Jet Fuel, Aviation Jet Fuel, AvJet, Kero, Military Jet Fuel

CAS number/other identifiers

- CAS number** : Not applicable.
- EC number** : Mixture.
- Product code** : Not available.

Ingredient name	%	CAS number
Kerosene	60 - 100	8008-20-6
Contains: Naphthalene	0 - 0.04	91-20-3
A complex combination of hydrocarbons including naphthenes, paraffins, and aromatics	-	-

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention if irritation occurs.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.



Never give anything by mouth to
an unconscious person. If
unconscious, place in recovery
position and get medical
attention immediately. Maintain
an open airway.

Section 2: Hazards identification



Section 4. First aid measures

Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact : No known significant effects or critical hazards.
- Inhalation : No known significant effects or critical hazards.
- Skin contact : No known significant effects or critical hazards.
- Ingestion : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact : No known significant effects or critical hazards.
- Inhalation : No known significant effects or critical hazards.
- Skin contact : No known significant effects or critical hazards.
- Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments : No specific treatment.
- Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : No specific data.

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.



Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent



leakage. Do not store in
unlabeled containers.
Use appropriate
containment to avoid
environmental
contamination.



Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Kerosene	NIOSH REL (United States, 6/2009). TWA: 100 mg/m ³ 10 hour(s). ACGIH TLV (United States, 2/2010). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hour(s).

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.



Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid. [Clear.]
Color	: Straw.
Odor	: Kerosene like
Odor threshold	: 100 ppm
pH	: Not applicable.
Melting point/freezing point	: -18°C (-0.4°F)
Boiling point/boiling range	: 151 to 301°C (304 to 574°F)
Flash point	: Closed cup: 43.33°C (110°F) [Pensky-Martens.]
Evaporation rate	: Slow; varies with conditions
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 0.7% Upper: 5%
Vapor pressure	: 0.053 kPa (0.4 mm Hg) [20°C]
Vapor density	: 4.5 [Air = 1]
Relative density	: 0.82
Solubility	: Very slightly soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 210°C (410°F)
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Kinematic (40°C (104°F)): >0.013 cm ² /s (>1.3 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials, chlorine, peroxides, nitric acid, sulfuric acid.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.



Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Kerosene	LD50 Oral	Rat	>5000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Kerosene	Skin - Severe irritant	Rabbit	-	500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100%	-
	Skin - Moderate irritant	Rabbit	-	0.5 mL	-

Sensitization

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Kerosene	A3	-	-	-	-	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

There is no data available.

Aspiration hazard

Name	Result
Kerosene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact : No known significant effects or critical hazards.

Ingestion : Adverse symptoms may include the following:
nausea or vomiting



Section 11. Toxicological information

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects : No known significant effects or critical hazards.
 Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects : No known significant effects or critical hazards.
 Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

- General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

Section 12. Ecological information

Toxicity

There is no data available.

Persistence and degradability

There is no data available.

Bioaccumulative potential

There is no data available.

Mobility in soil

- Soil/water partition coefficient (K_{oc}) : There is no data available.

- Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

- Disposal methods : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local

authority

requirements.

Waste

packaging

should be

recycled.

Incineration or

landfill should

only be

considered when

recycling is not

feasible. This

material and its

Section 11. Toxicological information

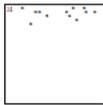


Kerosene (all grades)

Section 13. Disposal considerations

container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	IMDG	IATA
UN number	UN1223	UN1223	UN1223
UN proper shipping name	KEROSENE	KEROSENE	KEROSENE
Transport hazard class(es)	3 	3 	3 
Packing group	III	III	III
Environmental hazards	No.	No.	No.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations :

- TSCA 8(a) PAIR:** Naphthalene
- TSCA 8(a) IUR Exempt/Partial exemption:** Not determined
- United States inventory (TSCA 8b):** Not determined.
- SARA 302/304/311/312 extremely hazardous substances:** No products were found.
- SARA 302/304 emergency planning and notification:** No products were found.
- SARA 302/304/311/312 hazardous chemicals:** Kerosene
- SARA 311/312 MSDS distribution - chemical inventory - hazard identification:** Kerosene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard



Clean Water Act (CWA) 307: Naphthalene
 Clean Water Act (CWA) 311: Naphthalene

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

State regulations

Massachusetts : The following components are listed: Kerosene

New York : None of the components are listed.

New Jersey : The following components are listed: Kerosene

Pennsylvania : The following components are listed: Kerosene

California Prop. 65

No products were found.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Naphthalene	Yes.	No.	Yes.	No.

Section 16. Other information

History

Date of issue mm/dd/yyyy : 07/15/2012

Version : 1

Prepared by : KMK Regulatory Services Inc.

**Key to abbreviations**

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.



SAFETY DATA SHEET

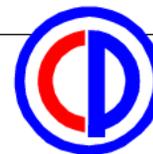
Transmix



Conforms to HazCom 2012/United States

SAFETY DATA SHEET

Transmix



Section 1. Identification

Product identifier used on the label : Transmix

Other means of identification : This Safety Data Sheet represents the composite characteristics and properties of fungible petroleum hydrocarbons and other related substances transported by Colonial Pipeline Company. Transmix is the trade/industry name for mixtures of refined petroleum products in unknown concentrations.

Product type : Liquid.

Recommended use and restrictions

Identified uses

Mixtures of refined petroleum products in unknown concentrations

Supplier/Manufacturer : Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: <http://www.colpipe.com/>

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards identification

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 2
ACUTE TOXICITY: INHALATION - Category 4
SKIN CORROSION/IRRITATION - Category 2
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1A
TOXIC TO REPRODUCTION [Fertility] - Category 2
TOXIC TO REPRODUCTION [Unborn child] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE): INHALATION [central nervous system (CNS)] - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC TOXICITY (ACUTE) - Category 3
AQUATIC TOXICITY (CHRONIC) - Category 2

Ingredients of unknown toxicity : Not applicable.

Ingredients of unknown ecotoxicity : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 100%

GHS label elements



Section 2. Hazards identification



Hazard pictograms	:	
Signal word	:	Danger
Hazard statements	:	<p>Highly flammable liquid and vapor. Harmful if inhaled. Causes skin irritation. May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. May be fatal if swallowed and enters airways. May cause damage to organs if inhaled. (central nervous system (CNS)) May cause damage to organs through prolonged or repeated exposure. Toxic to aquatic life with long lasting effects.</p>
Precautionary statements		
General	:	Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention	:	Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Avoid release to the environment. Do not breathe vapor.
Response	:	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Storage	:	Keep cool.
Disposal	:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Other hazards which do not result in classification	:	Not available.

Section 3. Composition/information on ingredients

Substance/mixture	:	Mixture
Other means of identification	:	This Safety Data Sheet represents the composite characteristics and properties of fungible petroleum hydrocarbons and other related substances transported by Colonial Pipeline Company. Transmix is the trade/industry name for mixtures of refined petroleum products in unknown concentrations.
<u>CAS number/other identifiers</u>		
CAS number	:	Not applicable.
EC number	:	Mixture.
Product code	:	Not available.



Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Distillates (petroleum), full-range straight-run middle	60 - 100	68814-87-9
Fuel oil no. 2	60 - 100	68476-30-2
Kerosene	60 - 100	8008-20-6
Distillates (petroleum), light catalytic cracked	30 - 60	64741-59-9
Xylene	10 - 30	1330-20-7
Toluene	10 - 30	108-88-3
n-Hexane	1 - 5	110-54-3
Benzene	1 - 5	71-43-2
1,2,4-Trimethylbenzene	1 - 5	95-63-6
Ethylbenzene	1 - 5	100-41-4
Naphthalene	1 - 5	91-20-3

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : Harmful if inhaled. May cause damage to organs following a single exposure if inhaled.
- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms



Section 4. First aid measures

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Indication of immediate medical attention and special treatment needed if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

- Specific hazards arising from the chemical** : Highly flammable liquid and vapor. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.



Section 5. Fire-fighting measures

- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.



Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Gasoline	ACGIH TLV (United States, 2/2010). TWA: 300 ppm 8 hour(s). TWA: 890 mg/m ³ 8 hour(s). STEL: 500 ppm 15 minute(s). STEL: 1480 mg/m ³ 15 minute(s).
Fuel oil no. 2	ACGIH TLV (United States, 2/2010). Absorbed through skin. TWA: 100 mg/m ³ , (measured as total hydrocarbons) 8 hour(s). Form: Total hydrocarbons
Kerosene	NIOSH REL (United States, 6/2009). TWA: 100 mg/m ³ 10 hour(s). ACGIH TLV (United States, 2/2010). Absorbed through skin. TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hour(s).
Xylene	ACGIH TLV (United States, 1/2011). STEL: 651 mg/m ³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 434 mg/m ³ 8 hour(s). TWA: 100 ppm 8 hour(s). OSHA PEL (United States, 6/2010). TWA: 100 ppm 8 hour(s). TWA: 435 mg/m ³ 8 hour(s).
Toluene	NIOSH REL (United States, 6/2009). STEL: 560 mg/m ³ 15 minute(s). STEL: 150 ppm 15 minute(s). TWA: 375 mg/m ³ 10 hour(s). TWA: 100 ppm 10 hour(s). OSHA PEL Z2 (United States, 11/2006). AMP: 500 ppm 10 minute(s). CEIL: 300 ppm TWA: 200 ppm 8 hour(s). ACGIH TLV (United States, 1/2011). TWA: 20 ppm 8 hour(s).
n-Hexane	ACGIH TLV (United States, 2/2010). Absorbed through skin. TWA: 50 ppm 8 hour(s). NIOSH REL (United States, 6/2009). TWA: 180 mg/m ³ 10 hour(s). TWA: 50 ppm 10 hour(s). OSHA PEL (United States, 6/2010). TWA: 1800 mg/m ³ 8 hour(s). TWA: 500 ppm 8 hour(s).
Benzene	ACGIH TLV (United States, 2/2010). Absorbed through skin. STEL: 8 mg/m ³ 15 minute(s). STEL: 2.5 ppm 15 minute(s). TWA: 1.6 mg/m ³ 8 hour(s). TWA: 0.5 ppm 8 hour(s). NIOSH REL (United States, 6/2009). STEL: 1 ppm 15 minute(s). TWA: 0.1 ppm 10 hour(s). OSHA PEL (United States, 6/2010). STEL: 5 ppm 15 minute(s). TWA: 1 ppm 8 hour(s). OSHA PEL Z2 (United States, 11/2006). AMP: 50 ppm 10 minute(s).



Section 8. Exposure controls/personal protection

1,2,4-Trimethylbenzene	<p>CEIL: 25 ppm TWA: 10 ppm 8 hour(s).</p> <p>ACGIH TLV (United States, 1/2011). TWA: 123 mg/m³ 8 hour(s). TWA: 25 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). TWA: 125 mg/m³ 10 hour(s). TWA: 25 ppm 10 hour(s).</p> <p>OSHA PEL 1989 (United States, 3/1989). TWA: 25 ppm 8 hour(s). TWA: 125 mg/m³ 8 hour(s).</p>
Ethylbenzene	<p>ACGIH TLV (United States, 1/2011). TWA: 20 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). STEL: 545 mg/m³ 15 minute(s). STEL: 125 ppm 15 minute(s). TWA: 435 mg/m³ 10 hour(s). TWA: 100 ppm 10 hour(s).</p> <p>OSHA PEL (United States, 6/2010). TWA: 435 mg/m³ 8 hour(s). TWA: 100 ppm 8 hour(s).</p>
Naphthalene	<p>ACGIH TLV (United States, 1/2011). STEL: 79 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 52 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s).</p> <p>NIOSH REL (United States, 6/2009). STEL: 75 mg/m³ 15 minute(s). STEL: 15 ppm 15 minute(s). TWA: 50 mg/m³ 10 hour(s). TWA: 10 ppm 10 hour(s).</p> <p>OSHA PEL (United States, 6/2010). TWA: 50 mg/m³ 8 hour(s). TWA: 10 ppm 8 hour(s).</p>

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.



Section 8. Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

- Physical state** : Liquid.
- Color** : Bronzed to Pink.
- Odor** : Petroleum.
- Odor threshold** : Not available.
- pH** : Not available.
- Melting point/freezing point** : Not available.
- Boiling point/boiling range** : 80 to 680°C (176 to 1256°F)
- Flash point** : Closed cup: -34.44 to 43.33°C (-30 to 110°F)
- Evaporation rate** : <1 (Ethyl Ether = 1)
- Flammability (solid, gas)** : Not available.
- Lower and upper explosive (flammable) limits** : Lower: 1.4%
Upper: 7.4%
- Vapor pressure** : 26.7 to 93.3 kPa (200 to 700 mm Hg) [20°C]
- Vapor density** : 3 to 8 [Air = 1]
- Relative density** : 0.87
- Solubility** : Very slightly soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : Not available.
- Auto-ignition temperature** : 257.22 to 260°C (495 to 500°F)
- Decomposition temperature** : Not available.
- SADT** : Not available.
- Viscosity** : Not available.

Section 10. Stability and reactivity

- Reactivity** : No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability** : The product is stable.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid**



Avoid all possible
Sources of

Section 8 Exposure controls/personal protection

ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.



Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials, acids and alkalis.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Fuel oil no. 2	LD50 Oral	Rat	12 g/kg	-
Kerosene	LD50 Oral	Rat	>5000 mg/kg	-
Distillates (petroleum), light catalytic cracked	LC50 Inhalation Vapor	Rat	3400 mg/m ³	4 hours
Xylene	LD50 Oral	Rat	3200 mg/kg	-
	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
Toluene	LD50 Oral	Rat	4300 mg/kg	-
	LC50 Inhalation Vapor	Rat	49 g/m ³	4 hours
n-Hexane	LD50 Oral	Rat	636 mg/kg	-
	LC50 Inhalation Gas.	Rat	48000 ppm	4 hours
Benzene	LD50 Oral	Rat	15840 mg/kg	-
1,2,4-Trimethylbenzene	LD50 Oral	Rat	930 mg/kg	-
	LC50 Inhalation Vapor	Rat	18000 mg/m ³	4 hours
Ethylbenzene	LD50 Oral	Rat	5 g/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
Naphthalene	LD50 Oral	Rat	3500 mg/kg	-
	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Oral	Rat	490 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Fuel oil no. 2	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
Kerosene	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Severe irritant	Rabbit	-	500 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100%	-
	Skin - Moderate irritant	Rabbit	-	0.5 mL	-
Distillates (petroleum), light catalytic cracked	Skin - Severe irritant	Rabbit	-	500 mg	-
Xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Moderate irritant	Rabbit	-	100%	-
Toluene	Eyes - Mild irritant	Rabbit	-	0.5 minutes 100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Mild irritant	Rabbit	-	870 µg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Pig	-	24 hours 250 µL	-
	Skin - Mild irritant	Rabbit	-	435 mg	-
	Skin - Moderate irritant	Rabbit	-	500 mg	-
n-Hexane	Eyes - Mild irritant	Rabbit	-	10 mg	-
Benzene	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Ethylbenzene	Eyes - Severe irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-
Naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.05 mL	-

**Section 11. Toxicological information****Sensitization**

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Gasoline	A3	2B	-	+	-	-
Fuel oil no. 2	A3	3	-	-	-	-
Kerosene	A3	-	-	-	-	-
Distillates (petroleum), light catalytic cracked	-	2A	-	-	-	-
Xylene	A4	3	-	-	-	-
Toluene	A4	3	-	-	-	-
Benzene	A1	1	-	+	Proven.	+
Ethylbenzene	A3	2B	-	None.	-	-
Naphthalene	A4	2B	-	None.	Possible	-

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Toluene	Category 2 Category 3	Inhalation Not determined	central nervous system (CNS) Respiratory tract irritation
n-Hexane 1,2,4-Trimethylbenzene	Category 3 Category 3	Inhalation Not determined Not determined	Narcotic effects Narcotic effects Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Distillates (petroleum), full-range straight-run middle	Category 2	Not determined	Not determined
n-Hexane	Category 2	Not determined	Not determined
Benzene	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
Distillates (petroleum), full-range straight-run middle	ASPIRATION HAZARD - Category 1
Kerosene	ASPIRATION HAZARD - Category 1
Toluene	ASPIRATION HAZARD - Category 1
n-Hexane	ASPIRATION HAZARD - Category 1
Benzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled. May cause damage to organs following a single exposure if inhaled.



Section 11. Toxicological information

- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways. Irritating to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : Adverse symptoms may include the following:
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
reduced fetal weight
increase in fetal deaths
skeletal malformations
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting
reduced fetal weight
increase in fetal deaths
skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

Potential chronic health effects

- General** : May cause damage to organs through prolonged or repeated exposure.
- Carcinogenicity** : May cause cancer. Risk of cancer depends on duration and level of exposure.
- Mutagenicity** : May cause genetic defects.
- Teratogenicity** : Suspected of damaging the unborn child.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	24747.5 mg/kg
Dermal	7407.4 mg/kg
Inhalation (gases)	30303 ppm
Inhalation (vapors)	10.54 mg/l



Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Xylene	Acute IC50 10 mg/L	Algae	72 hours
	Acute LC50 8500 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
Toluene	Acute LC50 3300 to 4093 ug/L Fresh water	Fish - Oncorhynchus mykiss - 0.6 g	96 hours
	Acute EC50 12500 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11600 ug/L Fresh water	Crustaceans - Gammarus pseudolimnaeus - Adult - 9 mm - 0.017 g	48 hours
	Acute EC50 6000 ug/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
n-Hexane	Acute LC50 5500 ug/L Fresh water	Fish - Oncorhynchus kisutch - Fry - 1 g	96 hours
	Chronic NOEC mg/L Fresh water	Daphnia - Daphnia magna	21 days
Benzene	Acute LC50 2500 to 2980 ug/L Fresh water	Fish - Pimephales promelas - 31 days - 20.4 mm - 0.123 g	96 hours
	Acute EC50 29000 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1600000 ug/L Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 9230 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 21000 ug/L Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorbuscha - Fry	96 hours
1,2,4-Trimethylbenzene	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 18.1 cm - 3.39 g	4 weeks
	Acute LC50 4910 ug/L Marine water	Crustaceans - Elasmopus pectinicus - Adult	48 hours
Ethy benzene	Acute LC50 7720 to 8280 ug/L Fresh water	Fish - Pimephales promelas - 34 days	96 hours
	Acute EC50 4600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 3600 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
	Acute EC50 6530 ug/L Fresh water	Crustaceans - Artemia sp. - Nauplii - es7:k56s:7pt	48 hours
Naphthalene	Acute EC50 2970 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 4200 ug/L Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 1600 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 2350 ug/L Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 213 ug/L Fresh water	Fish - Melanotaenia fluviatilis - Larvae - 1 days	96 hours

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Xylene	3.16	-	low
Toluene	2.69	8.317637711	low
n-Hexane	3.9	-	low
Benzene	2.13	4.265795188	low
1,2,4-Trimethylbenzene	3.8	120.226443461	low
Ethylbenzene	3.1	-	low
Naphthalene	3.3	85.11380382	low

Mobility in soil

Soil/water partition coefficient (K_{oc}) : There is no data available.

Other adverse effects : No known significant effects or critical hazards.



Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	IMDG	IATA
UN number	UN1993	UN1993	UN1993
UN proper shipping name	FLAMMABLE LIQUIDS, N.O.S. (Xylene, Toluene). Marine pollutant (Gasoline)	FLAMMABLE LIQUIDS, N.O.S. (Xylene, Toluene). Marine pollutant (Gasoline)	FLAMMABLE LIQUIDS, N.O.S. (Xylene, Toluene). Marine pollutant (Gasoline).
Transport hazard class(es)	3 	3 	3
Packing group	II	II	II
Environmental hazards	Yes.	Yes.	Yes.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations : TSCA 8(a) PAIR: Naphthalene
TSCA 8(a) IUR Exempt/Partial exemption: Not determined

Section 15. Regulatory information

United States inventory (TSCA 8b): Not determined.

SARA 302/304/311/312 extremely hazardous substances: No products were found.

SARA 302/304 emergency planning and notification: No products were found.

SARA 302/304/311/312 hazardous chemicals: Gasoline; Xylene; Toluene; n-Hexane; Naphthalene; 1,2,4-Trimethylbenzene; Ethylbenzene; Benzene; Distillates (petroleum), light catalytic cracked; Fuel oil no. 2; Kerosene

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:
 Gasoline: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Xylene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Toluene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; n-Hexane: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Naphthalene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; 1,2,4-Trimethylbenzene: Fire hazard, Delayed (chronic) health hazard; Ethylbenzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Benzene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard; Distillates (petroleum), light catalytic cracked: Delayed (chronic) health hazard; Fuel oil no. 2: Fire hazard, Immediate (acute) health hazard; Kerosene: Fire hazard, Immediate (acute) health hazard, Delayed (chronic) health hazard

Clean Water Act (CWA) 307: Toluene; Benzene; Ethylbenzene; Naphthalene

Clean Water Act (CWA) 311: Xylene; Toluene; Benzene; Ethylbenzene; Naphthalene

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Listed

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5
Supplier notification	Xylene	1330-20-7	10 - 30
	Toluene	108-88-3	10 - 30
	n-Hexane	110-54-3	1 - 5
	Benzene	71-43-2	1 - 5
	1,2,4-Trimethylbenzene	95-63-6	1 - 5
	Ethylbenzene	100-41-4	1 - 5
	Naphthalene	91-20-3	1 - 5

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts

The following components are listed:

Section 15. Regulatory information

Kerosene;
Xylene;
Toluene; n-
Hexane;
Benzene;
Ethylbenzene;
1,2,4-Trimethylbenzene;
Naphthalene

Section 15. Regulatory information

- New York** : The following components are listed: Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; Naphthalene
- New Jersey** : The following components are listed: Kerosene; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene
- Pennsylvania** : The following components are listed: Gasoline; Kerosene; Fuel oil no. 2; Xylene; Toluene; n-Hexane; Benzene; Ethylbenzene; 1,2,4-Trimethylbenzene; Naphthalene

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Toluene	No.	Yes.	No.	7000 µg/day (ingestion) 13000 µg/day (inhalation)
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)
Ethylbenzene	Yes.	No.	41 µg/day (ingestion) 54 µg/day (inhalation)	No.
Naphthalene	Yes.	No.	Yes.	No.

Section 16. Other information

History

- Date of issue mm/dd/yyyy** : 07/15/2012
- Version** : 1
- Prepared by** : KMK Regulatory Services Inc.

Key to abbreviations

Section 15. Regulatory Information

: ATE = Acute Toxicity Estimate
B1F = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Section 15. Regulatory information

SAFETY DATA SHEET

Biodiesel (all grades)

Conforms to HazCom 2012/United States

Section 15. Regulatory information

SAFETY DATA SHEET



Biodiesel (all grades)

Section 1. Identification

Product identifier used on the label : Biodiesel (all grades)

Other means of identification : Bio-Fuel Oil #2, Bio-Fuel Oil, B100 Biodiesel

Product type : Liquid.

Recommended use and restrictions

Identified uses

Fuel.

Supplier/Manufacturer : Colonial Pipeline Company
1185 Sanctuary Parkway
Suite 100
Alpharetta, GA 30009
Tel.: 678-762-2200
Toll Free: 800-275-3004
Fax: 678-762-2466
Email: info@colpipe.com
Web site: <http://www.colpipe.com/>

Emergency telephone number (with hours of operation) : CHEMTREC, U.S. : 1-800-424-9300
International: +1-703-527-3887
Hours of operation: 24 hours/day, 7 days/week

Section 2. Hazards identification

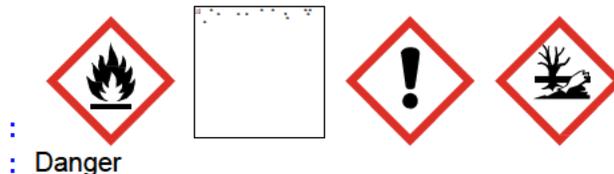
Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
ACUTE TOXICITY: INHALATION - Category 4
GERM CELL MUTAGENICITY - Category 1B
CARCINOGENICITY - Category 1A
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
ASPIRATION HAZARD - Category 1
AQUATIC TOXICITY (CHRONIC) - Category 2

Ingredients of unknown toxicity : Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 5%

Ingredients of unknown ecotoxicity : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5%

GHS label elements

Hazard pictograms
Signal word





Section 2. Hazards identification

- Hazard statements** : Flammable liquid and vapor.
Harmful if inhaled.
May cause genetic defects.
May cause cancer.
May be fatal if swallowed and enters airways.
May cause damage to organs through prolonged or repeated exposure.
Toxic to aquatic life with long lasting effects.
- Precautionary statements**
- General** : Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.
- Prevention** : Obtain special instructions before use. Wear protective gloves. Wear eye or face protection. Keep away from heat, sparks, open flames and hot surfaces. - No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Avoid release to the environment. Do not breathe vapor.
- Response** : IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- Storage** : Keep cool.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Other hazards which do not result in classification** : Not available.

Section 3. Composition/information on ingredients

- Substance/mixture** : Mixture
- Other means of identification** : Bio-Fuel Oil #2, Bio-Fuel Oil, B100 Biodiesel

CAS number/other identifiers

- CAS number** : Not applicable.
- EC number** : Mixture.
- Product code** : 28070

Ingredient name	%	CAS number
Distillates (petroleum), full-range straight-run middle	60 - 100	68814-87-9
Distillates (petroleum), light catalytic cracked	30 - 60	64741-59-9
Benzene	0.1 - 1	71-43-2

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.



Section 4. First aid measures

- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects acute and delayed

Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : Harmful if inhaled.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)



Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor.

Large spill : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Dispose via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see section 1 for emergency contact information and section 13 for waste disposal.



Section 7. Handling and storage

- Precautions for safe handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Avoid release to the environment. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Benzene	ACGIH TLV (United States, 2/2010). Absorbed through skin. STEL: 8 mg/m ³ 15 minute(s). STEL: 2.5 ppm 15 minute(s). TWA: 1.6 mg/m ³ 8 hour(s). TWA: 0.5 ppm 8 hour(s). NIOSH REL (United States, 6/2009). STEL: 1 ppm 15 minute(s). TWA: 0.1 ppm 10 hour(s). OSHA PEL (United States, 6/2010). STEL: 5 ppm 15 minute(s). TWA: 1 ppm 8 hour(s). OSHA PEL Z2 (United States, 11/2006). AMP: 50 ppm 10 minute(s). CEIL: 25 ppm TWA: 10 ppm 8 hour(s).

- Recommended monitoring procedures** : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.
- Appropriate engineering controls** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.



Section 8. Exposure controls/personal protection

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state	: Liquid.
Color	: Bright & clear.
Odor	: Petroleum.
Odor threshold	: Not available.
pH	: Not applicable.
Melting point/freezing point	: Not available.
Boiling point/boiling range	: 148°C (298.4°F)
Flash point	: Closed cup: >51.67°C (>125°F)
Evaporation rate	: Slow; varies with conditions
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Lower: 0.5% Upper: 4.4%
Vapor pressure	: 0.0027 kPa (0.02 mm Hg) [20°C]
Vapor density	: Not available.
Relative density	: 0.85
Solubility	: Negligible.



