

U.S. Department
of Transportation

United States
Coast Guard



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COMDTNOTE 16465
19 September 1996

COMMANDANT NOTICE 16465

CANCELLED: SEP 18 1997

Subj: INCIDENT SPECIFIC PREPAREDNESS REVIEW REPORT FOR THE RESPONSE TO THE OIL SPILL RESULTING FROM THE MULTIPLE PIPELINES FAILURES IN HOUSTON, TEXAS

Ref: (a) Commandant Instruction 16465.42; Incident Specific Preparedness Review (ISPR)

1. PURPOSE. This Notice distributes the subject report for review and information. This notice is intended for Coast Guard units.
2. ACTION. Area, district commanders, On-Scene Coordinators (OSCs) and affected Headquarters Program Managers shall comply with the provisions of this notice as appropriate.
3. DISCUSSION. In accordance with ref (a), the enclosed ISPR report is being issued and distributed via this Commandant Note. This report provides the feedback which is essential to an effective preparedness process by critically assessing that process, focusing on the effectiveness of the Area Contingency Plan, and how well that plan integrates with other plans. These "lessons learned", combined with lessons from other incidents and exercises are intended to enhance our overall pollution response planning and preparedness.

J. G. CARD
REAR ADMIRAL, U. S. COAST GUARD
CHIEF, MARINE SAFETY AND
ENVIRONMENTAL PROTECTION

Encl: (1) ISPR Report for the Response to the San Jacinto River Oil Spill in Houston, Texas.

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Encl to /COMDNOTE 16465
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Phone:

16465
30 Jul 1996

From: Chairman, Incident Specific Preparedness Review Team
To: Chief, Office of Marine Safety, Security and
Environmental Protection

Subj: INCIDENT SPECIFIC PREPAREDNESS REVIEW (ISPR) OF THE
RESPONSE TO THE HOUSTON OIL SPILL

1. During the period 9-21 October, 1994, the remnants of Hurricane Rosa brought significant rainfall to the San Jacinto River Basin causing severe flooding of the waterways in the Houston, TX area. Thirty-six counties were declared disaster areas by the Governor.
2. On 20 and 21 October 1994, four pipelines crossing the San Jacinto River failed due to scouring of the supporting soil. Broken were: a 40" gasoline pipeline, a 36" diesel fuel pipeline, a 12" natural gas pipeline, and a 20" light crude oil line. The lines were owned by three different companies, Texaco, Colonial Pipeline and Valero. As the gasoline found ignition sources, fires and explosions quickly followed. Houses, office buildings, boats, cars and barges were damaged or destroyed by the fires.
3. Along with the unburned oil, the flood waters distributed household hazardous waste, medical waste and drums from storage yards and dump sites throughout the affected area. This extended the evacuation period and caused additional damage.
4. At the onset of the spill, a verbal agreement was made between the EPA and the Coast Guard On Scene Coordinators. The Coast Guard would focus on responding to the oil spill in the area below the dam at Lake Houston. The EPA would focus on the cleanup of the hazardous waste. This division along functional lines versus geographic boundaries was unanticipated in the Area Plan, but capitalized on each agency's strengths and involvement with the disaster prior to the discharge of oil.
5. In accordance with the Area Plan, the oil spill response organization used the Unified Command structure. Colonial Pipeline and Texaco were the responsible parties. The Texas General Land Office (TGLO) represented the State and the Commanding Officer, Marine Safety Office, Houston was the Federal On-Scene Coordinator. The command post was initially located at MSO Houston, but moved to a purpose built facility at the Exxon Baytown refinery.
6. The Coast Guard mobilized assistance from over 19 shore stations, air stations and cutters in a matter of hours. This rapid mobilization of personnel and equipment enabled the Unified

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Subj: INCIDENT SPECIFIC PREPAREDNESS REVIEW (ISPR) OF THE
RESPONSE TO THE HOUSTON OIL SPILL

Command to accomplish the rapid growth needed to meet this incident. The Unified Command complemented this rapid influx of personnel and other assistance by providing an organizational structure that effectively absorbed and coordinated their activity. This ability to absorb and efficiently utilize outside assistance is an achievement every spill response organization should seek to emulate.