Section 9. Physical and chemical properties

Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: 260°C (500°F)
Decomposition temperature	: Not available.
SADT	: Not available.
Viscosity	: Kinematic (40°C (104°F)): 0.019 to 0.041 cm ² /s (1.9 to 4.1 cSt)

Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), light catalytic cracked	LC50 Inhalation Vapor	Rat	3400 mg/m ³	4 hours
Benzene	LD50 Oral	Rat	3200 mg/kg	-
	LD50 Oral	Rat	930 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Distillates (petroleum), light catalytic cracked	Skin - Severe irritant	Rabbit	-	500 mg	-
Benzene	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2 mg	-
	Skin - Mild irritant	Rat	-	8 hours 60 µL	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 mg	-

Sensitization

Skin : There is no data available.

Respiratory : There is no data available.

Mutagenicity

There is no data available.

Carcinogenicity

There is no data available.

Classification



Section 11. Toxicological information

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Distillates (petroleum), light catalytic cracked	-	2A	-	-	-	-
Benzene	A1	1	-	+	Proven.	+

Reproductive toxicity

There is no data available.

Teratogenicity

There is no data available.

Specific target organ toxicity (single exposure)

There is no data available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Distillates (petroleum), full-range straight-run middle	Category 2	Not determined	Not determined
Benzene	Category 1	Not determined	Not determined

Aspiration hazard

Name	Result
Distillates (petroleum), full-range straight-run middle	ASPIRATION HAZARD - Category 1
Benzene	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure : Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact : No known significant effects or critical hazards.
Inhalation : Harmful if inhaled.
Skin contact : No known significant effects or critical hazards.
Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards.
Inhalation : No known significant effects or critical hazards.
Skin contact : No known significant effects or critical hazards.
Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Long term exposure

Potential immediate effects : No known significant effects or critical hazards.
Potential delayed effects : No known significant effects or critical hazards.

Potential chronic health effects

General : **Carcinogenicity** : **Mutagenicity** :

May cause damage to organs through prolonged or repeated exposure.

May cause cancer. Risk of cancer depends on duration and level of exposure. May cause genetic defects.



Section 11. Toxicological information

- Teratogenicity** : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (vapors)	11 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Benzene	Acute EC50 29000 ug/L Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 1600000 ug/L Fresh water	Algae - Selenastrum sp.	96 hours
	Acute EC50 9230 ug/L Fresh water	Daphnia - Daphnia magna - Neonate - <=24 hours	48 hours
	Acute LC50 21000 ug/L Marine water	Crustaceans - Artemia salina - Nauplii	48 hours
	Acute LC50 5.28 ul/L Fresh water	Fish - Oncorhynchus gorboscha - Fry	96 hours
	Chronic NOEC 1.5 to 5.4 ul/L Marine water	Fish - Morone saxatilis - Juvenile (Fledgling, Hatchling, Weanling) - 18.1 cm - 3.39 g	4 weeks

Persistence and degradability

There is no data available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Benzene	2.13	4.265795188	low

Mobility in soil

- Soil/water partition coefficient (K_{oc})** : There is no data available.

- Other adverse effects** : No known significant effects or critical hazards.

Section 13. Disposal considerations

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a



highly flammable

Section 11. Toxicological information

atmosphere

inside the

container. Do

not cut, weld or

grind used

containers

unless they have

been cleaned

thoroughly

internally. Avoid

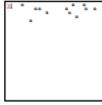


Biodiesel (all grades)

Section 13. Disposal considerations

dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT	IMDG	IATA
UN number	UN1268	UN1268	UN1268
UN proper shipping name	PETROLEUM DISTILLATES, N.O.S.	PETROLEUM DISTILLATES, N.O.S.. Marine pollutant (Distillates (petroleum), full-range straight-run middle)	PETROLEUM DISTILLATES, N.O.S.
Transport hazard class(es)	3 	3 	3 
Packing group	III	III	III
Environmental hazards	No.	Yes.	Yes.
Special precautions for user	Not available.	Not available.	Not available.
Additional information	-	-	-

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

Section 15. Regulatory information

Safety, health and environmental regulations specific for the product : No known specific national and/or regional regulations applicable to this product (including its ingredients).

U.S. Federal regulations : **TSCA 8(a) IUR Exempt/Partial exemption:** Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: Distillates (petroleum), light catalytic cracked
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: Distillates (petroleum), light catalytic cracked: Delayed (chronic) health hazard
Clean Water Act (CWA) 307: Benzene
Clean Water Act (CWA) 311: Benzene



Section 15. Regulatory information

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Benzene	71-43-2	0.1 - 1
Supplier notification	Benzene	71-43-2	0.1 - 1

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : None of the components are listed.

New York : The following components are listed: Benzene

New Jersey : The following components are listed: Benzene

Pennsylvania : The following components are listed: Benzene

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Benzene	Yes.	Yes.	6.4 µg/day (ingestion) 13 µg/day (inhalation)	24 µg/day (ingestion) 49 µg/day (inhalation)

Section 16. Other information

History

Date of issue mm/dd/yyyy : 07/15/2012

Version : 1

Prepared by : KMK Regulatory Services Inc.

Colonial Pipeline Company

PRODUCT CHARACTERISTIC FACT SHEETS

Key to abbreviations

- : ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) UN = United Nations

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Colonial Pipeline Company

RELEASE RESPONSE STRATEGIES

Introduction

Colonial Pipeline Company transports gasoline, kerosene, diesel fuel, aviation kerosene, and transmix. All of these refined petroleum products have a specific gravity of less than one (float on water) and are biodegradable. The U. S. Coast Guard considers these products as Class "A" oils, having a low viscosity and high volatility. This results in the oil rapidly spreading on the water surface and subsequent increases in evaporation rates.

This section addresses release preparedness and response strategies associated with the types of products transported by Colonial Pipeline. This information, used in conjunction with the MSDS information in Section 9.01, should be used to affect safe and effective responses to release material.

Reconnaissance

One of the most important functions during the initial stages of release response is reconnaissance of the affected line segment and area of impact. As with any aspect of the response effort, **safety and the protection of human life are the primary concerns**. This is true for both persons located in the area of the release and responders performing recon operations. In addition to safety issues, recon personnel should be aware of measures to mitigate the consequences of the release.

Reconnaissance strategies and techniques are dependent on the weather and time of day. These factors largely dictate the use of aerial support in any response effort. Aerial support enhances the response effort by helping to obtain an overall picture of the extent of the release quickly so that adjustments to the response effort can be made as soon as possible. Ground level recon activities should be conducted immediately regardless of the weather or time of day. While aerial recon gives you the big picture, ground recon provides the important details.

The following is some general guidance on recon strategies and checklists on information to collect and useful equipment/supplies for conducting recon activities:

Preplanning

Preplanning is essential to an effective recon operation due to the diverse geographical nature of the pipeline. The following preplanning items should be taken into consideration:

- Preplanning should be performed/coordinated by personnel most familiar with the line segment for which the plan is being developed.
- All personnel likely to be involved with the planning and actual recon activities should be familiar with available reference maps and information, especially the USGS maps and associated data tables for predetermined oil containment/recovery locations.
- Recon personnel should be trained in the use of communications equipment that may be used.
- A tracking method to monitor the efforts of recon personnel to provide effective coverage when trying to locate the origin and down gradient extent of released product should be developed.

Colonial Pipeline Company

RELEASE RESPONSE STRATEGIES

- Recon personnel should be trained in relevant safety aspects associated with recon activities. These include knowledge of the product that may be released and necessary monitoring for those products, as well as the precautions that must be considered with respect to geographical features, weather, wildlife, and other dangers that may be present in a particular area.
- Available trained recon personnel should be identified.
- Natural and man-made barriers that may interfere with recon of a particular line segment (e.g. fences, secured properties, waterways, wetlands, cliffs, etc.) should be identified.

Reconnaissance Operations-General Guidance

Below is some general guidance that should be considered during recon activities:

- Make safety the priority
- Develop a buddy-system for responders performing recon activities
- Establish and maintain communication with the Atlanta Control Center. This communication will in most cases significantly reduce the search area and help locate the release more quickly

Establish a clear communications network prior to dispatching personnel to recon areas.

- Designate personnel to establish a mechanism for tracking personnel performing recon (e.g. recon personnel to contact command center hourly to give progress report)
- Secure proper supplies for documentation purposes. As a recon area is entered, record geographical features that may have an impact on upcoming containment, recovery, and cleanup operations
- Personnel performing the recon should monitor the air with appropriate devices (e.g. combustible gas meter, oxygen content meter, and Sensidyne colorimetric indicator tubes). This is especially important if the release is suspected to include gasoline

Initial Reconnaissance Strategies - No Aerial Support

Aerial recon provides the most efficient method of locating the release site and extent of affected areas. Aerial recon, however, may not be immediately available due to variety of reasons (e.g. weather conditions, darkness, availability of planes/helicopters/pilots). Regardless of the availability of aerial patrol, ground recon operations are an essential element. The tactics and magnitude of the initial recon efforts will depend on available manpower and site conditions. Below is guidance for conducting ground recon activities:

- Typically, the Atlanta Control Center will initially be able to identify between which two pump stations the release occurred, or a third party will call in with a more precise location. After Control Center personnel have analyzed pressure charts they can generally locate the site to within approximately five miles.
- If the release location has been tentatively identified, recon personnel should be dispatched to both the suspected leak location and to down gradient water access points.
- Two recon personnel should be sent to the suspected location of the leak site. If the leak is not found at this location then one should proceed downstream and the other upstream towards the closest pump station. If a pump station or other facility is nearby, recon personnel should first check the facility unless

Colonial Pipeline Company

RELEASE RESPONSE STRATEGIES

otherwise instructed. If the terrain is too hazardous or difficult for a foot recon effort, these conditions should be relayed to the Incident Command Center, and a search of nearby pipeline road crossings should be initiated. As recon personnel reach the suspected leak site or pump station, they should report their findings to the Incident Command Center.

- Water access points are those locations that are adjacent to or spanned by a road. The predetermined containment and recovery sites marked on the USGS maps should be visited. The order in which waterways are visited should be based on sensitivity of the waterway and when product would be expected to reach a given location. The expected time of arrival is based on the time elapsed from when the leak occurred and the estimated flow rate of the waterway. Recon personnel should report in to the Incident Command Center as soon as they have completed their inspection of each water access location. The water access points may need to be visited more than once. Product may be in the waterway, but still upstream of the access point when it is visited.
- If the release location is only known to be between two pump stations, more focus should be given to visiting water access points.
- The number of recon personnel needed to adequately cover the down gradient water access points will depend on the number of locations, but at least four people should be used. If possible the recon personnel should work in teams of two so that if product is encountered at a crossing, one of the responders can stay at the crossing to protect the public and assist additional responders find the site. The other person should continue to try to get ahead of the product and then work back toward the other site. If recon cannot be performed in pairs, then as product is found at crossings, the decision must be made whether to leave this site and continue recon activities, or stay at this site. The decision should be based on the potential danger to the public if the site is left unmanned until additional responders arrive. This will have to be determined on a case-by-case basis.
- Once the release site has been confirmed, it is imperative that the Incident Command Center be immediately notified so other recon personnel can be sent to potential containment/recovery locations.

Initial Reconnaissance Strategies - With Aerial Support

Initial aerial reconnaissance support techniques are used in conjunction with all ground level recon efforts.

- Helicopters and fixed wing aircraft should be used to assist in recon activities. Helicopters provide the best recon capabilities due to their design and should be utilized whenever possible.
- At least one helicopter should be secured for recon duties as soon as possible and the pilot given specific directions where to report to pick up Colonial recon personnel. The nearest Colonial patrol pilot should also be immediately contacted and dispatched, if possible, to the suspected release site.
- Appropriate communications should be established between the helicopter, Colonial patrol plane, and the Incident Command Center.
- Two people, if possible, should go on the initial helicopter flight so that if the leak site is found, one person can be dropped off at the site to protect the public, begin collecting and relaying important information to the Incident Command Center, and help additional responders locate the site. After the person is dropped off at the leak site, the helicopter and other recon person should follow the plume of product down gradient relaying important information back to the Incident Command Center. The recon person in the helicopter should help the ground recon teams by directing them to containment and recovery points. After the

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RELEASE RESPONSE STRATEGIES

farthest point of the plume of product is reached, the helicopter should continue to recon downstream to select the last containment and recovery site (the last stand).

- It is important to remember that the total number of recovery sites will greatly impact the staffing of the individual sites. Although the number of recovery sites will depend on the size of the release and conditions in the water body, identification of 3-4 sites is a good starting point. The helicopter recon person should be able to determine the locations of the most effective sites. More sites can be added as needed as resources arrive at staging.
- After the initial recon, at least one helicopter should be retained for continuing recon duties throughout the emergency response.
- The initial duty of the Colonial patrol pilot is to fly towards the suspected leak site to locate the site. Once the leak site has been found the patrol plane should fly the right-of-way on both sides of the leak site to a predetermined point. This is to ensure the integrity of the remaining segment of line (i.e. make sure there is only one leak site). After this is done, the company pilot should report to the Incident Command Center for further instructions on how to supplement and coordinate the response's aerial support efforts.

Important Information to Collect

Listed below is pertinent information that should be collected during recon activities:

- Location of release site, type of product, site characteristics (woods, wetlands, open field, etc), and access (nearest roads)
- Location of leading edge of product
- Extent of impact (e.g. area of coverage, product thickness)
- Stream/river velocities of each segment
- Approximate depth and width of stream/river segments and identify pertinent characteristics such as pools, swamps, swift currents, etc.
- Wind speed and direction
- Natural (e.g. log jams, ice) and manmade structures (e.g. dams) that are in the path that will retard or block the flow of product
- Potential containment/recovery locations
- Site access to potential containment/recovery locations
 - Will the pathways to the site support fully loaded tank trucks or will roads need to be built or mats installed?
 - Is there room for several trucks/frac tanks to be staged?
 - Is there room for trucks to turn around?
 - Will a large quantity of pipe or hose be needed to transport the recovered product to the loading area?
 - What is the elevation difference between the water and the loading area?
- Potential hazard areas (e.g. sources of ignition in path of product)
- Areas that may require evacuation
- Threatened sensitive areas that will need protective booming (e.g. wetlands, boat docks, coves)
- Approximate length of boom required at each potential containment site and what type of equipment is necessary to deploy it
- Potential underflow dam locations and how much of what diameter flume pipe is needed
- Locations of visible wildlife/livestock
- Effectiveness of presently deployed booms and necessary adjustments
- Estimated volume of product pooled behind each containment site
- Location of pockets of product that are stranded beyond the river banks

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- Information on manpower or equipment shortages at recovery sites

Recommended Recon Equipment/Supplies

The following equipment and supplies may be useful for performing recon duties:

- Cameras (Smartphone, Polaroid, camera that inscribes date/time on photos, video camera)
- USGS topographic maps (several photocopies on which to mark pertinent information) and accompanying data sheets for preplanned containment/recovery sites
- Pipeline alignment sheets
- Local road maps (command center should have an atlas/mapping software (e.g. DeLorme's Map Expert)
- Compass
- GPS unit
- Minerva (instrument to measure lengths of curved lines on maps)
- Tape measure and product/water gauge paste
- Water velocity meter or stop watch
- Communications equipment (Satellite phone, hand held radio, cellular phone)
- Binoculars
- First aid kit
- Tyvec suits, gloves, goggles
- Ear plugs, eye wash, insect repellent
- Flashlight
- Weather proof log books, pens, and permanent markers
- Machete, utility knife

General Inspection Procedures for the Detection of Petroleum Hydrocarbons

The following inspection procedures can be used to determine if a subsurface release of petroleum hydrocarbons which is impacting a surface water has occurred. Colonial Pipeline transports gasoline, kerosene and fuel oils. These materials have a specific gravity less than 1, and therefore will float on water. Petroleum hydrocarbons released into the subsurface can be discharged into surface waters which are recharged by groundwater or be transported above grade following heavy rains. The primary indications that petroleum hydrocarbons are present are the following: 1) odors, 2) biological growth (algae blooms) or 3) hydrocarbon sheens.

In general, the type of odor detected from a hydrocarbon release will vary depending on how long ago the leak occurred. As expected, a recent release would have an odor similar to that of "fresh" product. A petroleum product that has aged and is discharging to surface water can develop an odor similar to that of paint thinner or a "skunk" type odor. Typically, the strongest hydrocarbon odors can be detected in low areas. This is because the petroleum vapors are heavier than air and will migrate to the lowest elevation. It should be noted that other environmental factors have an effect on the ability to detect petroleum hydrocarbon odors (i.e. wind and temperature).

Surface water that is being impacted by petroleum hydrocarbons will often have an unusually large amount of biological growth associated with it. The most common indication of this is an algae bloom. Generally, the algae are filamentous, and are usually orange/red/rust in color. It should be noted that after a heavy rainfall the algae can often be washed away by swift flowing waters.

A third indication that surface water is being impacted by petroleum hydrocarbons is the presence of hydrocarbon sheens. A true hydrocarbon sheen will show a rainbow if stirred or swirled. Following agitation, the sheen will reform a layer of uniform thickness. If oil absorbent materials are available, they can be used to

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help confirm if the material is actually an oil product. Hydrocarbon sheens are easily confused with biological iron sheens upon first impression. Biological sheens typically occur in stagnate or slow moving water. Unlike hydrocarbon sheen, a biological sheen will break up into angular fragments if stirred and not reform.

It should be noted that the causes of the above indications are not limited to subsurface discharges of petroleum hydrocarbons. Other processes can result in similar observations. These can include urban storm water runoff and naturally occurring biological processes. Therefore, if any of the above indications are observed, additional assessment will be warranted to determine the source.

Release Containment Sites

Whenever possible, access to containment sites and the location of oil and gasoline releases should be via existing pipeline facilities such as pipeline right of way, haul road, pipeline facility, access roads, river or stream access, or by state, federal and private roadways. While these facilities should be utilized to their fullest potential, off-road operations of varying degrees may be required. The impact of off-road operations can be limited by identifying and using old survey trails, fire breaks and other potential access routes. Because these disturbed areas can be sensitive to erosion, care should be exercised when using these off-road routes.

Each site should be staffed with a minimum of five Colonial representatives (a site commander, safety monitor, technician, runner/communications assistant and accountant).

Access to Release Sites

Access to release sites via other than right-of-way or public roads is to be cleared with the affected property owner or the owner's representative. Also, if the release site is on property adjacent to navigable waters, it may be necessary to obtain a work permit from the United States Coast Guard before clean-up and repair operations begin.

Delineation of Boundaries

Selected sensitive areas are delineated on U.S.G.S. topographic maps showing contributory drainage ditches or dry washes, contributory creeks, main river courses, lakes, ponds, marshlands, any city or community water intakes or commercial cooling water intakes. These areas are sensitive year round. Access to these sites may also be determined by referencing the U.S.G.S. maps.

Encroachment

Every reasonable effort should be taken to notify property owners or tenants before entering property.

The areas sensitive to surface disturbance are likely to create severe problems of erosion and re-vegetation. It is recommended that these areas be avoided. However, it is understood that certain situations may develop that dictate encroachment within sensitive areas. A gravel access road or combination earth and wooden plank access road should be constructed across large wetland or marsh areas. At a minimum, approval should be sought from the Incident Command Center prior to moving into wet or marshy areas.

If encroachment on a surface sensitive area is required, protective measures should be taken so disturbance is minimized. Measures should include the following actions:

- Only trees and shrubs that physically impede surface travel should be cut.
- Trees and shrubs that are removed should be cut flush with ground and not pushed over.
- When access routes follow drainage ditches, a buffer zone should be established along the ditch.

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- When access is required to cross drainage ditches, incised banks should be completely restored and vegetation established.

Criteria for Selecting Release Containment Sites

Pre-planned containment sites are an essential component of control actions. While most of these pre-planned sites have been located on small drainages and points of confluence, containment sites can be constructed on suitable terrain away from drainages. This would be particularly useful in intercepting product near the pipeline or between pre-planned containment sites. The criteria established for selecting additional product containment sites are:

- River and stream characteristics
- Man-made structures
- Topography
- Access to site and proximity to sensitive areas
- Potential release volume
- Time of response

River and Stream Characteristics

The selection of containment sites within rivers and streams must be accomplished with consideration given to flow characteristics.

Important characteristics to be considered are:

- Level of hazard and training of responders
- Environmental impact
- Velocity of stream or river
- Discharge and flow characteristics
- Channel conformation (width, depth, pool riffle ratio)
- Man-made structures (culverts, spur dikes, bridges, canals, low water crossings)
- Side channels and backwater areas
- Presence of ponds adjacent to stream
- Bank Vegetation
- Storage areas for recovery

Man-made Structures

Bridges, culverts, spur dikes, and low water crossings provide ideal access points where dikes, berms, or other diversions can be installed to slow water velocities and facilitate containment procedures.

Site Security

(b) (7)(F), (b) (3)

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Potential Release Volume

The volume of the release must be considered in selecting containment sites. This volume may be used in conjunction with local topographical data and river/stream characteristics to evaluate suitability of sites.

Time of Response and Selection of Containment Sites

Response time is a consideration in the selection of containment sites. Factors to consider include the size of release, time necessary for product to reach a watercourse, and flow velocity. In all instances, containment of product is more critical than trying to intercept the leading edge. When weather or transportation problems delay response time or in the event of a release directly into flowing water, duplicate sites may be required.

Knowledge of local topography aids containment site selections. Topographic maps can indicate natural terrain features, such as depressions, ravines, and dry washes that could lend themselves to constructing containment sites. Topography must be considered when estimating the storage capacity of a potential site, planning access routes for operations (containment, clean-up, disposal) and assessing the speed at which product could reach a containment site.

Initial Response Procedures and Containment and Exclusion Strategies

INITIAL PROCEDURES

Upon confirmation of a release, Colonial must make an initial assessment to determine the material and volume of the release. This assessment is usually completed by the Atlanta Control Room Shift Supervisor. As part of this initial assessment, it is necessary for Colonial field personnel to determine the geographical and environmental factors of the area surrounding the release in order to plan the proper protective and remedial measures. Guidelines for determining whether an environment is sensitive are presented in the next section. The steps for the ascertaining the environmental impact of the release are as follows:

Release site: Investigate the release location and the natural areas already impacted to determine the extent of damage. Determine if any immediate actions at the scene can minimize further damage. At the release site, Colonial Personnel should determine the direction and rate of the flow. Steps should be taken to control the source of material and to contain the release if possible.

Areas of immediate danger: Following the assessment of the release site, Colonial representatives should examine the areas immediately downstream or adjacent to the release. Although these areas may not have been affected by the release, they are in immediate danger of contact with the release. (*Immediate danger can be defined as impact occurring in a matter of hours.*) If sensitive areas are located, then preemptive measures should be taken to minimize the impact of the release prior to contact. This includes, but is not limited to, deployment of boom, and/or construction of dams or other diversion measures to lessen the impact prior to contact with the released material.

Areas of potential danger: While steps are being taken to control the spread of the release, Colonial shall conduct a reconnaissance to determine what other sensitive areas might be affected if the release continues downstream. If sensitive areas are located, provisions shall be made to protect these areas. Preparation should be made for the deployment of additional cleanup resources as necessary.

SECONDARY PROCEDURES

Once a sensitive area has been identified and protective measures have been taken, the Colonial On-Scene coordinator (OSC) shall monitor the integrity and effectiveness of these measures. A minimum daily inspection

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will be carried out to ensure that the protective measures are holding and that no additional measures are required. The Colonial OSC will also monitor the ecological health of the threatened area.

GENERIC CRITERIA

The following is a partial listing of potentially sensitive environmental and/or economic areas:

ENVIRONMENTAL

- A. **Wetlands:** Marshes, swamps, and other areas where water flow is usually slow and has a high occurrence of vegetation. These areas support a large amount of species diversity and are often used as breeding grounds.
- B. **Endangered species:** Areas that contain endangered species, both flora and fauna, exist throughout the Colonial pipeline system. These species are often found in well defined preserves, but they may also exist in small remote populations. For example, in the State of Georgia, a species of river lily exists in only one location, a sand bar in the middle of a particular river.
- C. **Critical habitat:** These areas support communities of animals and plants that may not come into direct contact with the released material, but nonetheless rely on the waterway for food, habitat, or breeding grounds. If a river becomes contaminated sources of drinking water and food for upland species may be affected.
- D. **Natural areas:** These are areas which possess value as a whole eco-system. They may not contain endangered species, but are representative of the eco-system in its most natural state. Examples of these areas are outlined in the Outstanding Rivers List and the List of Wild and Scenic Rivers. Information on environmentally sensitive areas, including natural areas, can be found by querying the Colonial GIS accessible through the Colonial Pipeline intranet homepage.

A Job Aid that provides links to Environmentally Sensitive Area information is available at the following link:

<http://colonialhome.colpipe.com/environmental/ERP/ICS/ERP%20Resources%20and%20References.xls>

Although some information in this Job Aid is only available in GIS/metadata formats, other information can be displayed through interactive maps useful for responders having internet access during a response.

CHARACTERISTICS TO DETERMINE AND IDENTIFY SENSITIVITY

The following factors are to be utilized in determining sensitivity of an area. These factors are not the only criteria for determining sensitivity, but are presented here to provide a general formula.

ENVIRONMENTAL FACTORS

- A. **Geography:** Examine the position of the river or waterway. River and lake characteristics differ whether they are positioned in crystalline rock (e.g., Piedmont) of the eastern US and the carbonates of Tennessee, or the Coastal Zone. The crystalline rock lies above the fall line and the associated waterways are distinguished by shallow, fast-flowing rivers which usually have many changes in direction. The forest surrounding a crystalline rock river consists predominately of hardwood trees, and the land slopes sharply to the river. Below the fall line, in the Coastal Zone, the rivers straighten and widen with a steady flow. The land around the river has a more gradual slope.

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Many of the larger lakes along the pipeline have been developed by the construction of dams along rivers. These areas are widely used by communities for water supply and/or recreation and a release can significantly affect these activities. Conditions vary whether a waterway is a tributary stream or major river. Tributaries are usually not as fast-flowing as major rivers and are often used as breeding grounds for aquatic wildlife. Also, tributaries do not “flush out” as fast as major rivers and release material may collect in pools or eddies.

- B. **Season:** Water flow, and the dispersion of flora and fauna, varies widely with the season. Responders should determine what species and habitats are more susceptible based on the time of the year. In the winter time, vegetation is dormant and less vulnerable than in the summer growth seasons. The animal communities found in and around a waterway also differ in members and numbers throughout the year.
- C. **Habitat:** The types of habitat that may support endangered species are not uniformly distributed on rivers, even those rivers which are similar. The potential for sensitive habitats can be evaluated by determining the amount of development present on the river, the impact of past releases, or whether the location could be considered pristine.
- D. **List /Maps:** Consult the Colonial Pipeline Company Spill Response Maps, Environmentally Sensitive Areas and Areas of Concern information available through the Colonial GIS. The Release Response Maps and associated GIS information provides areas of rivers, state and federal forests and parks, and State and National Wildlife areas. Consult state and federal historic preservationists and wildlife authorities for detailed information for site that could be affected immediately by a release or as the response progresses.
- E. **Local Resources:** Determine what local sources of information are available for the area of the release. Consult State Heritage Programs or local conservation groups for detailed information concerning impacts a release might have on the areas biological systems.
- F. **On-Scene Conditions:** Use ones’ own observation and the information gathered by advance teams to determine areas of potential impact. Conduct reconnaissance of waterways to determine what areas are likely to be sensitive. All releases have different components, as do all eco-systems and natural habitats. Use all information available to determine the best method for determining the most effective strategy for protecting sensitive environments.

ECONOMIC

Economically sensitive areas determined by the *Oil Pollution Act of 1990* include public drinking water intakes which are listed in Section 9.06. These facilities are located on the shores of streams or rivers used as a municipal water source. These intake points can be located by consulting the Colonial Spill Response maps, or by contacting the agencies concerned with local water supply (See Section 2.04 and 5.03).

These agencies should be notified of the release as soon as possible and advised to prepare for the protection of the municipal water intakes. Additional protection measures may have to be undertaken to prevent the contamination of the local drinking water supply.

A Job Aid that provides links to Economically Sensitive Area information is available at the following link:

<http://colonialhome.colpipe.com/environmental/ERP/ICS/ERP%20Resources%20and%20References.xls>

Although some information in this Job Aid is only available in GIS/metadata formats, other information can be displayed through interactive maps useful for responders having internet access during a response.

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General Response Strategies

Methods of exclusion and containment may be used in the following situations: (More than one method may be used in each situation.)

- Pipeline right of way and access roads
- Small creeks, ponds and swamp area
- Highways
- Large rivers and floodplains
- Large lakes

Pipeline Right of Way and Access Roads

Workspace constructed parallel to the pipeline and existing access roads can be utilized to block the flow of product in areas down gradient from the pipeline. Exercise caution not to damage the pipeline, coating, or other nearby utilities. Drainage structures through the roads will need to be blocked with earth and polyethylene sheathing, and/or plywood and sandbags.

At some locations, interception trenches can be excavated to divert or contain product. These may have to be lined with an impermeable material. Trenches can be dug and barriers placed in the vegetative mat to limit subsurface product migration, possibly in conjunction with sorbent material and impermeable liners.

Small Creeks, Ponds and Swamp Areas

Small creeks can be entirely blocked by damming if there is sufficient area upstream. However, a means of stopping the product and letting the water continue downstream will generally be required. Underflow dams and overflow berms or a dam in conjunction with a pump or siphon, may be used for this. These barriers should be located so that a pond will form upstream from the barrier, allowing the use of sorbents, booms, and skimmers. In addition, pools may exist behind log and debris jams where containment could be achieved. On fast flowing creeks, a series of containment barriers such as filter fences using hardware cloth or chicken wire structures (with sorbents) should be used. It may be necessary to remove logs and other debris in creeks and streams to allow effective deployment and maintenance of booms or to allow product to flow freely. It may also be necessary to install steel nets, chicken wire or similar devices upstream of containment devices in order to protect both equipment and personnel. To facilitate cleanup and removal, the product should be diverted to an area with adequate storage.

On ponds, the outlet should be boomed to let the product collect on the surface of the pond. Additional booms should be deployed around the slick to prevent it from contaminating the shoreline. Sorbent booms and conventional booms deployed in tandem can be effective, with both booms deployed across the pond outlet. Sorbent booms should be farther downstream to collect portions of the product that may have passed the conventional boom. Sensitive areas along creek banks and shorelines can be protected by the appropriate booming strategy.

Containment in wet and swampy areas will be limited to interception with barriers and sorbent materials. Swamp areas will not generally support mechanized equipment. Action in these areas will be limited and usually have to be accomplished by hand and/or with the use of boats.

Highways

Highways and roads can serve as important containment barriers if the culverts passing beneath them are blocked. Most culverts are two feet or less in diameter and can be blocked with sand bags, sheets of plywood or earthen material. Larger culverts and some smaller ones transporting large volumes of water will require an underflow device. Where a large volume of product is involved and/or inadequate storage capacity exists on the side of the highway, it may be advantageous to allow all or part of the release to pass beneath the highway

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or roadway to a down gradient area with sufficient storage capacity. Dams should be constructed across the bar ditch to provide containment.

Where there is no bar ditch, or where the highway is not elevated, product may pass over the highway if it is not blocked. Material present on the road shoulder will usually contribute to blocking product flow.

Floodplains

Product approaching a floodplain should be blocked at the point of entry (contained within the drainage course). It is particularly important to have berms constructed between the release and the main river channel or water course. Underflow devices should be used if there is flowing water. Diversion berms can be built using booms to direct the product to a floodplain (side channel, abandoned meander or channel, or an excavated diversion pit). Floodplain debris can be used as containment barriers. Logs on sand or gravel bars and side channels create pools where product can be contained. Berms should be constructed downstream from the debris to act as a backup containment barrier.

Large Rivers

Releases on a main river channel will be difficult to contain but can be addressed in several ways. During periods of high stream flow and velocity, a series of diversion berms and booms should be used to divert the product to a containment pit or floodplain. On smaller creeks or rivers, digging a trench to create eddies and calm water can create a recovery area. This technique is more effective when used in conjunction with an overflow dam directly downstream. The pit should be located where rapid removal of the product is possible. The usefulness of booms on fast flowing large rivers is limited. However, they can be deployed in containment pits upstream from natural or created pools and near sandbars. Product should be removed from behind the boom as rapidly as possible to prevent bypassing. Product entering the river can be partially controlled by deploying booms parallel to the river bank downstream from the point of entry. Under some circumstances, side channels could be converted to containment ponds utilizing the following procedures:

Berm or dike the downstream end of the side channel.

Construct a suitable channel for a diversion skimmer in conjunction with an overflow berm that diverts the product into the mouth of the side channel and allows the majority of water to flow down the main channel.

Under most circumstances, containment barriers will have to be continually maintained. Their resistance to erosive forces can be increased if the upstream portion of the earth barrier is covered with large pieces of heavy material such as rock rip rap or polyethylene sheathing.

Large Lakes

Booms are the most useful means of containment on large lakes. The most effective technique is to encircle the product with booms and direct, or herd, it to a recovery site with slow moving boats. During high water periods, debris moving into the lake area should be removed from behind the boom. Constant monitoring is essential to maintain booms and ensure product containment.

If product is flowing into the lake, a boom should be secured to the shore on one side of the point of entry and deployed around the perimeters of the slick by boat until the product is encircled. Conventional booms and sorbent booms deployed in tandem may be effective. Deploy both across the lake outlet with the sorbent boom downstream or behind the conventional boom. Sorbent pads can be distributed between the two booms. This technique will pick up product that passes the primary boom.

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Methods of Containment and Exclusions

The following are methods that can help limit the spread of released product or to exclude it from sensitive areas. These can be implemented individually or in combination.

- Dams
- Berms (Dikes)
- Culvert blocking
- Interception barriers
- Sorbent and Trash Fences
- Booming

Since some of these techniques involve removal or disturbance of vegetative cover, it must be taken into account that many of the soils along pipeline routes are extremely sensitive and that such disturbance can cause hydraulic erosion. The Contingency Plan recommends precautions to prevent erosion and to completely restore soil and vegetation in disturbed areas, or the use of sound rip rap such as stone, hay or timber where applicable.

A second factor to consider when evaluating containment techniques at a specific site is the availability of on-site storage for contained or diverted product. In order for any containment technique to be effective, it is essential that the product be stored or removed from behind the containment or diversion device. The area where product is being diverted must be capable of storing all the material in a location where it may later be recovered. The same precaution holds true for product being stored up gradient from a containment device or structure.

Dams

There are two types of dam construction appropriate for product containment: The complete blocking of an actual or potential drainage course (a blocking dam) and the blocking of the product flow while letting water continue down-slope (an underflow dam).

Blocking Dams

Blocking dams should be constructed only across drainage courses which have little or no water flow. The dam should be situated at an accessible point where there are high banks on the upstream side. It must be well keyed into the banks and buttressed to support the back pressure. It can be constructed from several types of materials - earth, sand or earth bags, sheets of metal or wood or any material that blocks flow. Approval should be obtained for use of off-site material for control actions. Other materials can be improvised from portions of the right of way.

The dam can be built across the drainage course to form a holding pond or reservoir to contain the released product and water. Water trapped behind the dam can be pumped out by placing a suction (intake) hose at the base of the dam on the upstream side, leaving product trapped behind the dam for subsequent removal. The discharge (outlet) hose should be placed on the downstream side. Trapped water can also be removed across the dam with one or more siphons.

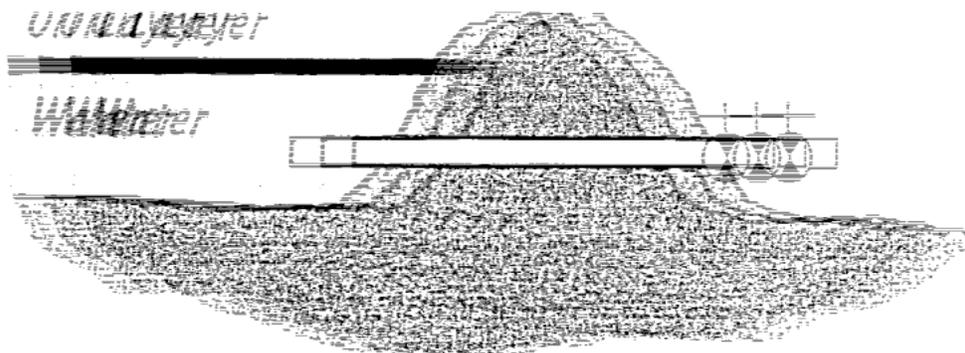
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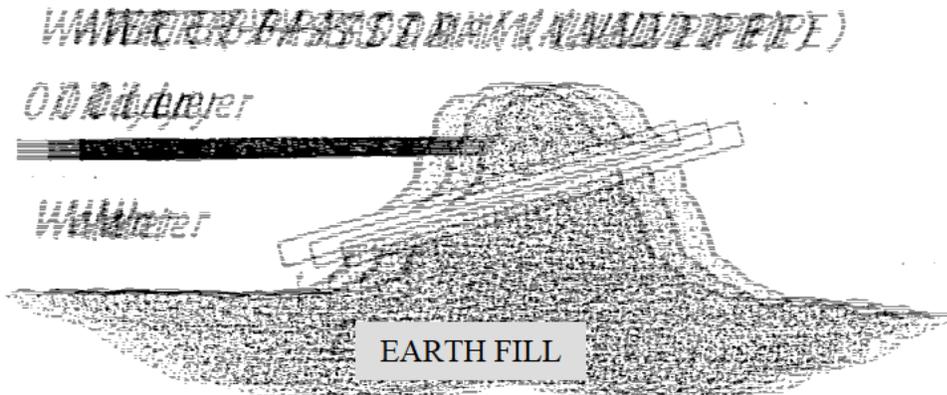
Underflow Dams

An underflow dam may be used for waterways with higher flow rates. If the dam is to be effective, the product/water interface must be above the top of the underflow opening. To maintain the proper level, it is necessary to remove some of the water through horizontal or inclined pipes, preferably with valves.

The underflow dam can be constructed by placing pipes of appropriate size on the stream bed and building an earthen or sandbag dam over the pipe across the waterway. The diameter of the pipe will depend on the flow rate of the stream and the depth of the water behind the dam. For example, 24" to 30" diameter pipe will have sufficient capacity for a flow rate of up to 30 cubic feet per second. A pair or series of dams may be required downstream if sufficient underflow cannot be maintained.



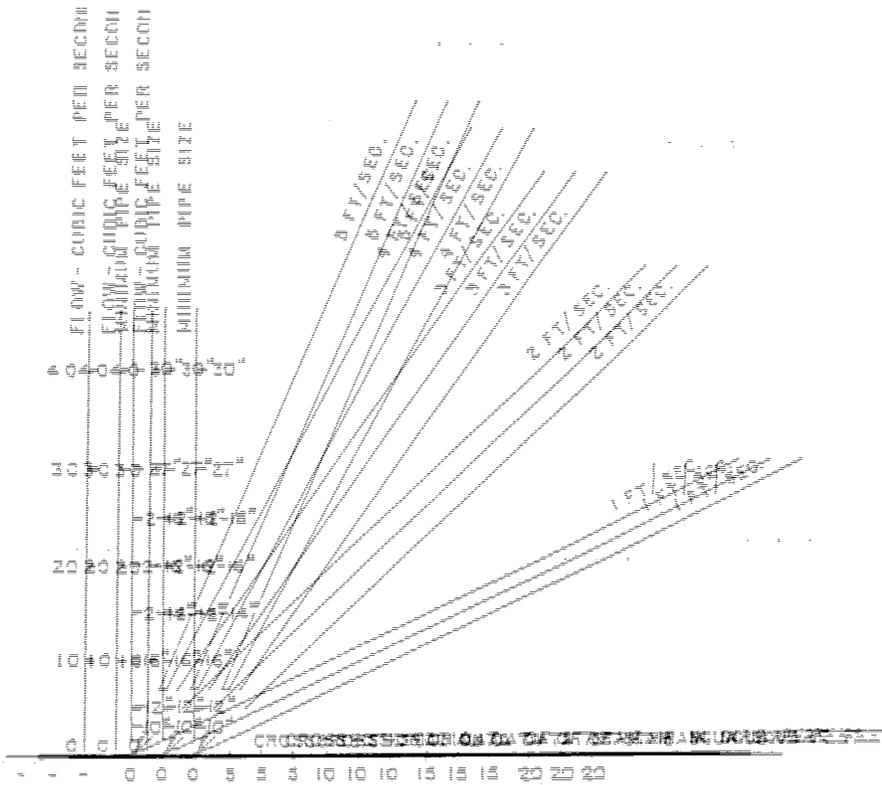
Crest of dam should be of sufficient width to accommodate compaction vehicle. Height of fill is 2 to 3 feet above fluid level. Normal fall angle of fill will suffice for sloping.



WATER FLOW OF STREAM IS BY-PASSED TO MAINTAIN RESERVOIR LEVEL. ELEVATE DISCHARGE END OF TUBE(S) TO DESIRED RESERVOIR LEVEL.



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PIPE SIZE (IN)	1 FT/SEC	2 FT/SEC	3 FT/SEC	4 FT/SEC	5 FT/SEC	6 FT/SEC	7 FT/SEC	8 FT/SEC
36	36	72	108	144	180	216	252	288
30	30	60	90	120	150	180	210	240
24	24	48	72	96	120	144	168	192
18	18	36	54	72	90	108	126	144
12	12	24	36	48	60	72	84	96
8	8	16	24	32	40	48	56	64
6	6	12	18	24	30	36	42	48
4	4	8	12	16	20	24	28	32
3	3	6	9	12	15	18	21	24
2	2	4	6	8	10	12	14	16
1	1	2	3	4	5	6	7	8

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
6" x 10" 10/14/10 10/14/10 10/14/10 10/14/10 10/14/10 10/14/10 10/14/10 10/14/10 10/14/10

WATER AT 1500 PSI (IN THE PRESSURE PART)

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Berms

Berms are constructed to control flow by diversion or overflow. For creeks and rivers, overflow berms (weirs) or diversion berms can be constructed from materials in the floodplains; on land, earth berms can be built to divert or impede flow. In fast moving streams, berms may have to be continually maintained. Multiple berms should be utilized and maintained on a 24 hour basis to prevent channelization and product bypassing the berm. Sorbents should be used to collect any residual product remaining behind the containment structures after initial recovery operations have been completed.

Diversion Berms

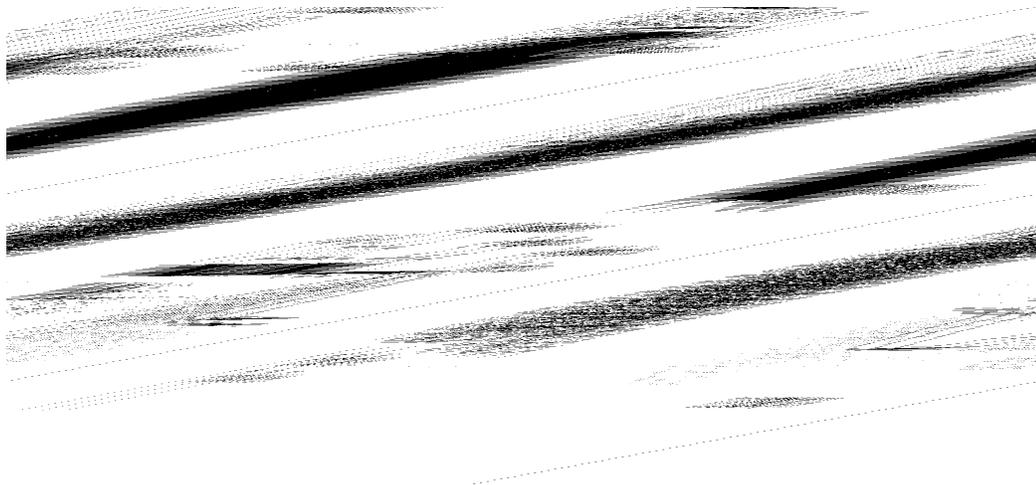
Diversion berms may be constructed from floodplain materials on large rivers. In most situations they should be constructed in a series, connected with short pieces of boom in a pattern that forces product to flow into a containment pit, side channel or similar features for temporary storage. The spacing between each berm should allow water to flow under the connecting booms while forcing product to the side. The size and angle of the berms will be dictated by stream velocity, channel size and product volume. As these factors increase, the required size of the berms will increase, and the angle between the upstream side of the berms and the stream bank will decrease.

Overflow Berms (Weirs)

The purpose of overflow berms or weirs is to reduce water velocity by widening and deepening the stream. They can be constructed in small streams or in the side channels of larger rivers. Overflow berms must be constructed across the entire channel. Materials should be excavated from the upstream side of the berm, creating a pool where stream flow will be retarded permitting boom deployment and product removal upstream from the berm. The required height and width of the berm will increase with stream depth and water velocity.

Berms Built on Land

In most cases, berms constructed on land will act as barriers to product flow. They may also be used to divert the flow of product in a different direction so as to protect a sensitive area. A windrow of material along pipeline right of way, a highway, or road can prevent a release from crossing the right of way or road and divert it into a storage area. Berms can serve as protective barriers near sensitive areas.



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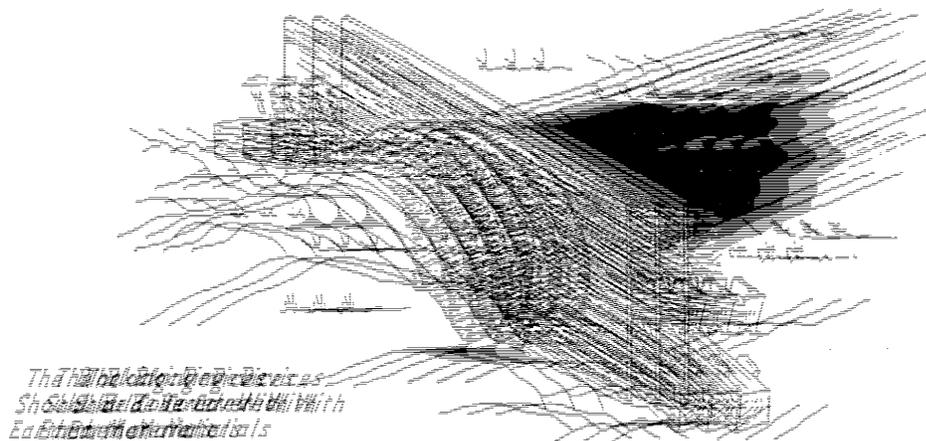
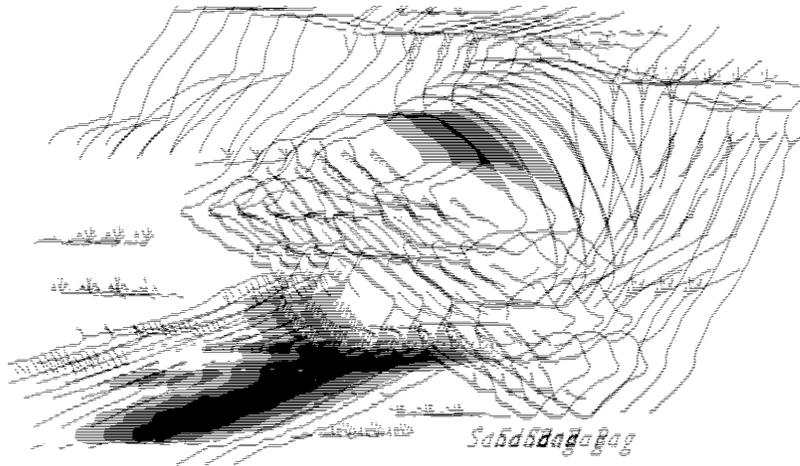
RELEASE RESPONSE STRATEGIES

Culvert Blocking

There are several ways to block culverts. Perhaps the most effective method is to block them with earthen material - to pile dirt, sand or a similar material over the end of the culvert. Placing sandbags or sheets of plywood over the end will also stop or retard flow.

Culverts that contain flowing water, and are to be blocked, may require the installation of an underflow device, or a pump or siphon to remove impounded water. Small volumes of water can be passed through a flume pipe covered with sandbags or dirt. Larger culverts that transport entire streams, tributaries, creeks, or small rivers will require a more sophisticated underflow device. This can be constructed from large timbers, steel pipe and plating.

Two pieces of pipe can be welded to a steel plate (dimensions of the pipe and plate will depend upon the size of the culvert). Large timbers with holes drilled in each end can be slipped over the pipes to act as a dam. Small blocks (chocks) can be inserted between the bottom timber and the steel plate to provide space for water to flow; the size of the chocks will vary with the volume of water that has to be removed from behind the dam.



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Interception Barriers

Interception barriers consist of trenches, ditches, and sheets of metal or plywood that intercept the subsurface flow of oil. Subsurface flow may be through a permeable layer that may or may not be transporting groundwater. It may also be between the vegetative mat and the ground surface. Trenches and sheet barriers may be used separately or together.

The direction of subsurface flow must be determined before a barrier is installed. First, surface reconnaissance of the area should be made. Good indications of flow are pools of product on the ground, dying or dead vegetation or an odor of product. If there are ditches that provide exposed banks, the banks should be examined closely for seeping product. The entire area of suspected subsurface product flow should be checked. Probe rods and hydrocarbon detectors can be used. The boundaries of subsurface contamination can often be located by "poke and sniff" methods. Subsurface geology may permit product to flow in directions that do not coincide with surface gradients.



Sorbent and Trash Fences

Sorbent and trash fences may be used wherever stream depth or configuration render dams, berms or booms impractical. Fences can be constructed quickly with stakes, and wire mesh. Sorbent booms, pads, sheets, chips, straw and small bushes may be used effectively. The mesh will hold the sorbent material while allowing the passage of water. This technique will require 24-hour maintenance to remove the product-saturated sorbents and to replace them with fresh material.

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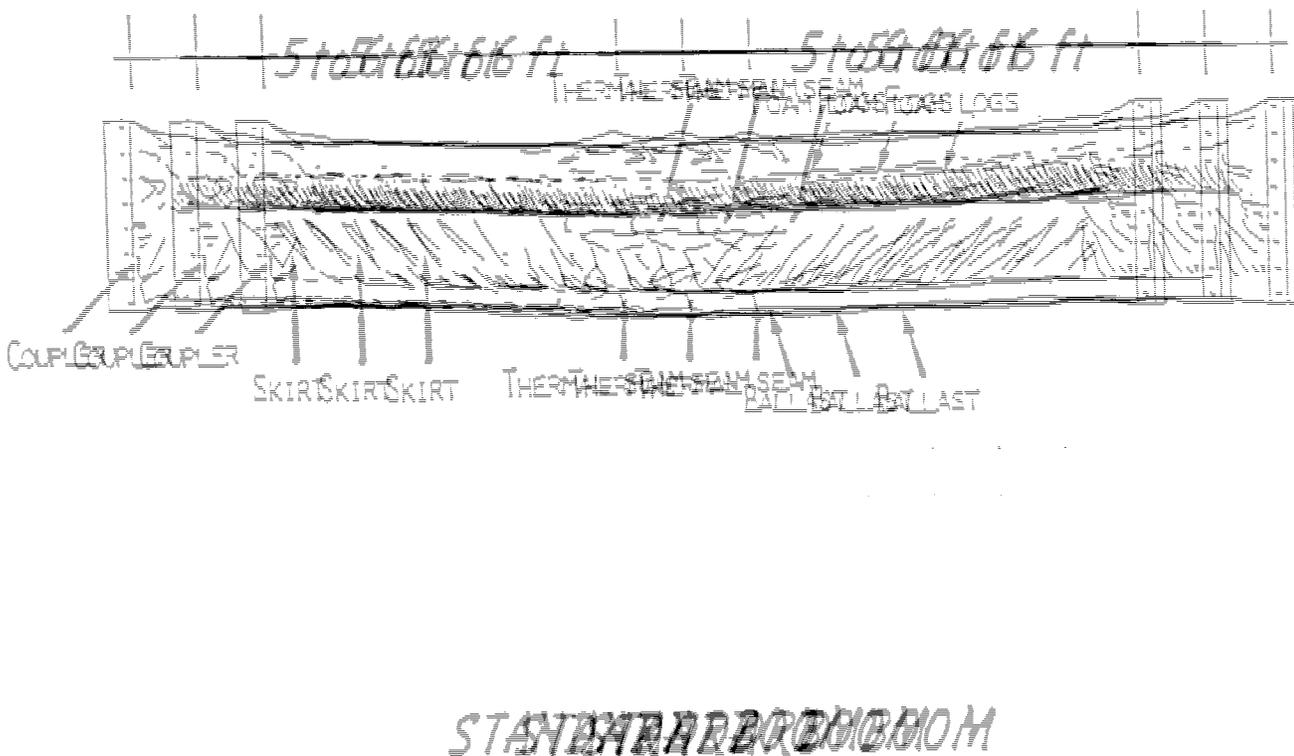
Booming

The diagram below depicts the typical boom used in rivers, lakes and larger bodies of water. The size of the boom (skirt width, ballast, etc.) varies and is dependent on the purpose for which the boom is designed (open sea, harbor, river, etc.).

Booms may be deployed for two distinct purposes.

- To block and contain the flow of product at recovery location.
- To divert the product to a collection point.