7. On 23 October, an in-situ burn of pooled oil was conducted. This burn and the burning accompanying the initial discharge are reported to have consumed most of the estimated 100,000 barrels of oil discharged during this incident. The intentional in-situ burn is reported to have consumed over 25,000 barrels of oil. During the ignition of the oil on 23 October, there was a breakdown in communication concerning timing and authorization. Preliminary discussion and planning for a burn had been accomplished, but the burn was initiated, without authorization from the Unified Command and before notifications and safety precautions were fully completed. The burn was conducted in the geographic area assigned to the EPA in the Area Plan, but informally given to the Coast Guard for oil spill portion of this incident. This may have contributed to the lack of communication with the Coast Guard OSC.

8. A characteristic of this incident was its extremely rapid growth. There was similarly rapid deflation to a more limited scale shoreline cleanup. The last fire was extinguished on 26 October. The Exxon command center was demobilized on 29 October. The remainder of the shoreline cleanup was routine and was completed on 6 December, 1994. The Unified Command gave strong emphasis to the demobilization of equipment and personnel. This resulted in little to no delay in demobilizing, saving money and streamlining the organization.

9. The relationship with the Federal Response Plan's disaster response organization led by FEMA was a distant one. EPA acting in accordance with their role as Emergency Support Function #10 (ESF-10) leader, kept the higher levels of the disaster response organization briefed on the activities of the Unified Command. The Unified Command coordinated with local authorities, such as the Harris County Office of Emergency Management, directly on an as-needed basis and sent daily radio briefings to the FEMA command post for inclusion in their daily broadcast. This independent operation surprised some members of the ISPR team. After review, we all agreed that this distance in upper level coordination coupled with direct access at the working level did not detract from the disaster response or the spill response.

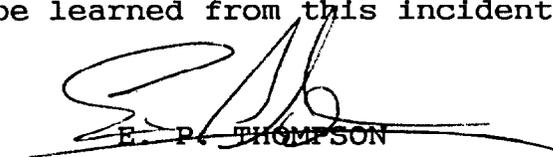
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RESPONSE TO THE HOUSTON OIL SPILL

This approach is probably the most efficient for a rapidly developing situation, such as the San Jacinto spill. Practice of this and other organizational relationships during exercises would be beneficial.

10. The broad makeup of the ISPR team resulted in a fresh look at many issues and broad set of observations. This approach of representation in the ISPR team that parallels the agencies and levels of government represented at the incident has great merit.

11. This was an excellent response. The lessons learned are an indicator of the outstanding organization and record keeping and the professionalism of the participants as well as their frankness and willingness to contribute to the betterment of future responses. We learned the Unified Command approach, when executed by trained personnel, works. This is probably the most valuable lesson to be learned from this incident.