In order for any of the methods to be effective, boom must be deployed at a minimum angle of 30 degrees[□]. During high water periods, booms will require 24-hour maintenance. Debris must be continually removed to prevent damage to the boom material and potential release of captured product.



Booms to Block the Flow of Product

Booms used in a stream to block product flow and divert product into a collection point are deployed from bank to bank or from shore to shore. This technique is not likely to be useful on larger rivers. Current velocities over one knot will make it difficult to block the flow of product, and the product will have to be removed rapidly from the upstream side of the boom.

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Booms deployed across the inlet stream to a lake may prevent product from reaching the lake itself. Boom the inlet and deploy preventive booms farther into the lake if necessary. Use containment booming along the shore to minimize the impact. However, booming the outlet to a lake is generally more practical because the surface of the lake provides a large storage area, and the decrease in current velocity aids in product recovery. To prevent a release from spreading once it has reached a lake, two boats towing a long boom can encircle the slick and herd the product to a recovery site for removal.

Booms deployed across a river or stream will usually contain the flow of product if current velocity is less than about one knot (1.7 fps). Surface velocity of product is affected by a factor of approximately 3% of wind speed. This should be taken into consideration regardless of the wind direction.

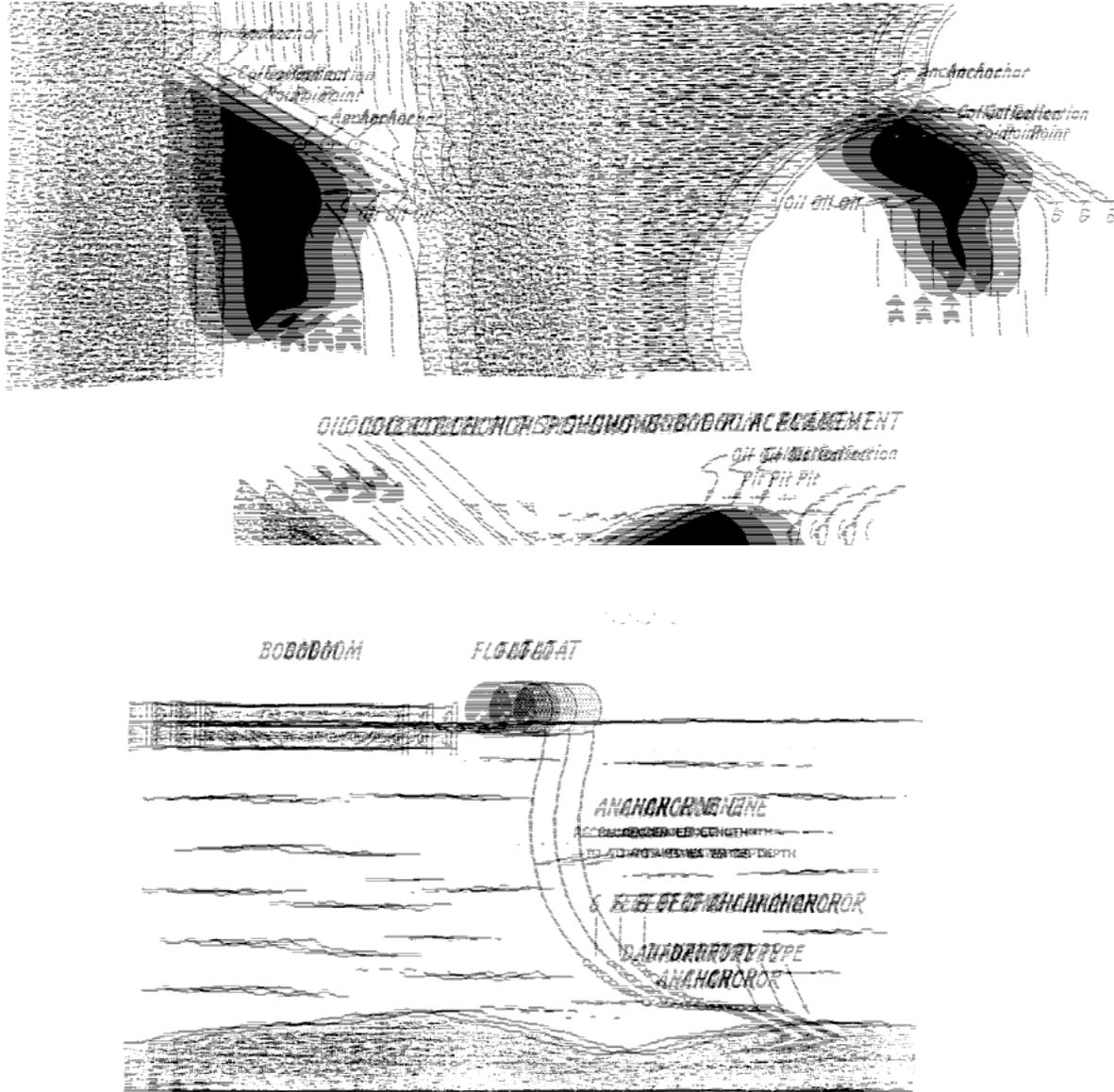
If product is flowing into a lake or stream and then onto the bank, or if the product is leaking from the ground into a water body, booms can be placed parallel to the bank. This creates a surface area from which the product may be skimmed and recovered. Booms can also be placed parallel to shore lines and banks to prevent contamination of sensitive areas.

Diversion booming should be used if current velocity does not permit blocking and containment of product.

Deflection Booming

Diversion booms are deployed to direct product toward a containment pit or other collection area or to divert product away from environmentally sensitive areas. They can be deployed as single or multiple sections. Multiple booms may be staggered across main or side channels, or used in conjunction with berms and river bars. The specific technique used depends on river characteristics and size. When using deflection booms to divert product toward a containment pit/collection area, the down stream end at the collection area should be anchored by natural features (rocks and trees). The choice of upstream anchors depends on river size, system characteristics (incised or braided) and whether or not the boom angle needs to be adjusted in response to water velocity and product volume. Vehicles or boats may be used for upstream anchoring. Diversion booms deployed to protect environmentally sensitive areas will generally be fixed between boats, natural features, or berms.

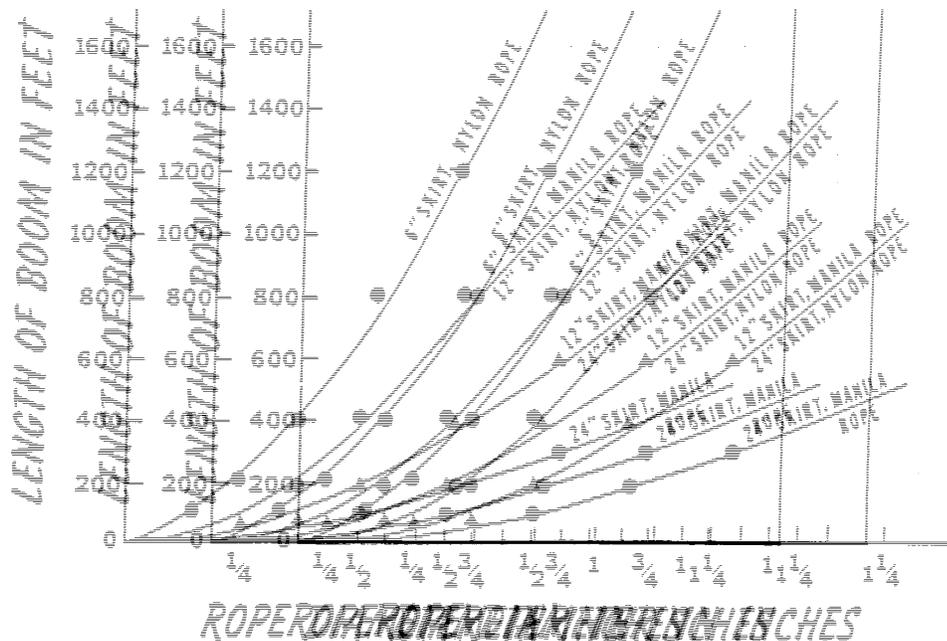
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In some instances it may not be possible or desirable to boom from shore to shore. The diagram above illustrates the proper technique for anchoring boom in mid stream. This method may be used for one or both ends of the boom.

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When anchoring boom either from shore to shore, shore to anchor, or anchor to anchor, consideration should be given to the size of rope necessary to secure the boom. The chart below depicts the correct rope diameter for various lengths and sizes of boom.



Skimmers

Skimming devices may be used where limited access would be a problem for larger vehicles and clean-up equipment. However, in order to be used in areas of limited access, the skimmer of choice should have the following characteristics:

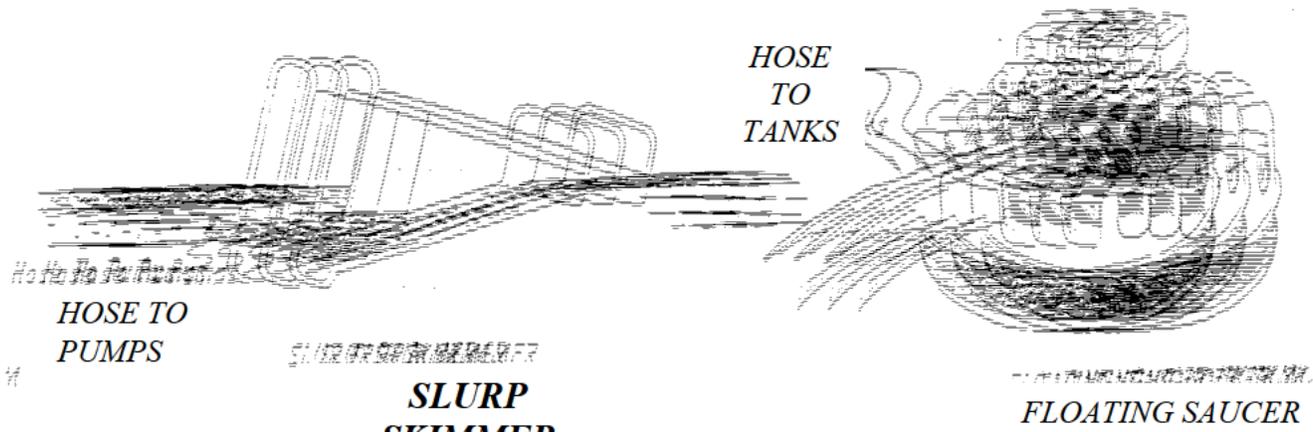
- Portability – The skimmer should be small and lightweight to allow manual deployment by two or three men.
- Shallow Draft – The skimmer should be able to operate in shallow water close to the banks of streams and lake.
- Maneuverability – The skimmer should be able to move around obstructions such as fallen trees and rocks and work up against a boom.

Skimmers with the above specifications can be used along the shore lines of streams or banks in conjunction with diversion boom. The skimmers can also be used aboard a workboat inside of containment boom. In all cases, on-shore storage for collected product will have to be provided.

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Two of the most common types of skimmers are shown below:



Clean up and Recovery Techniques

Early cleanup and disposal actions may be required to reduce or eliminate a threat to the public. If a threat to the public or environmentally sensitive area does not exist, cleanup and disposal can normally wait until after containment is accomplished and the pipeline is repaired. The following systems and materials can facilitate the removal of product and product contaminated materials:

- Heavy equipment
- Pressurized equipment
- Manual methods
- Skimmers
- Pumps
- Sorbents
- Pumping and flotation

It should be noted that the use of dispersants and other chemicals on releases is not an approved process on inland waters by any of the USEPA Regions.

Heavy Equipment

Bulldozers, front-end loaders, and backhoes can be used to remove product-contaminated soils from beaches, pipeline rights of way, river deltas, and floodplains. The same basic technique can be applied to cleaning up product along a highway or road.

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Pressurized Equipment

There are four types of pressurized systems that are useful in removing product from rocks and man-made structures: hydro-blasting, air blasting, sandblasting and steam cleaning. If one of these procedures is used, the Environmental Team must be consulted to determine if approval of these techniques by the appropriate state and federal agencies is necessary.

Pressurized equipment will remove a film of product from man-made structures. Care should be taken to ensure that the cleaning techniques do not cause more harm to the surface than the product. Hydro-blasting and steam cleaning will create pools of product around the surface being cleaned, and should always be used in conjunction with sorbents. Pressurized equipment should only be used with prior approval of state and federal agencies.

Safety should also be consulted to determine safe measures required when using pressure devices.

Manual Methods

The final stages of product clean-up will probably involve the hand cleaning of many surfaces, particularly areas that might be damaged by heavy equipment. Areas that are inaccessible to equipment or have only a small surface area should be cleaned by hand. Hand scrapers and wire brushes may be used to remove product impounded on rocks and man-made structures. A solvent such as acetone or a ketone that will remove this substance may be useful and will evaporate quickly, reducing the likelihood of further contamination. However, solvents are toxic and should not be used on surfaces having life forms. Approval by regulatory authorities must be obtained before using such methods.

Small pools of oil can be removed with sorbents. Product soaked debris may be cleaned up with shovels and rakes. If they must be left on site for periods of time, contaminated materials should be placed in impermeable storage containers such as polyethylene trash bags, polyethylene lined pits or approved steel drums. Small quantities of product contaminated debris can be placed in bags or piled up for removal. It may be necessary to remove contaminated vegetation and small rocks and debris by hand.

Skimmers

Skimmers are the simplest and most effective tools for removing product from the surface of water. Skimmers are normally used in conjunction with booms or diversion barriers. The three types of skimmers most commonly used are:

- Floating suction skimmer
- Floating weir skimming
- Hydraulically balanced floating weir skimmer

The three basic types of skimmers work in conjunction with booms for contained product. The principles are as follows: Floating suction units are constructed so the area of the mouth of the skimmer is large enough to permit wide coverage. In a floating suction head, a self-priming pump is needed to draw the product into the head, and the suction head is balanced to float at the product/water interface. Hoses float on top of the surface with the use of flotation collars. The advantages of suction-type skimmers are that they are simple to operate and can be used in most situations.

Floating weir skimmers are designed to allow product to flow over the top edge of a weir and into a collecting vessel where the product is removed through a flexible hose. The edge of the weir can be adjusted so that it is set near the product/water interface to maintain good product recovery efficiency. The weir skimmer has buoyancy from floating cylinders. Hydraulically balanced floating weir skimmers automatically adjust according to pre-set internal liquid or air level. A flexible suction hose is connected to the bottom of the unit to remove the product as it collects inside the skimmer. Weir devices are used in many places because they are relatively inexpensive and can be constructed quickly. Support equipment, such as hoses, pumps, and storage tanks or

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transport tankers, is required. The weir-type skimmer operates on the principle of gravity. The top of the weir is positioned as close to the product/water interface as possible. The skimmer moves through the slick or is positioned in the current to intercept the product. The product and water flows across the weir into a sump or enclosed area. A suction pump transfers the mixture to storage tankers for transportation to permanent storage. Like most skimmers, this device works best in calm waters with a thick product slick. By carefully adjusting the weir, the maximum amount of product can be skimmed while minimizing the volume of water collected. Properly deployed boom can serve to concentrate the product and increase recovery rates.

Pumps

Vacuum trucks, diaphragm, and other types of pumps are essential in cleaning up a product release. Vacuum trucks may be positioned to directly remove product from the boom or hoses and temporary pipelines may be utilized. To increase the pumping efficiency, position transport tankers close by to off-load into them. This gives vacuum trucks quick turnaround time to continue pumping. After obtaining approval from the presiding regulatory authority, trucks should be decanted of water on site.

Diaphragm pumps may be useful in cleaning up large terrestrial releases. Because of their pumping characteristics, they are most efficient when the intake head is entirely submerged in the product. The discharge hose can lead into a truck or containment pit.

Sorbents

There are two classes of sorbents available for oil:

Commercially available sorbents – packaged as rolls, pads, and booms

Naturally occurring materials – straw, hay, ground-corn cobs, peat, sawdust, and wood chips provide adequate sorption in the absence of commercial sorbents.

Additional commercial sorbents in the form of unconsolidated or bulk materials are also available but are difficult to retrieve and should be used only when necessary.

Commercial sorbents must be moved frequently to be effective. Rolls and pads are most efficient if they are turned over when the bottom side is saturated with product. Sorbent booms should be frequently rolled so that they are thoroughly exposed to the product. Booms may have to be weighted to ensure that they come in contact with the product. Sorbent booms can be used to remove light and/or small slicks from streams, ponds and lakes. The boom may be deployed between two boats or held by hand and dragged slowly through the slick or placed immediately downstream of primary boom to catch any product that bypasses the booms.

Sorbent pads and rolls are used to clean up residual slicks on bodies of water, shorelines, small pools of product on land, and small seeps. Pads can be distributed throughout boggy, marshy and vegetated areas to remove small pools of product. They are particularly useful in areas that are sensitive to vehicular traffic as well as in remote areas.

Sorbents should be distributed during containment operations to absorb small amounts of product escaping from between the booms. This will reduce the area of contamination.

One disadvantage of the natural organic sorbents is their tendency to absorb water as well as product. Once applied, they should be recovered quickly. The natural organics retain from three to six times their weight in product, which is slightly less than that of mineral products.

Baled fibrous materials such as straw and peat moss can be distributed by a commercial mulching machine, or by hand. After use, materials are usually collected manually. Straw and peat are relatively inexpensive and readily available. However, they tend to pose difficulty with recovery and disposal operations.

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Fine particulate sorbents such as ground corn cobs and sawdust are easier to spread than the fibrous materials. If used, they should be distributed from the up-wind side of a slick with a fan or blower or by hand. A boom should be placed downwind to collect both product and sorbent for easier recovery. Organic sorbents should be collected shortly after application.

Pumping and Flotation

In addition to skimming, there are two techniques involving pumping that apply to cleanup:

- Water flooding (flotation)
- Pumping subsurface product-contaminated water to the surface

Water flooding is a means of floating released product to the surface where it can be cleaned up with sorbents, skimmers, and booms.

In areas such as bogs as well as sand and gravel areas, product that has migrated downward can be forced to the surface by water flooding. A dam or other method of interception barrier can be installed down gradient or downstream from the contaminated area. Water can be impounded or backed up over contaminated soil in the dammed area and used to float product to the surface. The product can be removed using booms, skimmers and sorbents. In areas where the contaminated material is more consolidated, the water may have to be pumped into the ground through one or more holes drilled down to the groundwater table.

When the oil has migrated to a depth of more than six feet, drilling and pumping techniques will have to be employed. Drilling and subsequent pumping of contaminated groundwater requires some knowledge of the subsurface hydrology of the affected areas. The following should be determined before implementing this process:

- Flow rates within the contaminated aquifer
- Depth of the subsurface flow
- Amount of water being supplied to the aquifer
- Extent of the contamination

The depth of the groundwater table (GWT) can be determined by forcing a tube into the soil layers. Pumping will lower the GWT, forming a depression that will trap the product so it can be pumped out. The size of pumps and rates of pumping are dictated by the rate of groundwater flow, the amount of water replenishing the GWT and the amount of product released. The product in the water pumped from the hole may be emulsified. The discharge hose of the pump should be connected directly to at least two large storage containers. Hoses and/or temporary pipelines may be used to provide this connection in cases where pumping units and storage containers are some distance apart.

While one storage receptacle is being filled, the other should be discharged into an oil/water separator. If pumping is discontinued before the entire volume of product is removed, the GWT will return to its former position, allowing the product to migrate farther into the aquifer.

Water used for the purposes of flooding and pumping should be properly treated before being discharged. It may be necessary to consult with the Environmental Team before using local streams, lakes, or rivers as a source of water. In some cases, a permit may be required from the appropriate state or federal department or Fish and Game Commission. If a portable oil/water separator is available, treated water may be re-circulated.

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Transport and Storage of Recovered Product

Work order contracts are maintained with tank truck companies system-wide. Additionally, a listing of contacts with other tank truck contractors is maintained in each response zone. Adequate transportation to handle the recovered product will be arranged.

Recovered product may be transported to the nearest Colonial facility downstream of the affected line section and either placed in tankage or injected into the pipeline. Colonial's facilities are located approximately every 35 miles along the pipeline.

If the recovered product volume is greater than the tank capacity at a Colonial facility, the product will be injected into the pipeline. Product may be pulled away from the injection location, thereby creating "storage" adequate for worst case volumes.

Dispersing Agents

Dispersing agents, also called dispersants, are chemicals that contain surfactants and/or solvent compounds that act to break petroleum oil into small droplets. In an oil release, these droplets disperse into the water column where they are subjected to natural processes, such as waves and currents that help to further break them down. This helps to clear oil from the water's surface, making it less likely that the oil slick will reach the shoreline.

Environmental factors, including water salinity, temperature, and conditions at sea influence the effectiveness of dispersants. Studies have shown that most dispersants work best at salinities close to that of normal seawater. **EPA and/or State policies do not allow the use of dispersants unless authorized by an On-Scene Coordinator or the Regional Response Team.**

Types of Environments Impacted

Freshwater Marshes/Swamps

Description:

- Marshes characterized by soft-bodied, non-persistent, herbaceous vegetation, such as grasses. Swamps also have dense stands of water tolerant shrubs and trees.
- High degree of species diversity. May harbor sensitive or endangered species.
- Breeding and nursery areas for many species.
- Sediments usually consist of organic soils with a soupy consistency.
- Foot travel tends to be difficult.

Predicted Impact:

- Minimal flushing and organic soils allow oil to remain in environment.
- Season is important – dormant vegetation least sensitive; blooming and budding plants most sensitive.
- High mortality rate – especially for reptiles, amphibians and crustaceans.
- Trace contamination can impact water supplies.

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Suggested Actions:

- High-priority areas require the use of release protection devices minimize impact (i.e. deflection booms, skimmers).
- Allow lightly covered areas to recover naturally.
- Avoid activities that mix oil into organic soils and sediments.
- Conduct manual pickup from boats and floating platforms.
- Use the least intrusive cleanup methods. A no-action alternative may be appropriate to minimize the environmental impact.
- Quick flushing and removal of oil while still fresh can reduce long-term impacts.

Vegetated Bank

Description:

- Low banks with grasses or steeper banks with trees.
- Located in fresh or brackish water.
- Contain a variety of plant species.

Predicted Impact:

- Heavy oil concentrations penetrate areas and coat plant and ground surfaces. Impact can be severe.
- Oil can persist for months.
- Water supplies can be impacted through trace contamination.

Suggested Actions:

- Use caution when cleaning. Supervise and minimize plant cutting, if conducted.
- A no-action alternative may be appropriate to minimize environmental impact.
- Cleanup usually unnecessary for light coatings; heavier accumulations may require sediment removal to allow new growth.
- Low-pressure spraying may aid removal.

Sand Beaches

Description:

- Fine/coarse sand and gravel beaches. Typically found along coastal areas and along sandbars in inland rivers.
- Sloping profiles vary from gentle to steep.
- Species density and diversity low along coarse sand or gravel beaches.

Predicted Impact:

- Heavy accumulations of oil can cover entire beach surface.
- Oil can penetrate from 15 cm to 60 cm deep.
- Organisms living along beach killed through smothering or by oil in the water column. Reduces food sources for birds and other animals.
- Birds and animals may become oil coated.

Suggested Actions:

- Fine sand beaches are easier to clean.
- Minimize sand removal to prevent erosion. Manual cleanup more efficient. Heavy equipment may remove excess sand.
- Prevent grinding of oil deeper into beach by limiting activity in heavily contaminated areas

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Riprap Structures

Description:

- Cobble to boulder-sized rocks used for shoreline protection.
- Organisms and plant life can be plentiful and varied.

Predicted Impact:

- Deep penetration of oil between boulders. If left, oil can become asphaltic.
- Fauna and flora may be killed by oil.

Suggested Actions:

- Remove all oiled debris.
- Use sorbents to remove oil in crevices.
- May remove and replace heavily oiled riprap to prevent chronic appearance of sheen.

Bluffs

Description:

- Usually found along eroding riverbanks.
- Composed of mixed grain sizes (from silt to gravel).
- Biological activities usually low.

Predicted Impact:

- Oil forms band along top of water line. Can penetrate into sandy sediments.
- Wave or current action can flush off oil within days or weeks.

Suggested Actions:

- Cleanup usually not necessary due to short residence time.
- Manual labor can be used to scrap oil from surfaces.
- Avoid removing sediments.
- Avoid mechanical cleanup (limited access and steep slopes).

Wall, Piers, and Docks

Description:

- Common in developed areas to protect or facilitate access in residential and industrial locations.
- Constructed of concrete, stone, wood or metal.
- Mussels, shellfish, and algae often found attached to structure.

Predicted Impact:

- Oil percolates between joints and coats surfaces.
- Biota damaged or killed under heavy accumulations.

Suggested Actions:

- High-pressure spraying may remove oil, prepare substrate for re-colonization of fauna/flora, and minimize aesthetic damage and chronic leaching of oil from structure.

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RELEASE RESPONSE STRATEGIES

Clean Up Technologies

The following table presents a number of alternatives for cleaning up oil in the environment, primarily along shorelines.

ACTION	DESCRIPTION	WHEN TO USE	BIOLOGICAL CONSTRAINTS	ENVIRONMENTAL EFFECTS
No Action	No action is taken	When shoreline extremely remote, inaccessible, or cleanup will do more damage or an effective method is not available.	Not for areas with high number of mobile animals.	Same impact as oil.
Manual Removal	Remove surface oil by manual means and placed in containers for disposal. No mechanized equipment is used.	For areas where oil can be easily removed.	None.	Minimal if surface disturbance and work force movement is limited.
Passive Collection Sorbents	Sorbent material placed on oil surface.	When oil is viscous and thick enough to be absorbed.	None. Method can be slow allowing oil to remain in critical habitats.	No major effects except if soaked sorbent materials are left in environment.
Debris Removal	Manual or mechanical removal of debris, including cutting an removal of oiled logs.	Use on any accessible area. Especially important when contaminated debris could contaminate other organisms.	None.	None.
Trenching	Dig wells or trenches to the depth of oil and pump oil out of well. Best with lighter oils.	Fine grain sand beaches, coarse sand and gravel beaches where oil has seeped in and cannot be removed by manual cleaning.	None.	None.
Sediment Removal	Mechanical or manual removal of sediments. Material disposed of off-site.	Used on sand, pebble and cobble beaches where limited amounts of oiled material have to be removed. Do not use in areas with erosion potential. Do not remove sediments past the depth of oil penetration.	Mechanized equipment should not be used in areas adjacent to endangered or sensitive species.	Maybe detrimental if too much sediment removed without replacement.
Cold Water Flooding	Wash oil from surfaces and crevices to water's edge for collection.	Boulder, cobble, gravel, coarse sand mixed with sediment and rock. Not applicable to mud, vegetated upland or steep rocky shorelines. Frequently used with low or high pressure washing.	Not appropriate at creek mouths.	Habitats may be physically disturbed as sand and gravel are mixed. Organisms may be flushed away.
Cold Water/Low Pressure	Remove oil that has adhered to rocks or man-made structures.	Boulder, cobble and rock/seawall shorelines heavily oiled. Not appropriate for sedimentary habitats. Best	Not appropriate for sane, gravel, mud beaches, marshes or shorelines where destruction of	May flush contamination into other areas. Increases turbidity in

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Washing	Oil floated to shoreline for pickup by a skimmer.	where adhered oil must be removed to prevent continuous release into environment.	biological communities must be avoided.	water.
ACTION	DESCRIPTION	WHEN TO USE	BIOLOGICAL CONSTRAINTS	ENVIRONMENTAL EFFECTS
Cold Water/High Pressure Washing	Better for removing adhered oil. Water pressure up to 100 psi.	Riprap, rock and seawalls. Can be used to float oil out of crevices.	Not appropriate for sand, gravel, mud beaches, marshes or shorelines where destruction of biological communities must be avoided.	Removes many organisms on surface. May drive oil deeper or flush into other environments. Increases turbidity.
Warm Water/Mode rate to High Pressure Washing	Mobilize thick and weathered oil adhered to rock surfaces prior to flushing it down shore for pickup.	Boulder, cobble, and rock/seawall shorelines that are heavily oiled. Not appropriate for sedimentary habitats. Good for weathered or difficult to remove oil.	Tradeoff between damage to the biological community versus damage from leaving oil in place.	Can kill or remove most organisms. May flush oil into other environments. Increases turbidity.
Hot Water Pressure Washing	Dislodge trapped oil from inaccessible locations and surfaces not amenable to mechanical removal. Requires extensive equipment (water heat – 170°F). Vacuuming necessary to remove oil flowing from rocks and soil.	Not applicable to sandy beaches, marshes or where difficult to place equipment.	Must be careful not to remove all attached organisms from surfaces. Decreases biodegradation potential.	Has a highly negative impact on most environments. Possibility of driving oil further into substrate.
Slurry Sand Blasting	Use sandblasting equipment to remove heavy residual oil from solid substrates.	Seawalls and riprap. Equipment can be operated from boat or land.	Not to be used in areas with high biological abundance on the shoreline.	Possible destruction or smothering of organisms.
Vacuum	Use suction head, hose, and pump and storage tank to recover free oil from the water surface.	Use for large volumes of free oil. Can be used on any shoreline if accessible.	Do not use in areas where foot traffic and equipment may harm organisms.	Minimal impact if done correctly.
Shoreline Removal, Cleansing and Replacement	Remove and clean oiled substrata before returning it to the excavated area. Cleansing includes hot water wash or physical agitation with a cleansing solution.	Sand, pebble, gravel, etc. Applicable where permanent removal of sediment is undesired. Equipment must be close to excavation area to reduce transport problems. Cleaning solutions must be properly disposed.	Typically unacceptable in spawning areas. Almost all life will be removed from area. Replaced material must be free of oil and toxic substances.	May be detrimental if excessive substrate is not replaced. Very large equipment causes environmental disruption. Could be negative impact if cleaning solution not properly disposed.
Cutting Vegetation	Manual cutting of oiled vegetation using weed eaters and removal of cut material with rakes. Cut vegetation is immediately bagged for disposal.	When risk of oiled vegetation contaminating wildlife is greater than the value of the vegetation that is to be cut, and there isn't a less destructive method.	Prevent forcing of oil into sediments and contaminating the root structures.	Can be a total loss of habitat for some animals. Erosion may occur if vegetation does not grow back.

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Disposal

Proposed disposal methods and sites must be submitted for review and approval by the appropriate regulatory agencies. Contract disposal services should be investigated to determine if the firms are financially responsible, licensed, protected by insurance, and reputable. Local air or water pollution control officers may be able to recommend contractors that meet state requirements.

Disposal methods include oil and water separation, burning, burial, and natural degradation. The specific disposal method selected depends on the nature of the material and the availability of existing disposal sites.

All disposal activities should be coordinated through the Environmental Team.

Contaminated Product

The Environmental Team should supervise disposal. Recovered product may be transported to existing pump stations and placed in the sump tank or utility tank and stored there until the water has dropped out or drained off. The remaining product can either be injected back into the pipeline or sold to a third party. Quality control procedures must be followed before product is injected into the line.

Oil/Water Separation

In addition to oil/water separators at Colonial facilities, portable separators are available or can be constructed to suit the needs at the site. Recovered material can be stored in an available tank and treated with chemicals to hasten the water drop out. The water can be removed or drained off, leaving only product.

Contaminated Materials

Product contaminated materials such as sorbent pads, leaves, twigs and driftwood materials can be collected, put into bags, and accumulated for transportation to appropriate disposal sites.

Transportation

Product contaminated materials and debris collected must be transported in approved vehicles. Licensed haulers of hazardous materials must obtain state or federal permits for their equipment. Truck beds must be sealed to prevent leakage of material and beds must be covered. A special waste manifest must be obtained from state authorities. The manifest provides a method of verification that both the cleanup contractor and the waste hauler have taken the waste to an approved disposal facility. It is the responsibility of the generator (Colonial) to ensure that applicable requirements for packaging, transportation, and disposal are met.

Disposal Sites

In most cases the state or local authorities will designate an approved public hazardous material disposal site. There are occasions where either a public disposal site is not located within a reasonable distance of the collection points, or due to the topography or the necessity to expedite removal of material from the area, a collection may be constructed and used as a disposal site. In this instance, approval must be obtained from the proper state and local authorities.

Burning

All recovered product should be removed from the disposal pit prior to requesting a permit from air pollution authorities to burn the contaminated materials and debris. A burning permit will contain restrictions as to the volume of material that can be burned at one time, weather conditions, and times of day, in addition to the density of smoke produced by the burning process. Air quality authorities must be notified each time material is to be burned.

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RELEASE RESPONSE STRATEGIES

Burial

If burning is not allowed, burial is an alternative disposal method. Land burial can be a safe and proper method of disposal if a suitable site can be found and correct procedures are followed.

Topography, geology, and hydrology are important in selecting disposal sites. Flat upland areas, gullies, ravines, and gentle sloping hills are suitable. Unfavorable sites include depressions where water accumulates, lower reaches of streams, floodplains or other sites near surface water areas. Leaching could occur at any of these latter sites if not properly controlled. Any area with saturated soil and pooled water on the surface is undesirable.

An adequate quantity of good cover material should be available close to the site. Sandy-silty material that is workable but relatively impervious (if properly compacted) makes the best cover material.

Communications

Effective communications are imperative during an emergency situation. An effective communications network needs to be established as quickly as possible utilizing any and all types of available equipment and personnel that the situation requires.

Strategies

Overall

There are three major communication needs during an emergency response.

1. The Incident Command Center must be equipped with a variety of options to use to communicate with the outside world. These options include phone lines via a hotel switchboard (or other incident command center provider), various radio systems and satellite phones.
2. The various emergency response sites (pickup sites, staging, etc) must be able to communicate with the Incident Command Center. Specific methods are listed in the following sections.
3. An emergency response site (recovery site, staging) will require communications between workers at that site so that information can be exchanged both within the site and relayed back to the Incident Command Center. Cell phones or hand held radios are the preferred method to communicate within the site. Satellite phones are also an option.

Incident Command Center

- Insure phone communications are available via landline and/or cell phone.
- Insure inbound/outbound Fax is available.
- Install internet access is available for computers.
- Utilize a satellite phone if other means of communications are not functional.
- Test different modes of communication to determine which ones are most reliable.
- Establish a schedule for periodic progress reports from section leaders and recovery sites.
- Meetings of section leaders should be held twice daily prior to shift changes to review the status of the clean-up and the upcoming 12 hour plan.
- Prepare and maintain personnel lists with pertinent information (landline phone #, shift, hotel/room #, cellular phone #, email address, texting address, satellite phone #, etc.).
- Prepare maps with directions to the incident command center, staging, each containment/recovery site, product off-loading sites, and hotels.
- Have runners available should all other means of communications fail or become disabled.

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Staging/Logistics

- Insure phone communications are available via landline and/or cell phone.
- Insure inbound/outbound FAX is available.
- Insure internet access is available for computers.
- Test different modes of communication to determine which ones are most reliable.
- Utilize a satellite phone if other means of communications are not functional.
- Have runners available to set up a remote communications point if no means of communication are functional at the staging location.

Oil Containment/Recovery Sites

- Test different modes of communication to determine which ones are most reliable.
- Utilize a satellite phone if other means of communications are not functional.
- Have runners available if normal communications are inadequate at the work site. Personnel may need to be positioned at locations where there is good reception (e.g.: at a higher elevation). Runners can be used to convey information between the work site and the relay points.

Ground Recon

- Utilize portable radio and/or cellular phone if there is adequate reception.
- Utilize a satellite phone if other means of communications are not functional.

Aerial Recon

- In the event that air-to-ground radio communications are not functional and something is observed that warrants urgent notification land the helicopter at a location where communications can be established via cellular, radio, or satellite phone.

Public Affairs/ROW Claims

- Establish an office separate from Incident Command Center.
- Insure phone communications are available via landline and/or cell phone.
- Insure inbound/outbound FAX is available.
- Establish internet connectivity via hotel, cellular air card, a local Wifi provider, and/or a satellite internet data connection.
- Advertise 1-800 claims notification phone number for those affected by the incident per regulatory requirements.
- P.R. and claims to each have at least one representative available around the clock .

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RELEASE RESPONSE STRATEGIES

Types of Communication Equipment – see IT ER Suggested Supplies for detailed list

Voice

- Hardwired Telephones
- Cellular and Smart Phones
- Satellite Phones
- Internet phone services such as Skype

Data

- Local wired connection such as hotel or local service provider
- Local wifi connection such as hotel, coffee shop, etc.
- Cellular air cards and/or hotspots
- Cell phone hotspots and/or tethering
- Satellite data services

Other

- Switches and/or Routers with Wifi capability
- FAXing capability via fax machines or PC
- Printers
- Scanners
- Cameras
- Cables as needed to connect equipment
- Extension cords and surge protectors
- Equipment chargers including mobile chargers

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RELEASE RESPONSE STRATEGIES

Hardwired telephones are the most reliable form of communication and should be used if available. This mode of communication must (if at all possible) be used for discussion of sensitive topics or information. The incident command center will normally be located at a facility with several hardwired phones.

Cellular Telephones

Cellular telephones are used extensively unless reception is poor. Caution must be observed as these instruments are not intrinsically safe.

Satellite Telephones

Portable satellite telephones are quite versatile and can overcome the remote area reception problems that have been encountered with portable radios and cellular phones. The latest models are lightweight. The primary disadvantage is one-half second time delays between each transmission (e.g. phone-to-satellite-phone travel time).

Portable Radios

Portable radios are useful if towers can be accessed or if line of sight can be established. Operation can be erratic. Smaller hand-held radios may be used without a tower for up to five miles depending on terrain. Some Nextel push-to-talk cell phones may also be used for up to five miles even if cellular services are not available.

E-mail

During an emergency Colonial's Email System or any internet connected E-mail system can be used to send messages to the Incident Commander and/or the Situation Room in Atlanta. Colonial's e-mail system includes mailboxes for "Incident Commander" (email address incident@colpipe.com) and "Atlanta Support Team" (email address response@colpipe.com)

Fax

Fax machines can be used to distribute maps, correspondence, verify permits, press releases, etc.

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Air Monitoring During Recon and Initial Response

Air monitoring equipment must be zeroed, bump-tested, and (as-necessary) calibrated prior to performing recon and initial response activities. Initial air monitoring results must be used to establish and delineate a perimeter where air contaminant or combustible vapors are at or below safe working levels (defined in the table below). The *support (cold) zone* must be established outside of this perimeter. Recon personnel should approach spill sites (and suspected spill sites) from upwind directions. Colonial personnel must suspend activities and withdraw to safe positions if conditions encountered exceed safe working levels.

Note - Low-lying areas (trenches, depressions, etc.) and enclosed spaces that need to be entered have an increased risk of containing hazardous levels of airborne contaminants.

Safe Working Levels during Recon and Initial Response:

CHEMICAL/HAZARD	SAFE WORKING LEVELS	RATIONALE
LEL	<10%	Safe vapor concentration level
Oxygen	19.5% - 23.5%	OSHA acceptable breathing air range
H ₂ S	<1ppm	ACGIH TLV-TWA for H ₂ S
Benzene	<0.5ppm	OSHA PEL Action Level for benzene
Gasoline	<300ppm	ACGIH TLV-TWA for gasoline
Diesel	<12 ppm	ACGIH TLV-TWA for diesel fuel
Kerosene/Jet Fuel	<28 ppm	ACGIH TLV-TWA for kerosene

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8-hour work shift or a 40-hour work week (OSHA 29 CFR: 1910.1000).

Action Level = ½ of PEL

ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

Air Sampling Strategies during Recon and Initial Response

Employees shall utilize real-time air monitoring devices to determine exposure levels and implement protective perimeters.

Sampling strategy:

- **WARNING:** Personnel must not enter contamination reduction (hot) zones without proper PPE
- Approach the release site from upwind. Identify alternate routes of escape and any potential ignition sources such as motor vehicles
- Upon confirmation of the presence of product or product vapors through sight or smell, begin sampling for all hazards of concern listed above. Approaching the source, re-sample at least every 100 feet until detections reach or exceed any of the values listed above
- If detection levels reach or exceed any of the values listed above, move at least 100 feet upwind and establish a protective perimeter. Establish perimeter boundaries in all directions using monitoring results taken in all cardinal directions or conservative decision-making
- Once the boundary is established, conduct the following activities:
 - Evacuate any personnel within the hot zone that are without proper PPE

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- Clearly mark boundaries with physical barrier – e.g. barrier tape, snow fence, signs, ropes, etc.
- Keep unauthorized personnel away from the area
- Continue air monitoring at the perimeter at least every 15 minutes
- Evacuate occupied buildings within or near the perimeter
- If detection readings sustain (or drop) during any 1 hour period, monitoring frequency can be reduced to once per hour
- Monitor weather conditions (wind direction, wind speed, humidity, etc.) to determine the areas of downwind impact
- If detection levels are at or above any of the values above in areas near roadways or nearby communities (residential, commercial, or retail), discuss readings with local emergency responders to determine if evacuations, road closures, or other actions are appropriate

Recommended Sampling Equipment and Frequency:

Instrument	Sensor/Tube	Analyte	Detection Limits	Frequency
MSA® Altair 5 or 5X ¹	4-gas monitor	LEL	1 - 100%	Initial + continuous
Rae® Detection Tube	Benzene (w/ LP-1200 pump)	Benzene	0.5 – 10 ppm	Initial + every 15 minutes
Rae® Detection Tube	Gasoline (w/ LP-1200 pump)	Gasoline	30 – 1000 ppm	Initial + every 15 minutes
Rae® Detection Tube	Diesel & Jet Fuel (w/ LP-1200 pump)	Kerosene/Jet Fuel	0.5 – 25 ppm	Initial + every 15 minutes

¹Equivalent LEL monitors may be used.

The equipment listed above is intended for worker protection strategies. As-needed, community air monitoring shall be conducted by third party consultants or local responders using equipment with greater detection limits.

Air Monitoring Contractors

As-needed, Colonial uses third party consultants to provide primary air monitoring and employee exposure monitoring during emergency response operations. Air monitoring services may also be offered by most OSROs as part of their normal services for the protection of their personnel.

Upon initial notification, and based on initial assessment of the spill, the Safety Officer (SOFR) shall make an immediate determination regarding mobilization of air monitoring contractors during an emergency response.

Benzene

Protection thresholds for benzene are far lower than the other volatile organic compounds (VOCs) found in refined petroleum products. While multiple VOCs will likely be present during emergency response, benzene is often the primary hazard of concern during an emergency response when total VOC levels are not sufficient to cause an explosion/flammability hazards.

Community Evacuation and Reoccupation Guidelines

Community evacuation and reoccupation guidelines are found below. All recommendations to authorities, however, must be closely coordinated with local response personnel and in accordance with site/event-specific air monitoring plans.

Initial evacuation recommendations should be based on the most recent revision of the Department of Transportation's *Emergency Response Guidebook* (ERG). Products transported by Colonial fall within

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ERG guide number 128 (Flammable Liquids). The table below contains evacuation guidelines from the ERG.

Initial Evacuation Guidelines from the DOT's *Emergency Response Guidebook*

Large Spill	Consider initial downwind evacuation for at least 300 meters (1000 feet)
Fire	Consider initial evacuation for 800 meters (1/2 mile) in all directions

Air monitoring consultants will produce site/event-specific air monitoring plans during emergency response. As air monitoring data becomes available, evacuation recommendations may be revised. General evacuation criteria are listed in the table below.

Product/Chemical-Specific General Evacuation Criteria:

PRODUCT/CHEMICAL	COMMUNITY EVACUATION THRESHOLD
Gasoline (all grades)	≥ 0.2 ppm total VOCs
Benzene	≥ 0.05 ppm
Toluene	≥ 2.5 ppm
Ethyl benzene	≥ 2.3 ppm
Xylene	≥ 0.04 ppm
Diesel fuel (all grades)	≥ 0.2 ppm total VOCs
Kerosene (all grades)	≥ 0.1 ppm total kerosene
Naphthalene	≥ 10 ppm

Note – Evacuation thresholds are lower than the detection limits of sampling equipment utilized by Colonial employees. As-needed, community air monitoring shall be conducted by third party consultants or local responders using equipment with greater detection limits.

Community re-occupation criteria are listed in table below. Re-occupation action levels are the inverse of evacuation levels. Re-occupation of residences will be determined based on air monitoring results, and a collaboration of Colonial emergency response personnel, local and/or government emergency response personnel, and air monitoring consultant advisors.

Community Reoccupation Criteria:

PRODUCT/CHEMICAL	COMMUNITY EVACUATION THRESHOLD
Gasoline (all grades)	< 0.2 ppm total VOCs
Benzene	< 0.05 ppm
Toluene	< 2.5 ppm
Ethyl benzene	< 2.3 ppm
Xylene	< 0.04 ppm
Diesel fuel (all grades)	< 0.2 ppm total VOCs
Kerosene (all grades)	< 0.1 ppm total kerosene
Naphthalene	< 10 ppm

Product-Specific Air Monitoring and Air Sampling Strategies

Sampling Strategy:

- Obtain real time air monitoring data as soon as safely possible in the area nearest the spill and downwind of the spill for all hazards of concern listed above. Collect real time downwind data for LEL, benzene, and total VOCs first. *Note date/time, wind direction, GPS coordinates and location description, note odor presence or absence, equipment description, and use of respiratory protection. Communicate this data to first responders.
- Obtain liquid sample of product for percentage composition of hazards of concern. This data will help in establishing the chemicals of concern for this particular spilled product.
- Begin collecting real time data outside of the spill area in areas such as nearby facilities and businesses, nearby residences, schools, community buildings, hospitals, etc. in a 360 degree

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pattern. *Note date/time, wind direction, GPS coordinates and location description, presence or absence of odor, and equipment description.

- Establish a perimeter around the work area using real time equipment and analytical sampling stations. The perimeter should be established so as to capture all cardinal directions should shifts in wind direction take place during the response.
- Monitor weather conditions (wind direction, wind speed, humidity, etc.) to determine the areas of downwind impact.

Personal Protective Equipment (PPE)

The following are the defined levels of PPE required. These levels may be modified depending on specific site conditions or job tasks as determined by the Safety Officer.

- **Level A** – Fully encapsulated chemical resistant suit, Air-supplied respirator, inner/ outer gloves, over boots, two-way communications
- **Level B** – SCBA (or Airline with escape pack), Nomex, Sarnex or Coated Tyvex, Chemical resistant boots, chemical resistant gloves and hard hat
- **Level C** – Full/half face air purifying respirator, Nomex or Coated Tyvex, Chemical resistant (or safety toe) boots, chemical resistant gloves, eye protection and hard hat
- **Level D** – Hard Hat, Eye Protection, Foot Protection, Hearing Protection. Level D PPE also includes helmet-mounted eye protection goggles

Gasoline (all grades)

Hazards of concern: (listed in SDS for product)

Xylene, toluene, n-hexane, benzene, 1,2,4-trimethylbenzene, ethyl benzene, & naphthalene

Other hazards not listed specifically in SDS:

LEL (lower explosive limit), VOCs (volatile organic compounds)

Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument ¹	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument ²	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphthalene Gastec® 60	Naphthalene	0.1 ppm
Colorimetric Tube	Toluene Gastec® 122L	Toluene	0.5 ppm
Colorimetric Tube	Xylene Gastec®123L	Xylene	1 ppm

¹The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for kerosene, xylene, toluene, n-hexane, benzene, ethylbenzene & naphthalene.

² Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL

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sensor has correction factors for jet fuel, xylene, toluene, n-hexane, benzene, ethylbenzene, & naphthalene.

Recommended Analytical Sample Collection:

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX), kerosene	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours

Occupational Exposure Thresholds:

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-STEL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Ethyl Benzene (ppm)	100	-	-	20	125	URT irr; kidney; cochlear impair
Toluene (ppm)	200	-	300, 500 [‡]	20	-	Visual impair; reproductive
Xylene (ppm)	100	-	-	100	150	URT irr; eye irr; CNS impair
Trimethylbenzene				25		URT irr; eye irr; CNS impair
Gasoline (ppm)	300 (VOC)	500		300	500	URT irr; eye irr; CNS impair

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8-hour work shift or a 40-hour work week (OSHA 29 CFR: 1910.1000).

OSHA PEL-STEL = The time-weighted average exposure that should not be exceeded for any 15-minute period (OSHA 29 CFR: 1910.1000).

OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15-minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day. (OSHA 29 CFR: 1910.1000).

ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).

ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

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Actions and PPE for Work Areas:

Job Task	Level	Environment ¹	Respirator
Gasoline			
General Air Monitoring	D	< 300 ppm	None
Air Monitoring w/ vapor exposure	B	≥ 300 ppm	SCBA or airline respirator w/ 10 min escape
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape
Toluene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 20 – < 500 ppm (IDLH Applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 500 ppm (IDLH Applied)	SCBA or airline respirator w/ 10 min escape
Ethyl benzene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 20 – < 800 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 800 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape
Xylene			
General Air Monitoring	D	< 100 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 100 – < 900 ppm (IDLH applied)	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 100 – < 900 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 900 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and *Contamination Reduction (warm) zone* work area perimeters should be based on the respiratory protection requirement, APR and SCBA respectively. During a spill with highly volatile

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compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If average benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene (1910.1028).

Diesel Fuel (all grades)

Hazards of concern: (listed in SDS for product)

Fuel oil No. 2

Other hazards not listed specifically in SDS:

LEL (lower explosive limit), benzene, & VOCs (volatile organic compounds)

Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument ¹	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument ²	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm

¹ The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has a correction factor for benzene and diesel fuel #2.

² Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor does not have a specific correction factor for diesel fuel.

Recommended Analytical Sample Collection:

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX), kerosene	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours

Occupational Exposure Thresholds:

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-STEL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Diesel				100 mg/m ³		12 ppm VOCs

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OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8-hour work shift or a 40-hour work week (OSHA 29 CFR: 1910.1000).

OSHA PEL-STEL = The time-weighted average exposure that should not be exceeded for any 15-minute period (OSHA 29 CFR: 1910.1000).

OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15-minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day. (OSHA 29 CFR: 1910.1000).

ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).

ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

Actions and PPE for Work Areas:

Job Task	Level	Environment ¹	Action
Diesel			
General Air Monitoring	D	< 12 ppm total hydrocarbons *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 12 – 120 ppm total hydrocarbons *if benzene < 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 12 ppm total hydrocarbons *if benzene < 25 ppm	Full-face APR w/ P100 OVM
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and *Contamination Reduction (warm) zone* work area perimeters should be based on the respiratory protection requirement, APR and SCBA respectively. For diesel specifically an action level of 0.2 ppm VOCs should be established for further investigation in areas of the community not previously evacuated. (This is a corrected value based off of the 8 hour TWA-TLV.) During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

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If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

Kerosene (all grades)

Hazards of concern: (listed in SDS for product)

Kerosene, naphthalene

Other hazards not listed specifically in SDS:

LEL (lower explosive limit), benzene, & VOCs (volatile organic compounds)

Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument ¹	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument ²	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphthalene Gastec® 60	Naphthalene	0.1 ppm

¹ The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for kerosene, benzene, & naphthalene.

² Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor has correction factors for jet fuel, benzene, & naphthalene.

Recommended Analytical Sample Collection:

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3500)	NIOSH 1550	Benzene, kerosene	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1550	Kerosene/naphthalene	8 to 12 hours

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Occupational Exposure Thresholds:

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-SETL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Kerosene				28.7		
Naphthalene	10			10	15	2B possible carcinogen

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8-hour work shift or a 40-hour work week (OSHA 29 CFR: 1910.1000).

OSHA PEL-STEL = The time-weighted average exposure that should not be exceeded for any 15-minute period (OSHA 29 CFR: 1910.1000).

OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15-minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day. (OSHA 29 CFR: 1910.1000).

ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).

ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

Actions and PPE for Work Areas:

Job Task	Level	Environment ¹	Action
Kerosene			
General Air Monitoring	D	<28 ppm *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 28 ppm *if benzene < 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 28 ppm *if benzene < 25 ppm	Full-face APR w/ P100 OVM
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	>5 – <25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and *Contamination Reduction (warm) zone* work area perimeters should be based on the respiratory protection requirement, APR and SCBA respectively. During a spill with highly volatile

Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

Transmix

Hazards of concern: (listed in SDS for product)

Petroleum distillates, fuel oil no. 2, kerosene, xylene, toluene, n-hexane, benzene, 1,2,4-trimethylbenzene, ethylbenzene, & naphthalene

Other hazards not listed specifically in SDS:

LEL (lower explosive limit), VOCs (volatile organic compounds)

Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument ¹	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument ²	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphthalene Gastec® 60	Naphthalene	0.1 ppm
Colorimetric Tube	Toluene Gastec® 122L	Toluene	0.5 ppm
Colorimetric Tube	Xylene Gastec®123L	Xylene	1 ppm
Colorimetric Tube	Naphtha Gastec®106	Naphtha	0.1 mg/L

¹ The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for kerosene, naphtha, xylene, toluene, n-hexane, benzene, ethylbenzene & naphthalene.

² Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor has correction factors for jet fuel, xylene, toluene, n-hexane, benzene, ethylbenzene, & naphthalene.

Recommended Analytical Sample Collection:

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX), kerosene	8 to 12 hours

Colonial Pipeline Company Air Monitoring Protocols During Emergency Response

Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours
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Occupational Exposure Thresholds:

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-SETL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Ethyl Benzene (ppm)	100	-	-	20	125	URT irr; kidney; cochlear impair
Toluene (ppm)	200	-	300, 500 [†]	20	-	Visual impair; reproductive
Xylene (ppm)	100	-	-	100	150	URT irr; eye irr; CNS impair
Trimethylbenzene				25		URT irr; eye irr; CNS impair
Naphtha	25					Analogy to kerosene

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8-hour work shift or a 40-hour work week (OSHA 29 CFR: 1910.1000).

OSHA PEL-STEL = The time-weighted average exposure that should not be exceeded for any 15-minute period (OSHA 29 CFR: 1910.1000).

OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15-minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day. (OSHA 29 CFR: 1910.1000).

ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).

ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

Actions and PPE for Work Areas:

Job Task	Level	Environment ¹	Action
Naphtha			
General Air Monitoring	D	< 20 ppm VOCs *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 20 – 200 ppm VOC *if benzene < 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 20 ppm VOC *if benzene < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 1,100 ppm *10% of the LEL	SCBA or airline respirator w/ 10 min escape
Benzene			
General Air Monitoring	D	< 0.5 ppm	None

Colonial Pipeline Company
Air Monitoring Protocols During Emergency Response

Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape
Toluene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 20 – < 500 ppm (IDLH Applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 500 ppm (IDLH Applied)	SCBA or airline respirator w/ 10 min escape
Ethyl benzene			
General Air Monitoring	D	< 20 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 20 – < 200 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 20 – < 800 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 800 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape
Xylene			
General Air Monitoring	D	< 100 ppm	None
Air Monitoring w/ vapor exposure	C	≥ 100 – < 900 ppm (IDLH applied)	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	≥ 100 – < 900 ppm (IDLH applied)	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 900 ppm (IDLH applied)	SCBA or airline respirator w/ 10 min escape

1= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and *Contamination Reduction (warm) zone* work area perimeters should be based on the respiratory protection requirement, APR and SCBA respectively. During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

Colonial Pipeline Company

AIR MONITORING PROTOCOL

Biodiesel (all grades)

Hazards of concern: (listed in SDS for product)

Petroleum distillates & benzene

Other hazards not listed specifically in SDS:

LEL (lower explosive limit), naphtha, & VOCs (volatile organic compounds)

Recommended Real-Time Data Collection:

Instrument	Sensor/Tube	Analyte	Detection Limit
Multi-gas instrument ¹	PID (photo-ionization detector)	VOCs	0.1 ppm
Multi-gas instrument ²	LEL sensor	LEL	1%
Ex. UltraRAE®	PID specifically calibrated for benzene	Benzene	0.05 ppm
Colorimetric Tube	Benzene Gastec® 121L	Benzene	0.1 ppm
Colorimetric Tube	Naphtha Gastec®106	Naphtha	0.1 mg/L

¹ The multi-gas instrument PID will have a typical lamp size of 10.6. Use the manufacturer's set of technical notes to apply correction factors to obtain concentrations for specific analytes. The detection limit may also differ depending on the brand of instrument. The Multi-RAE plus instrument has a detection limit of 0.1 ppm for total VOCs and has correction factors for naphtha and benzene.

² Use the manufacturer's guidelines to obtain correction factors for specific analyte monitored. The LEL sensor will have a real time detection based off of the calibration gas used. The RAE Systems LEL sensor has correction factors for jet fuel, gasoline, and benzene.

Recommended Analytical Sample Collection:

Instrument/Collection Device	Method	Analyte	Sample Period
Minican®/ Summa Canister	EPA-TO15	61 VOCs + library search for tentatively identified compounds (TICs)	24 hours
Passive Diffusion sampling badge (3M® 3520)	NIOSH 1550	Benzene, toluene, ethylbenzene, xylene (BTEX)	8 to 12 hours
Charcoal tube & sampling pump	NIOSH 1501	Benzene (STEL)/ aromatic hydrocarbons	15min/ 8 to 12 hours

Occupational Exposure Thresholds:

CHEMICAL	OSHA			ACGIH		ADDITIONAL
	PEL-TWA	PEL-STEL	PEL-CEIL	TLV-TWA	TLV-SETL (C)	
Benzene (ppm)	1	5	25, 50**	0.5	2.5	A1 carcinogen
Naphtha	25					* analogy to kerosene

OSHA PEL-TWA = The permissible concentration in air of a substance that shall not be exceeded in an 8-hour work shift or a 40-hour work week (OSHA 29 CFR: 1910.1000).

OSHA PEL-STEL = The time-weighted average exposure that should not be exceeded for any 15-minute period (OSHA 29 CFR: 1910.1000).

Colonial Pipeline Company

AIR MONITORING PROTOCOL

OSHA PEL-Ceiling = The exposure limit that shall at no time be exceeded. If instantaneous monitoring is not feasible, then the ceiling shall be assessed as a 15-minute time-weighted average (TWA) exposure, which shall not be exceeded at any time during the working day. (OSHA 29 CFR: 1910.1000).

ACGIH TLV-TWA = The Threshold Limit Value-TWA is the concentration for a normal 8-hour workday and a 40-hour workweek, to which nearly all workers may be repeatedly exposed, day after day, without adverse effect (ACGIH, 2011c).

ACGIH TLV-Ceiling = The ceiling exposure limit is the concentration to which workers cannot be exposed to for any period of time (ACGIH, 2011c).

ACGIH TLV-STEL = The STEL exposure limit is a 15 minute time weighted exposure that should not be exceeded at any time during a work day. (ACGIH, 2011c).

Actions and PPE for Work Areas:

Job Task	Level	Environment ¹	Action
Naphtha			
General Air Monitoring	D	< 20 ppm VOCs *if benzene non-detect	None
Air Monitoring w/vapor exposure	C	≥ 20 – 200 ppm VOC *if benzene < 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/vapor exposure	C	≥ 20 – 1000 ppm VOC *if benzene < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 1,100 ppm *10% of the LEL	SCBA or airline respirator w/ 10 min escape
Benzene			
General Air Monitoring	D	< 0.5 ppm	None
Air Monitoring w/ vapor exposure	C	0.5 – 5 ppm	Half-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	C	> 5 – < 25 ppm	Full-face APR w/ P100 OVM
Air Monitoring w/ vapor exposure	B	≥ 25 ppm	SCBA or airline respirator w/ 10 min escape

¹= All concentration values represent sustained levels.

Safety Zone Establishment

Exclusion (hot) zone and *Contamination Reduction (warm) zone* work area perimeters should be based on the respiratory protection requirement, APR and SCBA respectively. During a spill with highly volatile compounds, it will be important to establish an odor response team for community complaints. All odors within the nearby community that are a concern to a resident or neighboring facility should be evaluated.

If benzene concentrations are found in the work area > 0.5 ppm a sampling plan for workers will need to be implemented based on the OSHA specific standard for benzene.

Colonial Pipeline Company
BLOCK VALVE LOCATIONS

(b) (7)(F), (b) (3)



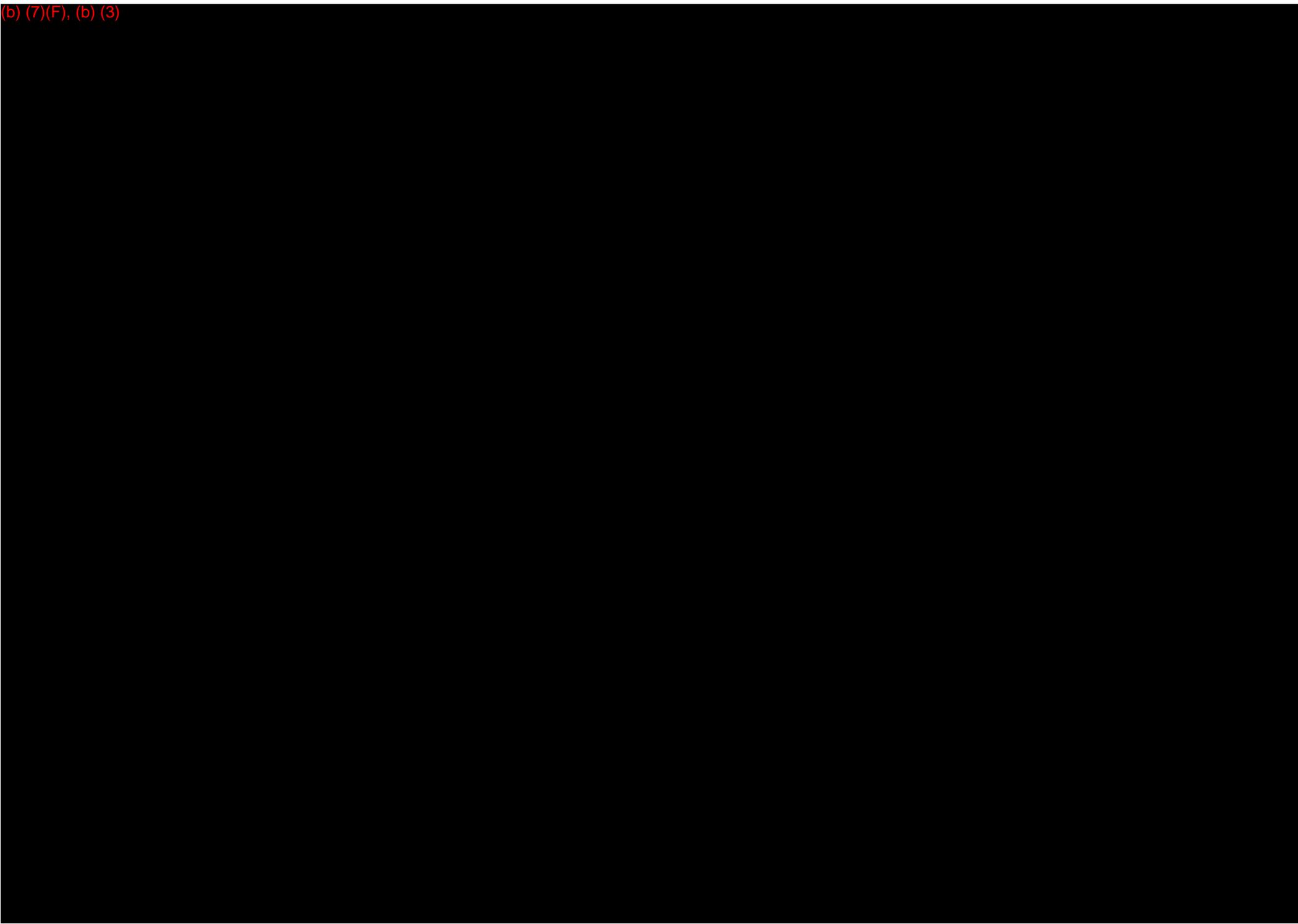
Colonial Pipeline Company
BLOCK VALVE LOCATIONS

(b) (7)(F), (b) (3)



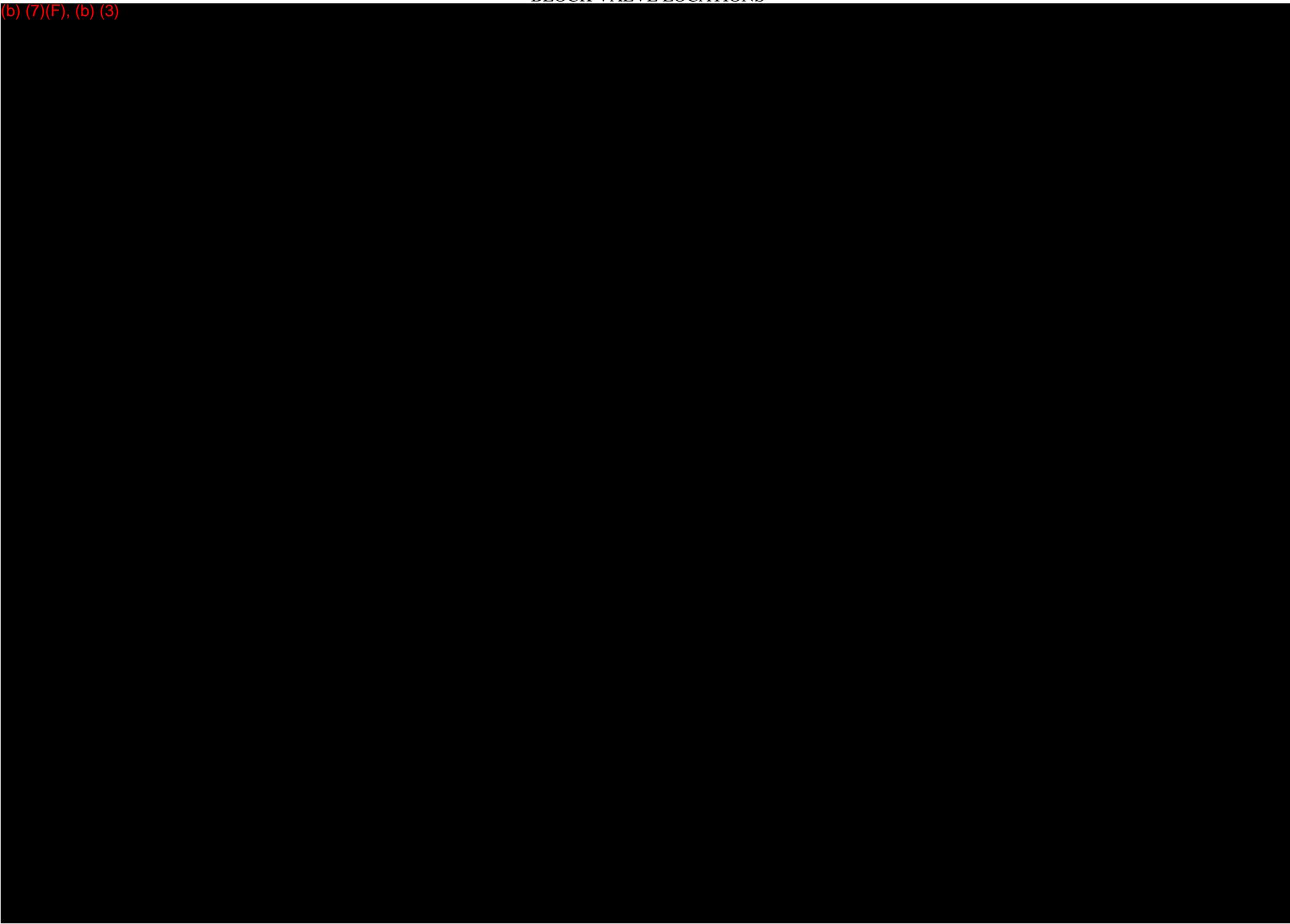
Colonial Pipeline Company
BLOCK VALVE LOCATIONS

(b) (7)(F), (b) (3)



Colonial Pipeline Company
BLOCK VALVE LOCATIONS

(b) (7)(F), (b) (3)



Colonial Pipeline Company
BLOCK VALVE LOCATIONS

(b) (7)(F), (b) (3)



Colonial Pipeline Company
BLOCK VALVE LOCATIONS

(b) (7)(F), (b) (3)



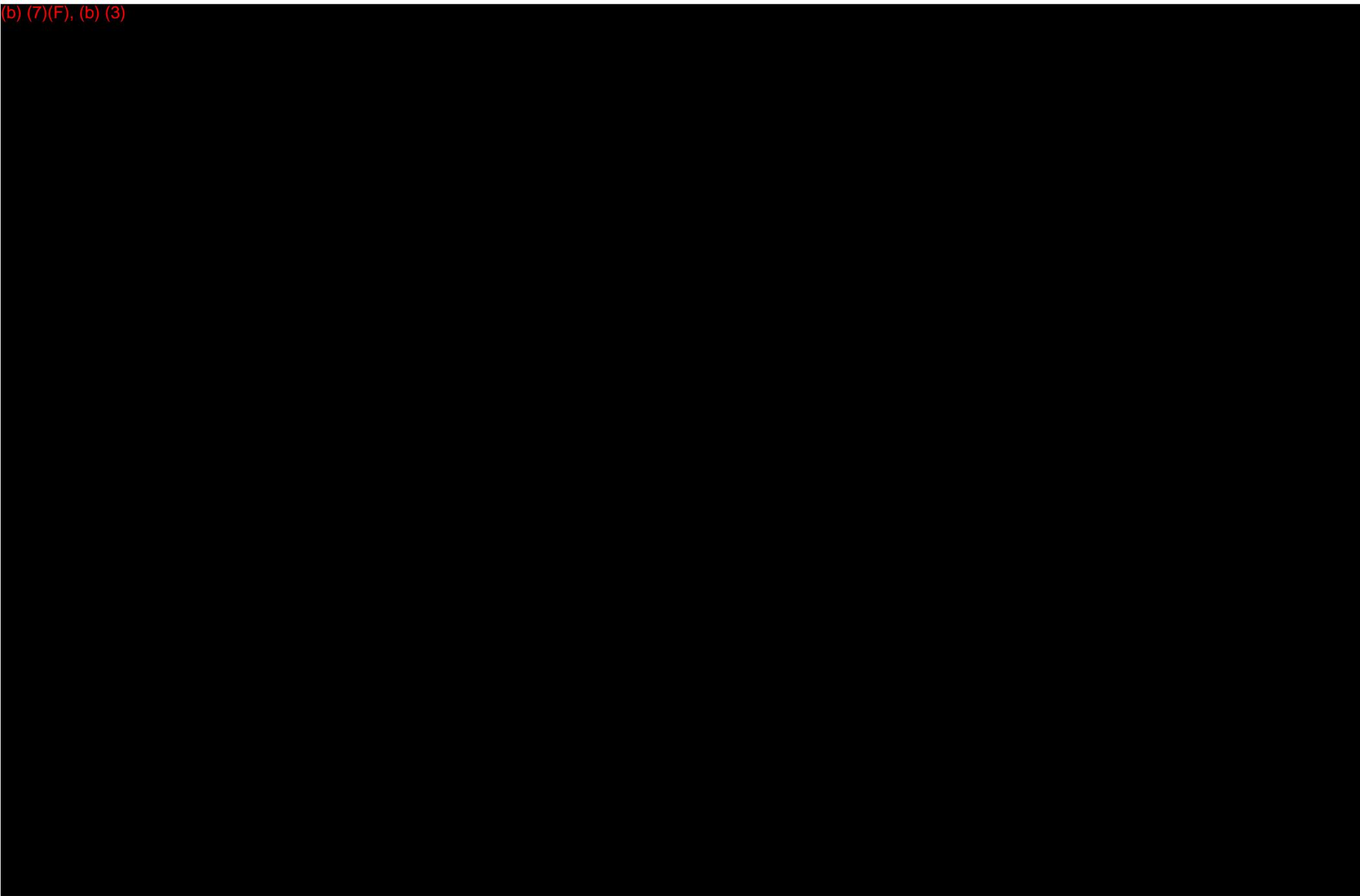
Colonial Pipeline Company
BLOCK VALVE LOCATIONS

(b) (7)(F), (b) (3)



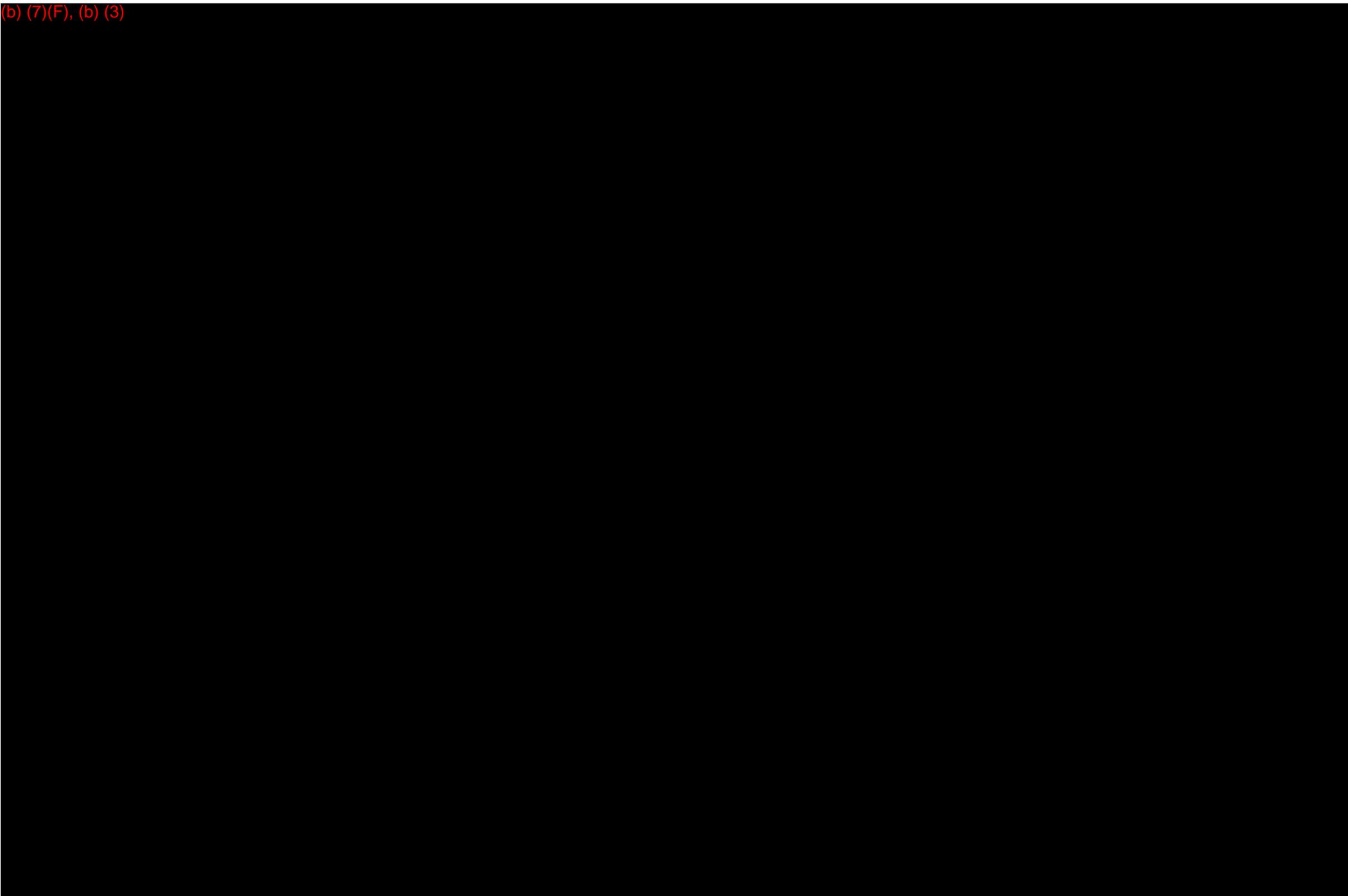
**Colonial Pipeline Company
RECTIFIER LOCATIONS**

(b) (7)(F), (b) (3)



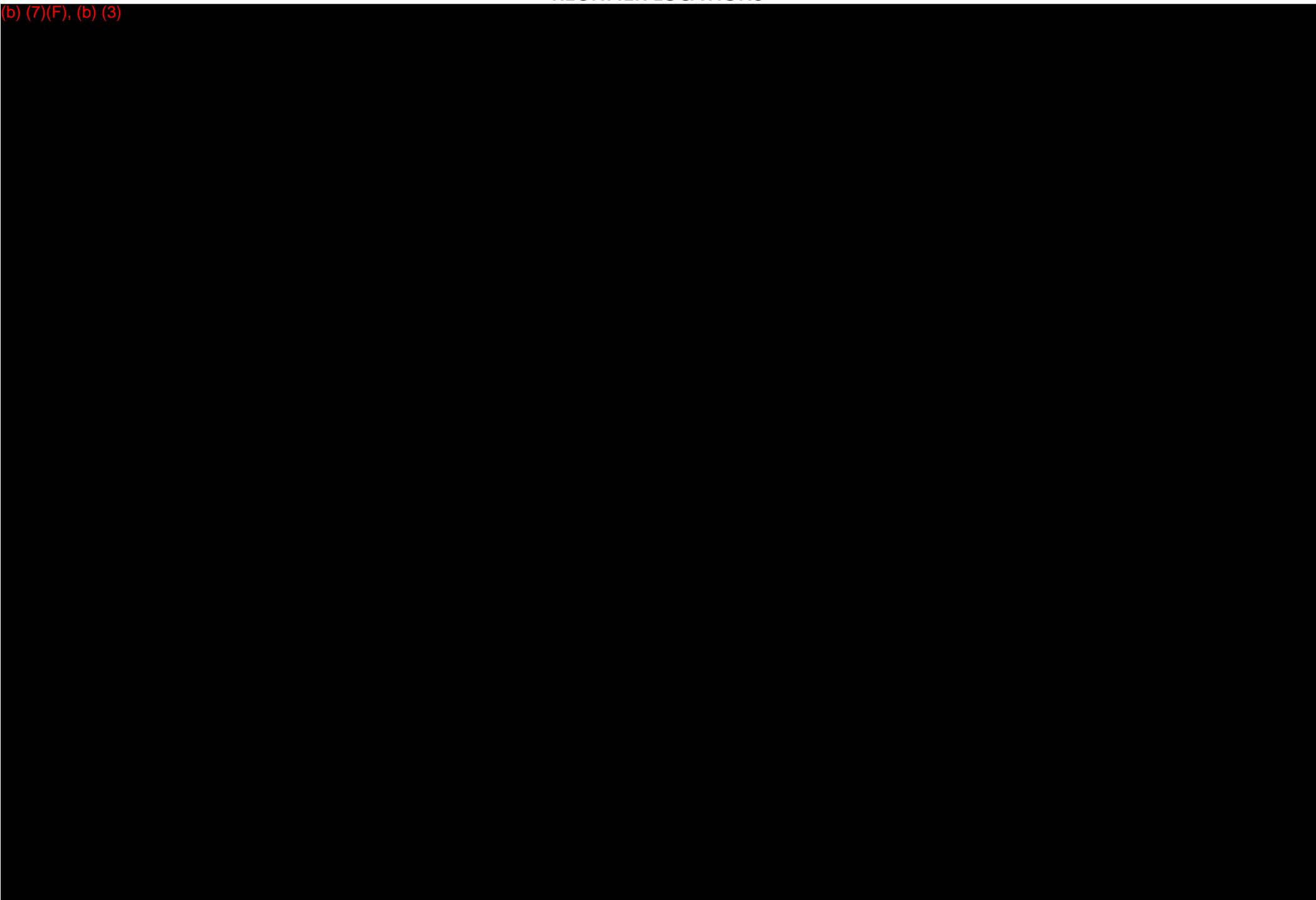
**Colonial Pipeline Company
RECTIFIER LOCATIONS**

(b) (7)(F), (b) (3)



Colonial Pipeline Company
RECTIFIER LOCATIONS

(b) (7)(F), (b) (3)



Colonial Pipeline Company
RECTIFIER LOCATIONS

(b) (7)(F), (b) (3)



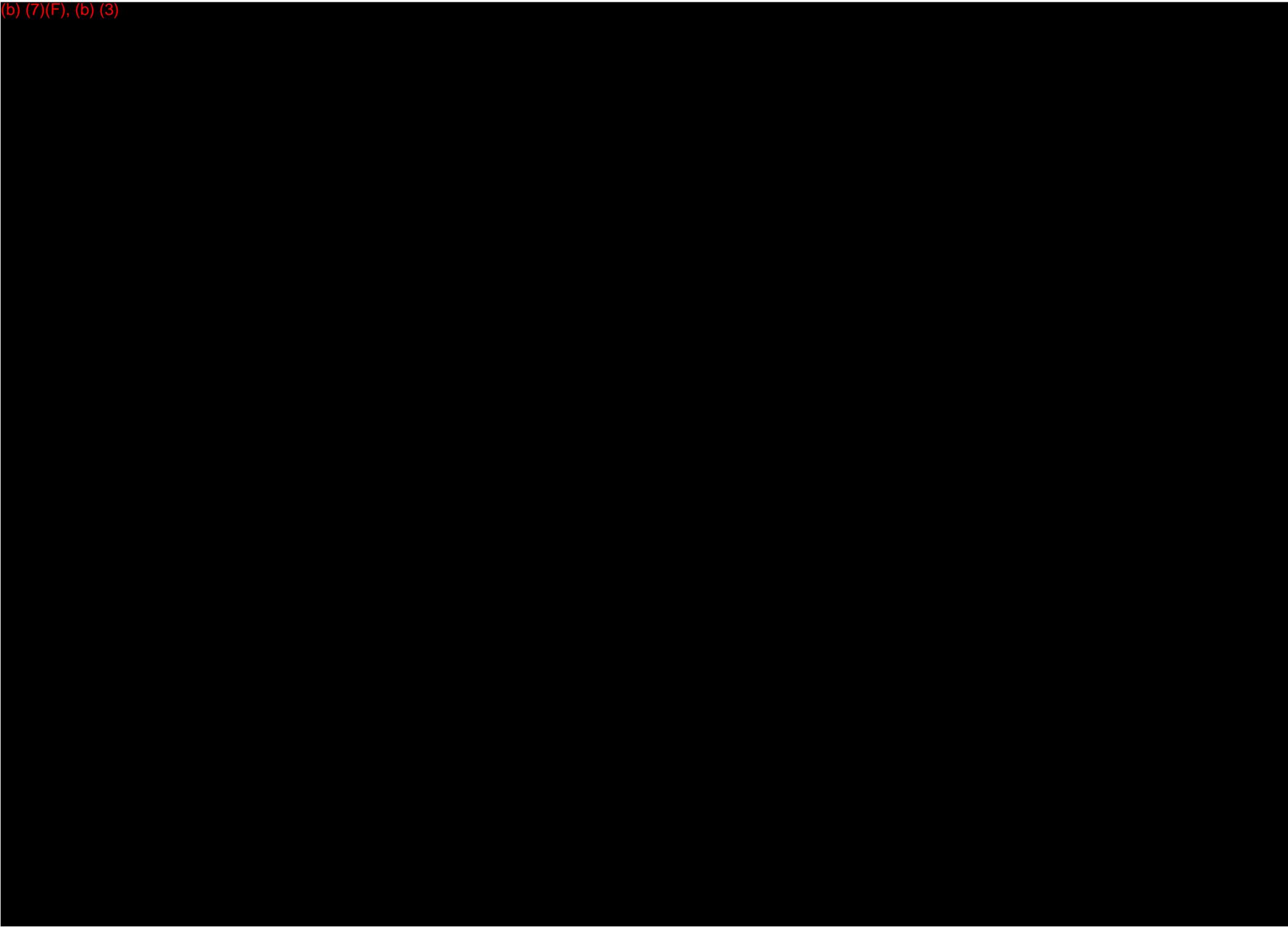
Colonial Pipeline Company
RECTIFIER LOCATIONS

(b) (7)(F), (b) (3)



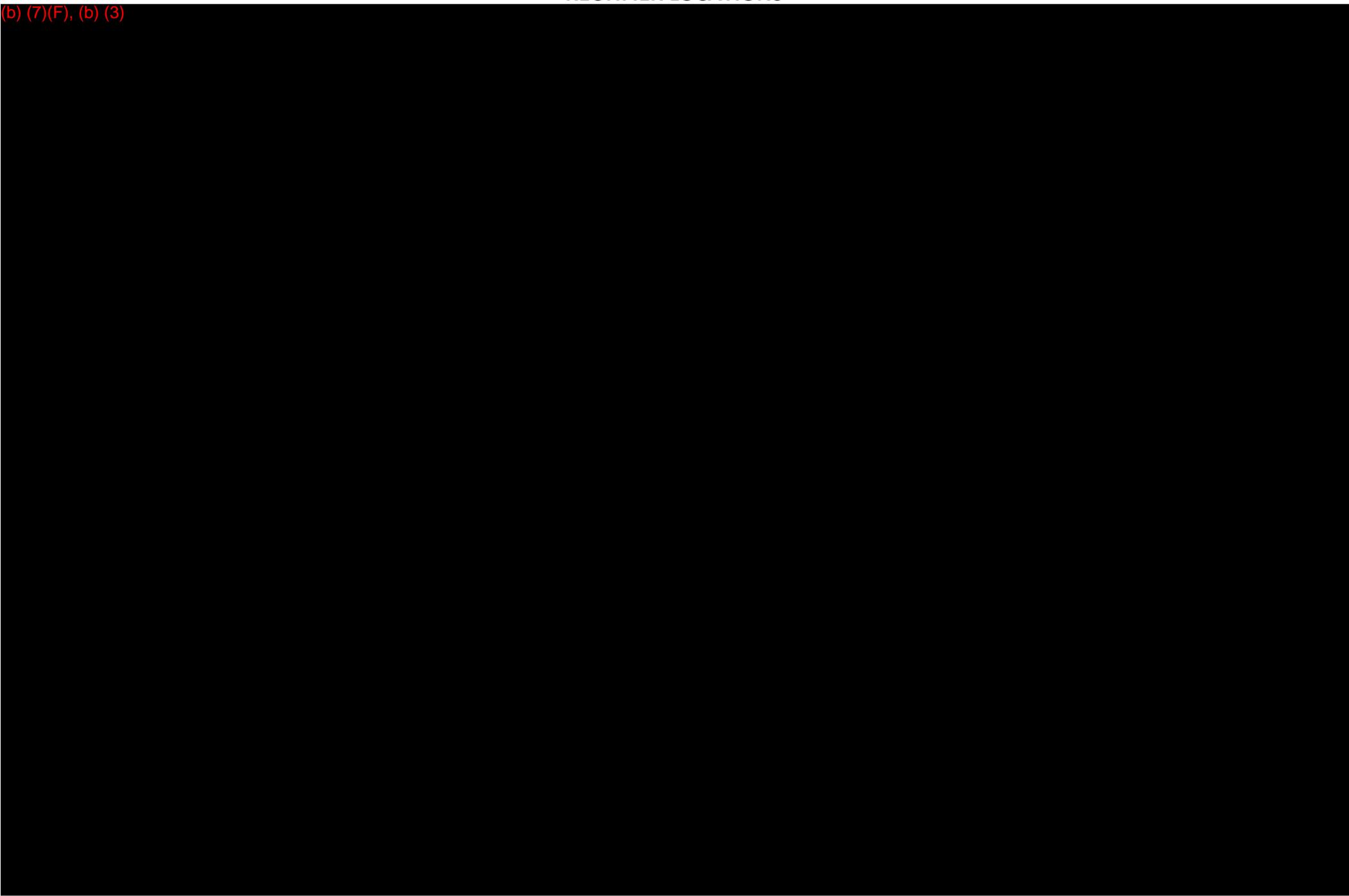
Colonial Pipeline Company

(b) (7)(F), (b) (3)



**Colonial Pipeline Company
RECTIFIER LOCATIONS**

(b) (7)(F), (b) (3)



Colonial Pipeline Company
RECTIFIER LOCATIONS

(b) (7)(F), (b) (3)



Colonial Pipeline Company
RECTIFIER LOCATIONS

(b) (7)(F), (b) (3)



Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

For more information on Colonial's Areas of Concern USGS maps may be accessed as described:

Colonial Pipeline Company utilizes USGS 7.5 minute (1:24,000 – scale) quadrangle sheets to locate and track significant spills. The USGS has recorded pertinent information on these maps which include roads, State Parks, Federal Lands (i.e., Forests, National Parks, etc.), populated areas, water bodies and wetlands.

Colonial has superimposed on these maps pertinent information which includes pre-located product recovery/monitoring points along all water bodies, equipment needs for each point, qualitative stream velocities, and industrial and municipal water intakes.

This information is available on hard copy and in electronic pdf format.

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

PROTECTION STRATEGIES

Resource constraints, time constraints, and various response constraints limit the amount of areas, which can be protected during a major oil spill. The following list provides a prioritization of types of areas, which should be protected during an incident.

1. Public Health.
 - (a) Storm drain outlets.
 - (b) Public drinking water intakes.
 - (c) Public utility water intakes.
2. Threatened and Endangered Species.
3. Habitat and Species Concentrations.
 - (a) Designated wildlife refuges and game management areas.
 - (b) Wildlife concentrations (which may vary seasonally).
 - (c) Vegetated wetlands and shoreline.
 - (d) Public oyster seed grounds.
 - (e) Commercial and recreational fisheries management areas.
 - (f) Coastal restoration projects.
4. Other Public Lands.
5. Cultural and Historical Sites.
6. Exposed Tidal Flats.
 - (a) Shell beaches and riprap.
 - (b) All other beaches.
7. Sheltered Rocky Shores and Sea Walls.
8. Private Recreational Areas and Facilities.
9. Marinas.
10. Private and Industrial Raw Water Supplies

Waterways Warning Network

The Louisiana Waterways Warning Network has been established to notify facilities concerned with the public drinking water supply. The Waterways Warning Network should be contacted by the Responsible Party during the normal course of initial notification procedures, but MSO New Orleans will verify that notifications have been completed. The river bank designations are as follows: the west bank, or right descending bank, is designated by a "W"; the east bank, or left descending bank, is designated by an "E". Once a spill is detected, the network is notified and the network contacts all plants downstream of the spill site so that appropriate precautionary measures are taken.

Wildlife Protection

If birds in a non-nesting area are seen in an area of potential impact they should be driven out of the area before the oil arrives. This may be done by deployment of "propane cannons" in areas where birds loaf or feed, or it may be accomplished by hiring airboats to patrol the marsh edge or shallow water area. This activity must not be initiated without consultation with the State Wildlife Department and/or the U. S. Fish and Wildlife Service personnel at the scene. Hazing of birds from an area will most likely have to be continued for the first 48 hours of habitat oiling and cleanup activity.

ARCHEO/HISTORICAL SENSITIVE AREAS

Due to numerous archeological sites along coastal Texas, Louisiana and Mississippi, the Texas Historical Commission, the Louisiana Division of Archeology and the Mississippi Department of Historical Preservation

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

need to be informed of oil spills that may affect their natural coastline. Specifically, they need to be notified if the spill response operations will require disturbing the terrain through digging or transplanting. This does not include normal operations that just require access to the land. The following people should be notified:

1. Texas Historical Commission. Weekdays from 8:00 AM to 5:00 PM. Commission phone number is (512) 463-6096 or Mr. Jim Burseth (512) 463-5863
2. LA Division of Archeology. Weekdays from 8:00 am to 4:30 PM: Mike Mahady at (504) 342-8170. If notification is required after hours, he can be reached at home via the Marine Safety Office Operations Center (504) 589-6261.
3. MS Department of Historical Preservation. Weekdays from 9:00 am to 5:00 PM: Roger Walker at (601) 359-6946, or the main office at (601) 359-6850.
4. National Advisory Council On Historic Preservation
Western Office of Review
730 Simms Street - Suite 401
Golden, CO 80401
Claudia Nissley - Director (303) 231-5230

No listing of State Historic Sites is maintained in the USCG ACPs because site location information of sufficient specificity to make the sites vulnerable to vandalism and/or pillage must be treated confidentially. The State Historic Preservation Officer (SHPO) in each state maintains a listing of locations and provides them on an as needed basis.

Site specific information of sufficient specificity to make archaeological sites vulnerable to vandalism and/or pillage has been treated with appropriate confidentiality within the ACPs. If necessary the State archaeologist/historic preservation officer will provide onsite assistance in identification and any relevant input regarding cleanup techniques which might avoid any damage to the known or suspected resource.

Moore Archaeological Consulting has been identified by the USCG as the only archaeologist with the credentials, flexibility and local expertise to provide a rapid response capability. His address is:

Moore Archaeological Consulting
Roger Moore, Archaeologist
2140 Bevis Street
Houston, TX 77008
Office (713) 861-8663
Cellular Phone (b) (6)

Home (b) (6)
FAX (713) 861-8627

Sensitive Areas Identified by Texas General Land Office and National Oceanic & Atmospheric Administration

The "Texas Oil Spill Planning and Response Atlas" contains maps and associated data to be used in oil spill planning and response. These maps include the Habitat Priority Protection Area, Environmental Sensitivity Index, the Texas Coastal Natural Resource Inventory and other GIS-related data acquisition efforts. This data may not be included on the Colonial GIS database. There are four copies of the Atlas in the Gulf Coast District.

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

Sensitive Areas Identified by USGC Area Contingency Plans

Houston Ship Channel North of Morgans Point

Includes Black Duck, Scott, Burnett, and San Jacinto Bays, Lost Lake, Buffalo Bayou to the Turning Basin, and the San Jacinto River north to the US Highway 90 bridge.

A. Marshes

1. Marshes in the subsided area of Brownwood subdivision.
2. Fringe marsh on Goose Creek.
3. Marshes in Whites and Bear Lakes North of I-10 bridge.
4. Marshes along the San Jacinto River near Banana Bend.

B. Bird Rookeries, Roosts, and Loafing Areas

1. Alexander Island nesting area (April - July).
2. Sand or shell bars along the Channel and bays edges.

C. Oyster Reefs

1. Reefs along the slopes of the Houston Ship Channel.

D. Open Beaches

1. None used at the present time.

E. Municipal, Industrial, and Recreational Uses

1. (b) (7)(F), (b) (3)
2. Docking facilities for shipping industry.
3. San Jacinto Battleground State Park, Battleship TEXAS.
4. PHA observation area & Sam Houston Pavilion and Turning Basin.

SOUTHWEST SECTOR AND TEXAS GULF COASTS

TEXACO ISLAND INTERSECTION AND SABINE LAKE

1. DESCRIPTION:

The intersection is made up of the Sabine - Neches Rivers, Taylor Bayou Turning Basin and the GIWW. Sabine Lake is a shallow saltwater lake of approximately 125 square miles.

2. ACCESS:

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

Taylor Bayou Turning Basin provides access to barges and deep draft vessels servicing Texaco, Chevron, Hallbuck Marine, and Great Lakes Carbon. The average response time for local major cleanup contractors to this area is 2 to 3 hours.

Upper Taylor Bayou and tributaries: North of Highway 73, the Taylor Bayou system supports large populations of fish, migratory birds, fur-bearing animals and alligators. The average response time for local major cleanup contractors to this area is 2 to 3 hours.

Prolonged closure of the GIWW would have a severe impact on the high volume of barge traffic that normally transits the waterway. The average response time for contractors to this area is 2 to 4 hours.

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

Sabine Lake is a popular fishing and water sport attraction. The lake and adjacent marshlands to the east are important aquatic breeding and spawning grounds. No industrial waterfront facilities are located along the lake shoreline, but barges servicing Johnson Bayou Oil Field cross the lake occasionally. One marine complex serves the lake's recreation and fishing clientele. The average response time for local major cleanup contractors to this area is 2 to 4 hours.

SABINE-NECHES INTERSECTION AND LOWER NECHES RIVER

1. DESCRIPTION:

The intersection of the Neches River and the GIWW and Sabine River at the north end of Sabine Lake.

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

(b) (7)(F), (b) (3)

Sabine Lake is directly to the southeast of this junction and a strong northwesterly wind could send pollutants into the Sabine National Wildlife Refuge. The average response time for local major cleanup contractors to this area is 2 to 3 hours.

NECHES RIVER, PORT NECHES TO BEAUMONT

1. DESCRIPTION:

This is a highly industrialized section of the Neches River extending westward or upriver to the I-10 Bridge in Beaumont. This section of the Neches River is home to numerous major oil transfer facilities located primarily on the south bank in Port Neches and Beaumont, Texas (see locator chart).

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

Waterfront Oil Transfer Facilities: Thousands of high volume oil and chemical transfers involving barges and deep draft vessels occur annually at facilities in this sector. Spills have occurred in this sector and the potential for such to recur is always present. The average response time for local major cleanup contractors to these areas is 2 to 4 hours.

Canals and bayous of the north bank: Several canals and bayous located along the north bank feed into the river. These watercourses include Bird Island Bayou, Bessie Heights Canal, Gray's Bayou, Anderson Gully, Meyer Bayou, Nig Bayou, Star Bayou and other unnamed canals, all of which drain marshlands north of the river. These watercourses usually flow into the Neches River but are influenced by the tides. Flow does occur in both directions. In the event of a spill, precautions must be taken to prevent the entrance of oil into these waterways. The average response time for local major cleanup contractors to these areas is 2 to 4 hours.

Port Neches Park: Is located between Star Enterprise and UNOCAL. This park has a boat ramp that is used heavily by recreational vessels.

Colonial Pipeline Company

ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

SABINE RIVER, SABINE LAKE TO ORANGE, TX

1. DESCRIPTION:

The Sabine River, northeasterly to the intersection of the GIWW

(b) (7)(F), (b) (3)

3. SENSITIVE ACCESS:

Two major bayous, Adam's and Cow, flow into the Sabine River. There are a few facilities located on Adam's Bayou, including E.I. DuPont. The majority of products handled by DuPont consist of hazardous bulk cargoes. The average response time for local major cleanup contractors to this area is 2 to 3 hours.

No transfer facilities are located on Cow Bayou, however H&H Shipyard is located on this bayou. The average response time for local major cleanup contractors to this area is 2 to 3 hours.

BLACK LAKE OIL FIELD

1. DESCRIPTION:

Black Bayou is located on the southeast bank of the Sabine River. Positioned at the northeastern end of the bayou is Black Bayou Oil Field.

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

The Black Bayou Oil Field, owned by Shell Corporation, is the only facility located on this bayou. The oil field is bordered by the Sabine National Wildlife Refuge water body. The facility is somewhat isolated by canals and marshland. A high volume of oil is pumped from this field. The average response time for local major cleanup contractors to this area is 2 to 3 hours.

LAKE CHARLES, CITY AND PORT

1. DESCRIPTION:

Lake Charles is a 1.26 square mile lake located on the south side of I-10 at the City of Lake Charles. The City of Lake Charles borders the south and east shorelines.

2. ACCESS:

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

This entire area serves as public beach and recreational waters along with a variety of commercial traffic. The average response time for local major cleanup contractors to this area is 2 to 5 hours.

There are numerous transfer facilities located on the northern Calcasieu River and Port of Lake Charles. The average response time for local major cleanup contractors to these facilities is 2 to 5 hours.

BLACK BAYOU OIL FIELD

1. DESCRIPTION:

The Black Bayou Oil Field is a system of canals and bayous servicing oil wells in Black Bayou. The oil field is located just off the GIWW at mile 260.

2. ACCESS

(b) (7)(F), (b) (3)

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ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

3. SENSITIVE AREAS:

Black Bayou runs from the GIWW, south through the oil field, through the Sabine National Wildlife Refuge, and then into Lake Sabine.

4. CONTAINMENT RECOVERY:

Containment and recovery operation will be very difficult. The low marshy area would hamper both containment and recovery. Recovered oil would probably have to be removed by barge.

5. PROTECTION PRIORITY:

Boom off entrances to the Sabine National Wildlife Refuge and the GIWW.

CALCASIEU RIVER INTERSECTION WITH GIWW MILE 241

1. DESCRIPTION:

This area consists of the intersection of the GIWW, which runs east and west, and the Calcasieu River, on which barge traffic and deep draft vessels transit to and from Lake Charles. This intersection is located approximately 1.5 miles north of Calcasieu Lake in Calcasieu Parish.

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

Moss Lake is 2.0 miles to the north and Calcasieu Lake is 1.5 miles to the south of the intersection. Depending on currents and wind conditions, oil may migrate into the neighboring lakes or marshlands. Fredeman's Shipyard and other industrial activities area located at the NW corner of the intersection. An incident in this vicinity may require closure of the GIWW and/or Calcasieu Ship Channel.

4. CONTAINMENT AND RECOVERY:

Containment will be difficult due to ship channel and GIWW traffic and currents. Recovery will be difficult due to limited land access to the east but access to the northwest is possible.

5. PROTECTION PRIORITY:

Containment priority will be directed at preventing migration of spilled product into adjacent marshlands or to prevent pollution from drifting into the lake.

NECHES RIVER

1. DESCRIPTION:

Industrialized canal with critical marshlands and recreational boating areas.

2. ACCESS:

(b) (7)(F), (b) (3)

3. CRITICAL AREAS:

Bessie Heights Marsh, Gray's Canal, Bessie Heights Canal, and Black Bayou Marsh areas are ecologically rich with waterfowl and wildlife. This is also a fish and shrimp breeding ground. Port Neches Park is used heavily for recreational boating. The oil transfer facilities and refineries that line this waterway may suffer economic loss due to a large spill on this river.

4. CONTAINMENT AND RECOVERY:

- a. Place containment booms and/or absorbent booms across Gray's Canal (approximately 100 feet), Bessie Heights Canal (approximately 100 feet), and Black Bayou (approximately 200 feet), and attempt to keep oil out of the critical marshlands.
- b. Place catch booms in and around marsh entrances. Currents are often very strong (approximately 4 knots).

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As much as a 30-degree angle would be needed to lessen entertainment of the oil.

- c. If oil gets into the marsh, flush off grass and mud towards containment areas with low-pressure water, then pick up with sorbents. Remove badly oiled marsh grass as deemed necessary.
- d. Use vacuum trucks on barges on the Orange County side, if necessary, because of fewer channel restrictions and better water.

5. PROTECTION PRIORITY:

Place containment booms and/or absorbent booms across Gray's Canal, Bessie Heights Canal, and Black Bayou, and attempt to keep oil out of the critical marshlands.

Place catch booms in and around marsh entrances.

SABINE LAKE

1. DESCRIPTION:

Sabine Lake is a shallow estuarine lake located below the confluence of the Sabine and Neches Rivers on the Texas-Louisiana border.

2. ACCESS:

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

- a. The Sabine Lake area is an ecologically rich fish, crab, and shrimp spawning ground that is heavily used for commercial and recreational fishing, crabbing, and shrimping. Contact Texas Parks and Wildlife Department in Seabrook, TX at 713-474-2811 for further guidance on seasonal wildlife information.
- b. Migratory bird routes: The entire Southeast Texas coastal area is a major winter stopover point for migratory birds. Spills in this area would threaten these birds.
- c. A few small shellfish beds are located on the Louisiana side of Sabine Lake and along the east side of Sabine Pass Channel. A spill in these areas could destroy shellfish.
- d. Sabine National Wildlife Refuge is located on the Louisiana side of Sabine Lake and includes most of the area between Black Bayou and Johnson's Bayou. Contact the refuge manager at (318) 762-3816 for guidance.
- e. Sydnes Island, on the north end of lake was a bird sanctuary and rookery. Most of the birds are gone from the area; however, there are a few left that do nest on the island. Contact Sue Bailey from Bailey's Fish Camp at (409) 735-9020 for assistance on bird cleaning in this area.

f. (b) (7)(F), (b) (3)

Pollution Potential and Response Strategy:

OIL SPILL IN SABINE-NECHES CANAL

CONTAINMENT AND RECOVERY:

- a. Attempt to keep spill from entering Sabine Lake.
- b. The GSU intake has a very strong incoming current toward the power plant most of the time.
- c. Attempt to keep oil away from intake canal entrance in Old River Cove.
- d. Use catch booms at Highway 87 and near GSU pump station.
- e. Use skimmer barges, if available.

Protection Priority:

Use boom accordingly to keep oil from entering Sabine Lake.

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ENVIRONMENTALLY SENSITIVE AREAS

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SABINE NATIONAL WILDLIFE REFUGE

1. DESCRIPTION:

This refuge is located in the southwestern corner of Louisiana in Cameron Parish. The refuge contains 125,000 acres of fresh and brackish marshes interspersed with low prairie ridges. Calcasieu Lake transects the refuge on the east and Sabine Lake adjoins it on the west.

2. GENERAL INFORMATION:

Equipment Available - Quantity

Air boats - 1

Outboard boats - 4

Possible remote command post can be set up at the refuge headquarters.

3. ACCESS:

(b) (7)(F), (b) (3)

4. CONTACTS:

Phone: (318) 762-3816 or 3817

Point of contact: Terence Delaine

Pollution Potentials and Response Strategy: OIL SPILL IN SABINE LAKE

CONTAINMENT:

a. There is no beach along most of the eastern shore of Sabine Lake and oil could penetrate to Gray's Ditch Levee, which will present a barrier to oil for the areas east of this ditch.

b. Boom across Bridge Bayou, Three Bayou, and Willow Bayou in times of slow currents, but use catch booms with fast currents.

RECOVERY:

a. Use barge-mounted skimmers along the shoreline.

b. Use snares and sorbents.

OIL SPILL IN CALCASIEU LAKE

(there is almost no beach and oil can penetrate directly into the marsh)

CONTAINMENT:

a. On the western shore, boom off all access canals and bayous.

b. Louisiana Highway 27 would present a barrier to oil penetrating areas west of Highway 27.

RECOVERY:

a. Use barge-mounted skimmers in Calcasieu Lake.

b. Use snares and sorbents.

SABINE-NECHES INTERSECTION

1. DESCRIPTION:

The intersection of the Neches River from Beaumont, the GIWW, and Sabine River from Orange, and Sabine Lake.

2. ACCESS:

(b) (7)(F), (b) (3)

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ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

3. SPECIAL INTERESTS:

(b) (7)(F), (b) (3)

4. CONTAINMENT AND RECOVERY:

- a. Booms could be stretched from the shore while vacuum trucks located at Bean's Fleet are used to recover the oil.
- b. Skimmers could be used to recover oil before it impacts the beach.

5. PROTECTION PRIORITY:

(b) (7)(F), (b) (3)

SABINE RIVER (SABINE LAKE TO I-10)

NOTE: Cow Bayou and Adam's Bayou are in the EPA zone.

Spills in these areas can impact the USCG zone.

1. DESCRIPTION:

The Sabine River from I-10 in Orange to its mouth at Sabine Lake.

2. ACCESS:

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS:

Jack Tar Marina, Sabine Yacht Club, Lottie's Landing, Cow Bayou, Adam's Bayou, and associated marshlands are rich in fish and migratory waterfowl. The GSU intake canal is located at the end of Old River Cove north of the Rainbow Bridge.

4. CONTAINMENT AND RECOVERY:

Containment presents a particular problem in this area since both sides of the channel are low marshy areas. Consider using skimmers and sorbents to recover oil spilled in this area.

5. PROTECTION PRIORITY:

Boom off entrances to Jack Tar Marina, Sabine Yacht Club, Lottie's Landing, Cow Bayou, Adam's Bayou, and associated marshland entrances. Boom off the GSU intake canal located at the end of Old River Cove north of the Rainbow Bridge.

WILDLIFE AND FISHERIES AREAS

Louisiana and Mississippi are characterized by many wildlife and fisheries areas. Below are some of the major wildlife and fisheries areas in the COTP New Orleans zone.

Louisiana.

Atchafalaya River and Atchafalaya Basin. Atchafalaya National Wildlife Refuge - primarily freshwater marsh.

Lower Mississippi River (LMR).

Mile 0 to mile 504. The shoreline of the Mississippi River consists primarily of urban waterfront structures (low sensitivity), freshwater marshes (high sensitivity), and some saltwater marsh areas in the lower delta.

SOCIO/ECONOMIC SENSITIVE AREAS

Mile 80 to mile 234. These miles constitute the industrial corridor. Incidents effect numerous Mississippi River industries, including commercial vessel traffic, barge fleet operations, oil and HAZMAT transfer operations, and towing industry traffic and operations. Additionally, casino boats operate on the Mississippi River in New Orleans and Baton Rouge.

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ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

ALLIANCE PIPELINE

MISSISSIPPI RIVER

1. DESCRIPTION

Mile 0 to mile 504. The shoreline of the Mississippi River consists primarily of urban waterfront structures (low sensitivity), freshwater marshes (high sensitivity), and some saltwater marsh areas in the lower delta. The Mississippi River experiences heavy barge, tanker and cargo vessel traffic in addition to a variety of other commercial vessel usage. Recreational boating is minimal along most of the river whereas shore based sport fishing may occur at many of the public access locations.

2. ACCESS

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS

Delta National Wildlife Refuge

The Delta consists of 48,800 acres of marsh, shallow ponds, channels and bayous. It primarily provides a winter sanctuary for migratory waterfowl such as snow geese and more than 18 species of ducks. It is also the home of many other water birds, shore birds, white-tailed deer and alligators. Delta National Wildlife Refuge is located between Main Pass and Pass A Loutre where the Mississippi River empties into the Gulf of Mexico.

Pass A Loutre Wildlife Management Area

The Pass A Loutre WMA consists of 66,000 acres. It is accessible by boat only, however, the tributaries along the Mississippi River provide excellent traveling passages. The nearest public launches are in Venice. River channels with attendant pass banks, natural bayous and man-made canals that are interspersed with intermediate and fresh marshes, characterize the area. Furbearers present include nutria, muskrat, mink, raccoon and otter. Alligators are fairly common in the marsh. Freshwater species including bass, bream, catfish, crappie, watermouth, drum and garfish flourish in the interior marsh ponds. Salt-water species include redfish, speckled trout and flounder. The Eastern Brown Pelican and Peregrine Falcon are two endangered species which visit Pass-a-Loutre on rare occasions. Pass A Loutre WMA is located between Pass A Loutre and South Pass where the Mississippi River empties into the Gulf of Mexico.

4. CONTAINMENT AND RECOVERY

The width and speed of the Mississippi River will often preclude the use of most response techniques down to the Head of Passes area where currents decrease and tidal influences are greater. An exception is potential diversion booming operations at the occasional "dead spot" along the shorelines where currents decrease considerably and form a natural collection area. Locations of the "dead spots" will very depending on the water level and current speed. The U.S. Coast Guard or local commercial vessel captains should be consulted at

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ENVIRONMENTALLY SENSITIVE AREAS

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the time of a spill to identify probable “dead spot” locations.

- 1) Deploy diversion booms at downstream “dead spot” locations if present. Exclusion booming of smaller channels, passes and bayous in Head of Passes area. Exclusion or deflection booming at water intakes.
- 2) For large spills, focus containment operations in Head of Passes area
- 3) Small skimmers or vacuum trucks and portable pumps with skimmer heads at containment sites.
- 4) Open water skimming may be possible in Head of Passes Area.

5. PROTECTION PRIORITY

10-25 Miles downstream of Alliance Crossing:

Point A La Hache Waterworks	(504) 564-3943 ext. 3317
Point A La Hache Oyster Breeding	(504) 442-2511
Port Sulphur Waterwork	(504) 564-3952
Freeport Sulphur Company	(504) 562-3981

25 to 50 Miles downstream of Alliance Crossing:

Bay Denessee oyster breeding	(800) 442-2511
Buras Marina	(504) 657-7632
Buras Waterworks District	(800) 442-2511
Dry Cypress Bayou oyster breeding	(800) 442-2511
Joshua Marina	(504) 657-8507
Boothville – Venice Waterworks	(504) 534-2233
Venice Marina	(504) 534-8357 or (504) 534-2587
Main Pass Geese Concentration Area	(800) 442-2511
Head of Passes Least Tern breeding area	(800) 442-2511
Riversia Bay bird breeding area	(800) 442-2511
Southwest Pass fish breeding area	(800) 442-2511

EAST SIDE OF MISSISSIPPI RIVER TO LAKE BORGNE

1. DESCRIPTION:

The area from the east bank of the Mississippi River to Lake Borgne primarily consists of brackish water marsh in association with bayous and lakes. This area is used for a variety of industries including oil & gas companies, vessel traffic and recreational boating / fishing.

2. ACCESS

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS

Lake Lery

Lake Lery is located approximately 9 miles northeast of the Alliance Refinery and just north of Delacroix, Louisiana. The lake measures around two (2) miles across at the widest point and about 5 miles long. Water depths are unknown but expected to be fairly shallow.

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ENVIRONMENTALLY SENSITIVE AREAS

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4. CONTAINMENT AND RECOVERY

Response techniques that are applicable include open water containment, diversion booming along the shorelines of the lakes. Lakes in this area are tidally influenced and, consequently, wind and tidal currents will influence spill movements. The primary response strategy should be to prevent oil from migrating out of the lakes (and bayous) and into the surrounding marshes.

5. PROTECTION PRIORITY:

10-25 Miles downstream of Crossing:

Lake Lery – Eastern Oyster breeding (800) 442-2511

Biloxi Wildlife Management Area (504) 765-2360

LAKE BORGNE TO THE MISSISSIPPI SHORELINE

1. DESCRIPTION

The pipeline enters south Lake Borgne (between Verret, Louisiana and Alluvial City, Louisiana), crosses Lake Borgne (southwest to northeast) and enters into Mississippi (south of Ansley, Mississippi). A spill from this area could impact Lake Borgne, the mouth of the Pearl River and the Mississippi shoreline (between Pearl River Island and Heron Bay Point). Consisting of salt water, this area is utilized by the recreational, vessel and oil and gas industries.

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS

Lake Borgne

This lake is not heavily trafficked by commercial vessels due to its shallow waters; however, recreational boaters and fishing vessels inundate the lake throughout the year. Additionally, with the active oil platforms on the lake, there is some towing of tank barges from the lake to adjoining waters.

Bayou Sauvage National Wildlife Refuge

The refuge is comprised of 18,300 acres in fee title and 4,200 under lease agreement. The refuge is located entirely within the corporate limits of New Orleans in Orleans Parish, Louisiana. U.S. Highway 90, U.S. Highway 11, and Interstate 10, which provides tremendous opportunities to attract for public access from the New Orleans Metropolis, traverse the NWR. The refuge habitats include estuarine and freshwater marshes, interspersed with shallow, open waterways and a hardwood hammock. A diversity of wintering waterfowl visit the refuge with peak populations of 50,000 ducks. The threatened American bald eagle, peregrine falcon and American alligator can be found on the refuge. Public use opportunities are fishing, hiking, biking, guided tours and environmental education programs. A spill in Lake Borgne could impact the southeast side of the Bayou Sauvage NWR.

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ENVIRONMENTALLY SENSITIVE AREAS

Gulf Coast

Biloxi Wildlife Management Area

The Biloxi WMA is located 40 miles east of New Orleans in St. Bernard Parish and consists of 39,583 acres. This area is located on the southeast shoreline of Lake Borgne and could be impacted by a spill if it occurred in Lake Borgne. Sensitive species include waterfowl, shorebirds and wading birds. The area is a low brackish to saline marsh. A few oak trees are present on old ridges but the major vegetation is wiregrass, black rush, hog cane, oyster grass, salt grass, glasswort and three square grass. Widgeon grass is the main submergent plant. A large number of bayous, sloughs and potholes make the Biloxi tract an excellent producer of fish, shrimp, crabs, waterfowl and furbearers. The many canal spoil banks scattered throughout the marsh provide escape for birds and mammals from rising water levels during storms or high tides. Blue and snow geese are normally found on Biloxi though not in large numbers. Fur animals present are nutria, muskrat, mink, raccoon, otter and opossum. Alligators are also found on the area. Threatened or endangered species that occur on Biloxi are the Brown Pelican and Bald Eagle.

Pearl River Wildlife Management Area

Pearl River Wildlife Management Area consists of approximately 34,896 acres. The terrain is flat, drainage is poor, and the area is subject to annual flooding. There are numerous streams and bayous on the area which provide recreational activities. The bald eagle and gold eagle are present. Swallowtail kites and Ospreys are frequently seen.

4. CONTAINMENT AND RECOVERY

Response actions should focus on containment booming at the outside of bends in the river where oil naturally concentrates and/or where currents are lowest. Strong currents could complicate booming operations during high flow conditions.

5. PROTECTION PRIORITY

Lake Borgne – Eastern Oyster Breeding
Biloxi Wildlife Management Area

(800) 442-2511
(504) 765-2360

MISSISSIPPI SHORELINE TO COLLINS TERMINAL

1. DESCRIPTION

This area primarily consists of creeks and rivers that ultimately drain into the Gulf of Mexico.

(b) (7)(F), (b) (3)

3. SENSITIVE AREAS

Jourdan River (which could impact St. Louis Bay)

Bay St. Louis supports numerous fishing fleets and marinas.
Little Black Creek Wilderness Park

Bowie Creek, Beaver Creek, Okatama Creek (which drain to the Bowie River) and Bowie River

The Alliance – Collins 20" pipeline crosses the Okatoma Creek and the Bowie Creek / River approximately 3.5 and 9 miles south, respectively, of the Collins Terminal.

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ENVIRONMENTALLY SENSITIVE AREAS

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The Okatoma Creek at the pipeline crossing is 50 to 60 feet wide and slightly deeper and also with moderate currents. The Bowie Creek / River at the crossing is approximately 125 feet wide with moderate depths and low to moderate currents. Public use of either waterway appears to be limited to sport fishing and canoeing.

4. CONTAINMENT AND RECOVERY

Underflow dams in coordination with containment and diversionary booming should be utilized for a spill in this area. Skimming will be limited to creek/river access along and downstream of pipeline crossings. Strong currents could complicate booming operations during high water conditions. Exclusion booming of large debris (log) accumulations at natural collection areas.

5. PROTECTION PRIORITY

City of Hattisburg, Mississippi

(601) 544-7900

Forest County, Mississippi

(601) 544-5911

Additional agency resources to identify environmental and economic sensitive areas can be found in the table below:

<u>Emergency Response Resource Websites</u>		
Resource	Contents	Document Link/Navigation Instructions
EPA		-
LEPC Database	EPA's list of LEPC sorted by state and county/municipality	http://yosemite.epa.gov/oswer/LEPCDb.nsf/ByState!OpenView&Start=1&Expand=45#45
EJMapper	Interactive map of facilities that report to EPA (including NPDES Permit holders), waterbodies, governmental jurisdictions, demographics (populations, economics, etc.), land cover, etc.	http://www.epa.gov/environmentaljustice/mapping.html

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EPA OSC Website	EPA's clearinghouse of useful information for On-Scene Coordinators (H&S information, Equipment and Supply Vendors, Training Providers, etc.)	http://www.epaosc.org/default.aspx
EPA NEPassist Website	Interactive map of facilities that report to EPA (including NPDES Permit holders), waterbodies, governmental jurisdictions, demographics (populations, economics, etc.), land cover, etc.	http://134.67.99.123/nepassist/entry.aspx
FEMA		-
NIMS Resource Center	FEMA's NIMS information clearinghouse that includes guidance documents, training materials and related resources	http://www.fema.gov/emergency/nims/index.shtm
NOAA		-
Oil Spill Responder Tools and Resources	Link to multiple resources to assist oil spill responders such as trajectory/weathering/dispersion models, Environmental Sensitivity Index maps, ICS forms and job aids, SCAT and Aerial Recon job aids	http://response.restoration.noaa.gov/oil-and-chemical-spills/chemical-spills/response-tools/guide-responder-tools.html
OSHA		-
Oil Spill Response Worker Protection Website	OSHA requirements and guidance for ensuring the protection of oil spill cleanup activities	http://www.osha.gov/oilspills/index.html
Incident Command System eTool Website	OSHA's ICS information clearinghouse that includes guidance documents, training materials and related resources	http://www.osha.gov/SLTC/etools/ics/index.html

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ENVIRONMENTALLY SENSITIVE AREAS

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PHMSA		-
National Pipeline Mapping System	PHMSA's Pipeline Information Management Mapping Application (PIMMA). Persons must apply to PHMSA for access to Interactive Map	https://www.npms.phmsa.dot.gov/
National Pipeline Mapping System Downloads	PIMMA download site which includes the following GIS datasets: Pipeline Data, Unusually Sensitive Area Data, Population Data, Basemap Data, Commercially Navigable Waterways and Natural Disaster Data	https://www.npms.phmsa.dot.gov/application.asp?tact=Data&page=subapp.asp?app=data&act=data_reg
Regional Response Teams		-
Regional Response Team Website Links	Link to the 13 Regional Response Team Websites; which often include information such as the Regional/Geographic Response Plans	http://www.rrt.nrt.org/
The Response Group (TRG)		-
TRG IAP Software Log In Screen	First Login User ID: iapcolonial Password: 07pipe!ne Second Login User ID: planning Password: planning	http://www.iapsoftware.com/

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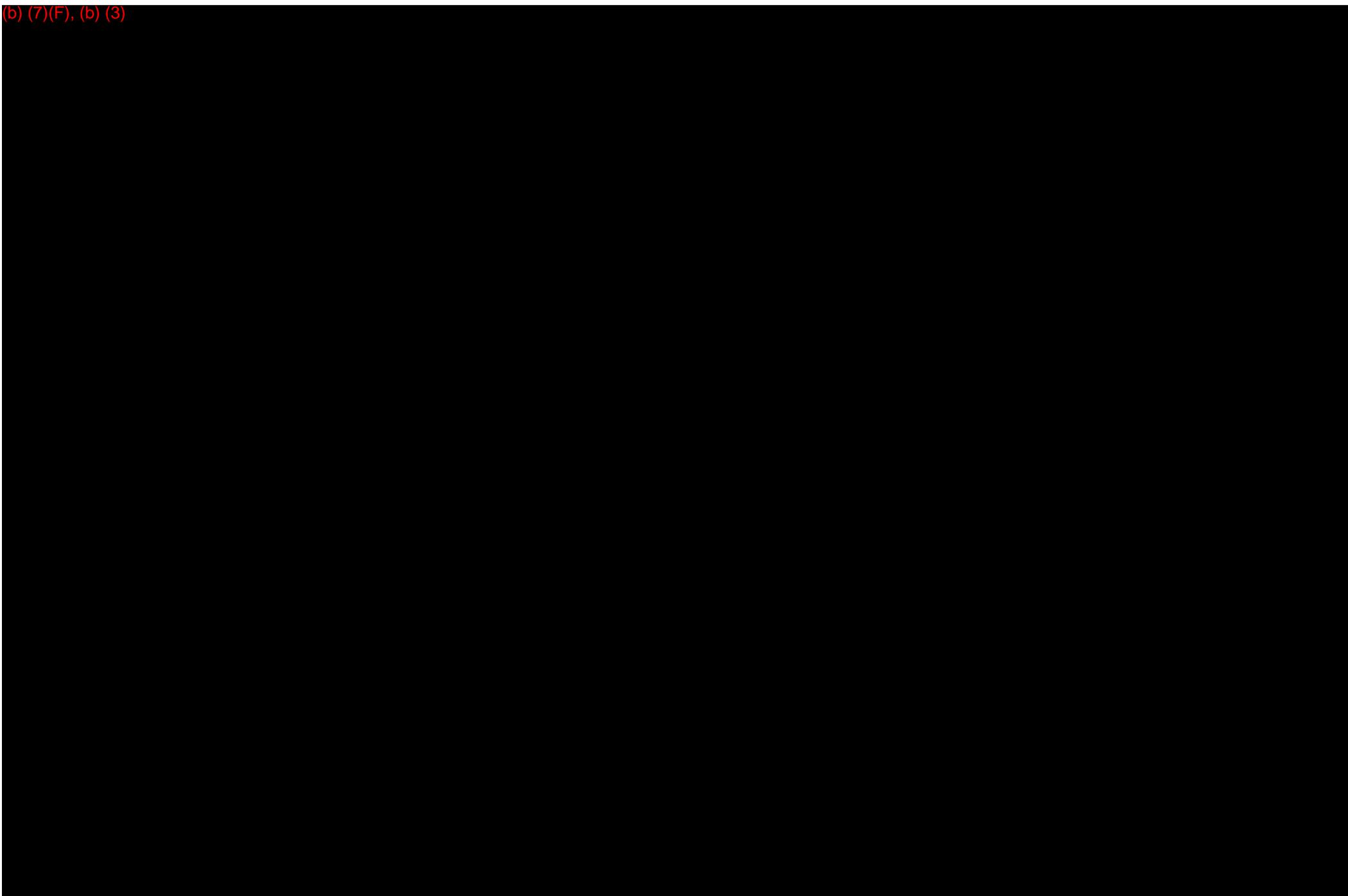
ENVIRONMENTALLY SENSITIVE AREAS

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USCG		-
USCG Homeport	Homepage that provides links to all USCG Ports/Sectors and public-access versions of the Area Contingency Plans	https://homeport.uscg.mil/mycg/portal/ep/home.do
USDA		-
Web Soil Survey	Interactive Map and downloadable GIS data that provide information about soil characteristics	http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm
USFWS		-
USFWS Critical Habitat for Threatened and Endangered Species	Interactive Map and downloadable GIS data that identifies areas that are designated as Critical Habitat and Threatened or Endangered Species by State and County	http://criticalhabitat.fws.gov/crithab/
National Wetlands Inventory	Interactive Map and downloadable GIS data that identifies areas that are designated as wetlands by the USFWS	http://www.fws.gov/wetlands/data/
USGS		-
USGS Surface-Water Data for the Nation	Database used to track water levels, discharge rates, rainfall and surface water quality at over 850,000 stations in the United States.	http://waterdata.usgs.gov/nwis/sw
USGS Watershed Data for Google Earth	Downloadable Google Earth Watershed/Water Feature overlay maps for the United States	http://edna.usgs.gov/watersheds/kml_index.htm
Juice Analytics for Google Earth		
Census Data	Census Data/Population Density for Google Earth by county or block in each state	http://www.juiceanalytics.com/writing/census-data-in-google-earth/
US Census Bureau		
Census Data	Census Data/Population Density	http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

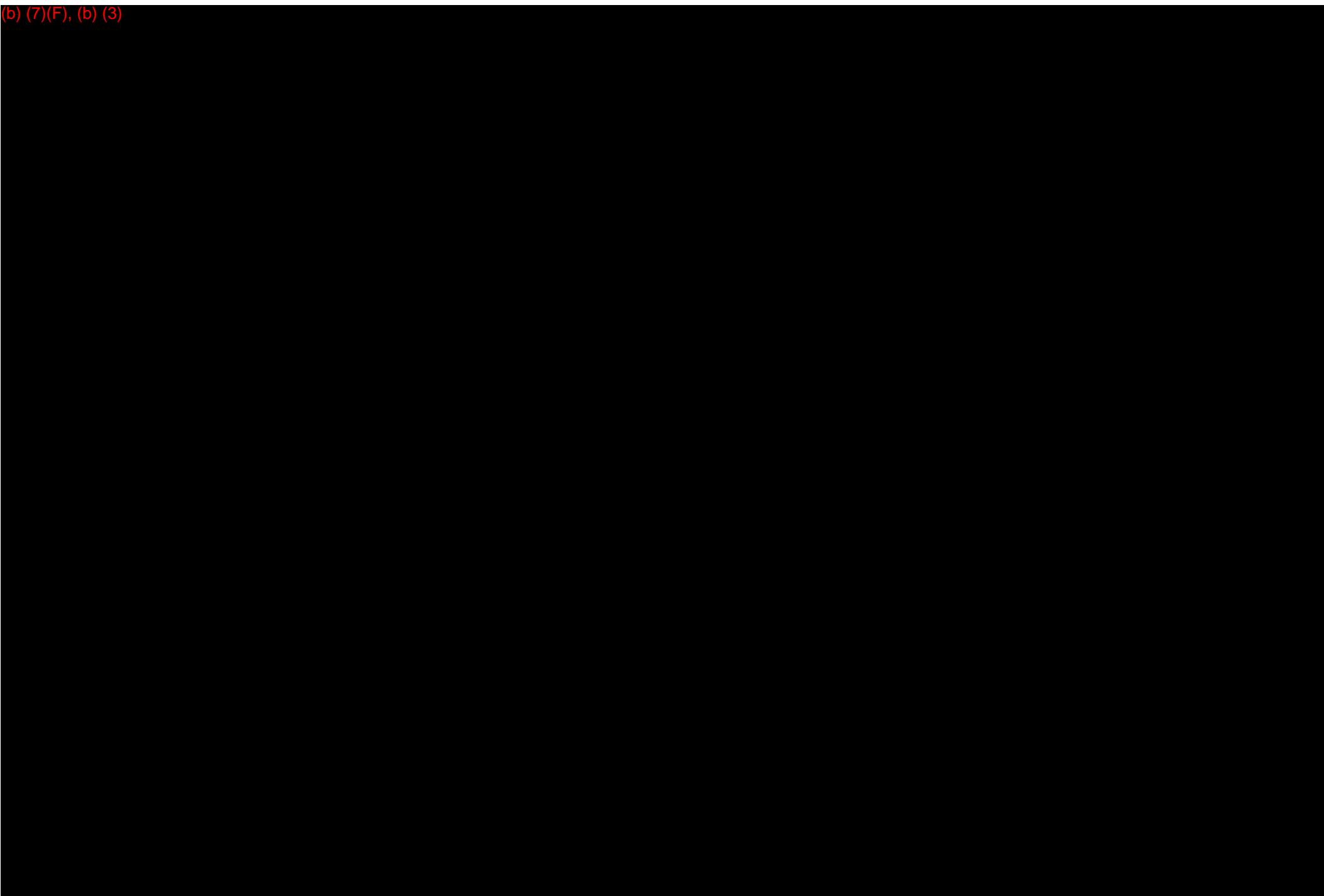
Colonial Pipeline Company
WATER INTAKE LOCATIONS – RESPONSE ZONE 801

(b) (7)(F), (b) (3)



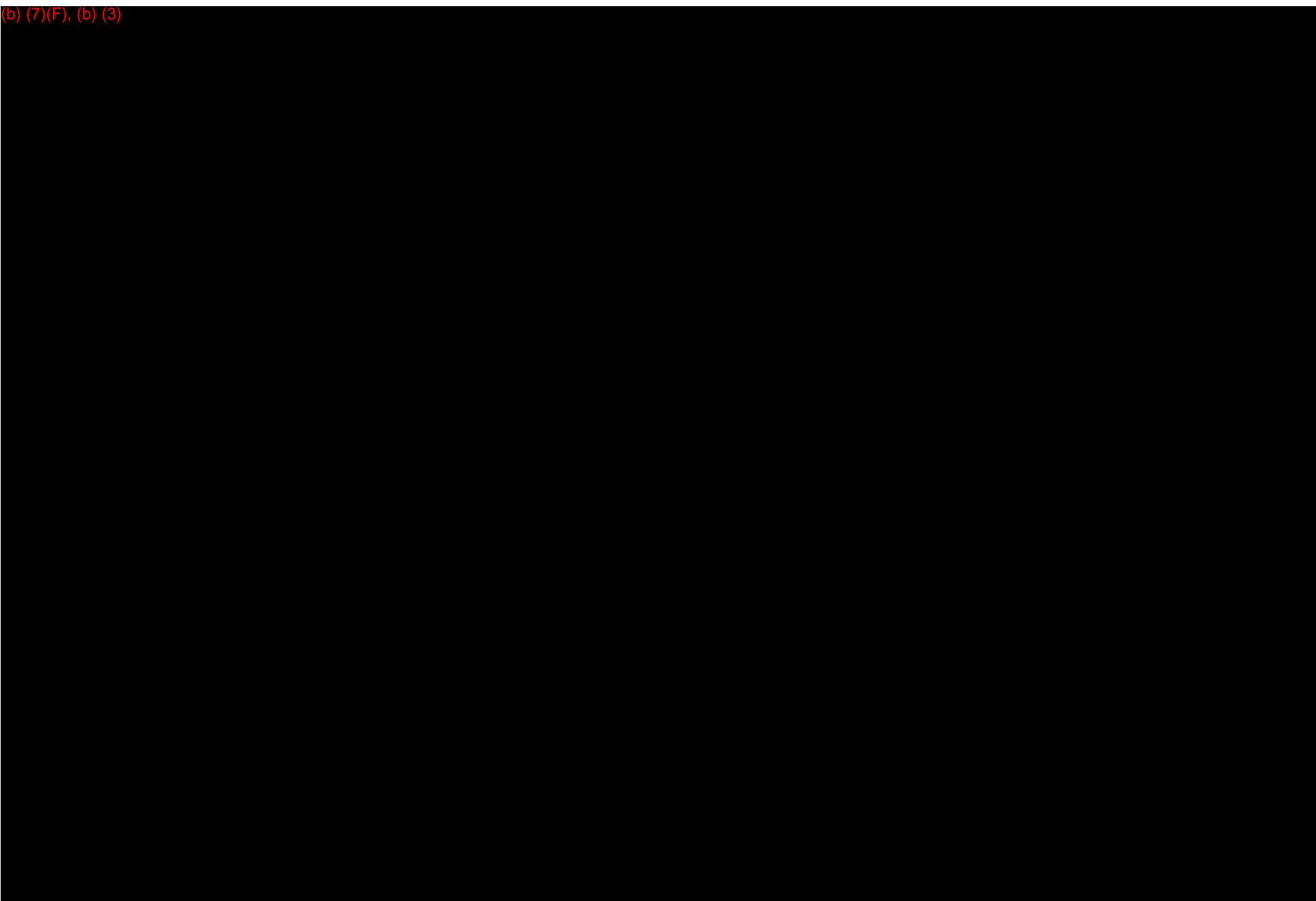
Colonial Pipeline Company
WATER INTAKE LOCATIONS – RESPONSE ZONE 801

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WATER INTAKE LOCATIONS – RESPONSE ZONE 801

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Colonial Pipeline Company
WATER INTAKE LOCATIONS – RESPONSE ZONE 801

(b) (7)(F), (b) (3)