E. P. THOMPSON

Encl: (1) ISPR Report

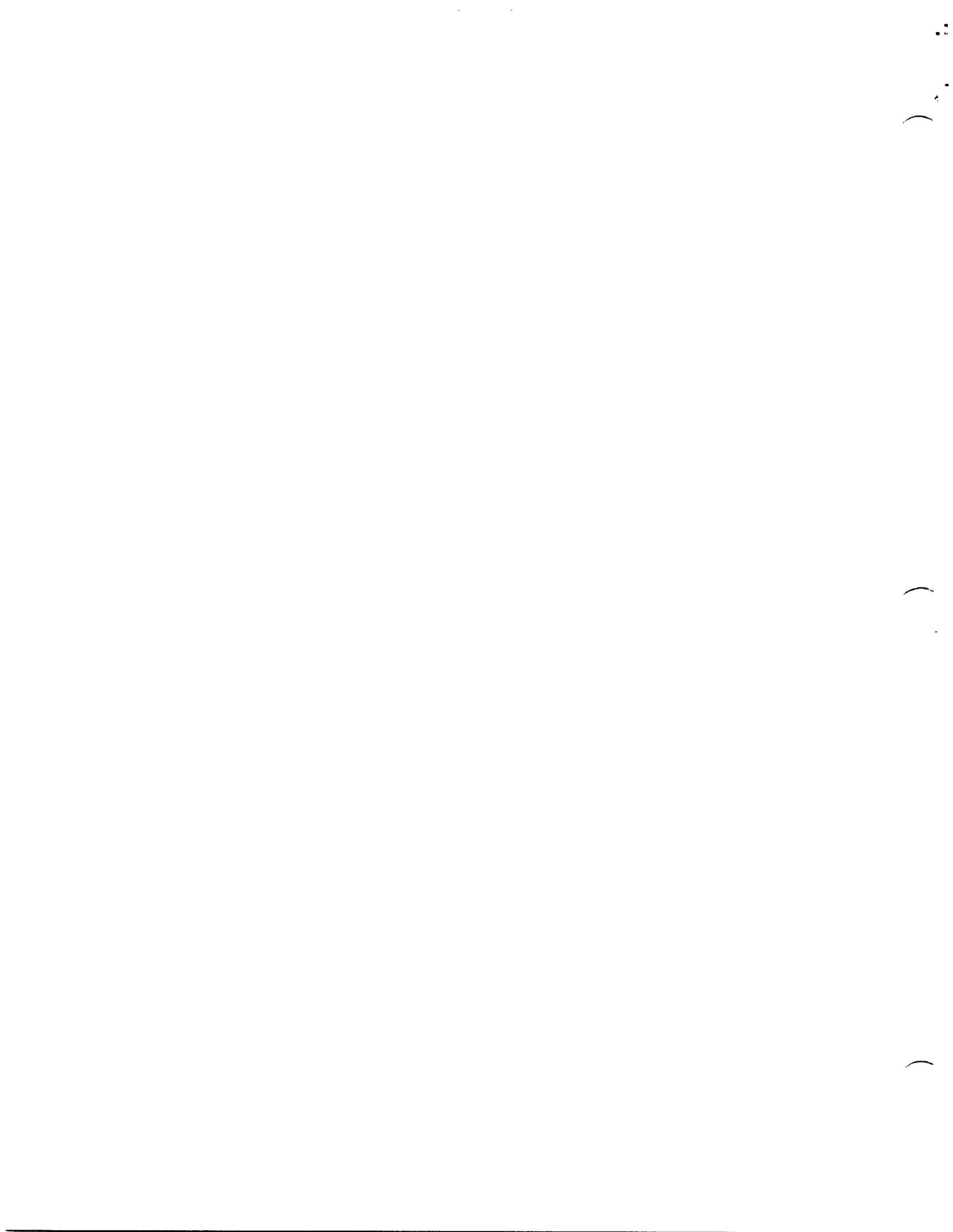
INCIDENT SPECIFIC PREPAREDNESS REVIEW

SAN JACINTO RIVER OIL SPILL

Submitted 30 July 1996

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2. OVERVIEW OF EVENTS.

a. During the period 9-21 October, 1994, the remnants of Hurricane Rosa brought significant rainfall to the San Jacinto River Basin causing severe flooding of the waterways in the Houston, TX area. The focus of this ISPR is the response to the oil spill from the pipelines broken by the flooding.

b. The severity of the flooding caused the water course to cut straight through the oxbows of the San Jacinto River, isolating and sometimes destroying many residential areas. Interwoven throughout the area were barge fleeting areas, industrial sites and pipeline right of ways. As a result of the flood, the Harris County Office of Emergency Management ordered the evacuation of the low lying areas adjacent to the San Jacinto River. The Coast Guard assisted Harris County with the evacuation of residents and monitored recreational boating and commercial traffic in the San Jacinto River and Houston Ship Channel. Thirty-six counties were declared disaster areas by the Governor. Most of the issues considered by this ISPR occurred in an area centered around the I-10 highway bridge that also marks the boundary between the Coast Guard (coastal) and EPA (inland) predesignated zones which determine which agency acts as Federal On-Scene Coordinator (OSC).

c. On 20 and 21 October 1994, four pipelines crossing the San Jacinto River failed due to scouring of the supporting soil. At 0831 Colonial reported their 40 inch gasoline pipeline was ruptured. Shortly after 0900, the gasoline had spread throughout a residential area and ignited. Sometime after 1430, a 36 inch pipeline carrying Number 2 fuel, belonging to Colonial Pipeline ruptured resulting in another explosion and fire. Also ruptured by floods were a 12 inch natural gas pipeline, belonging to Valero and a 20 inch light crude oil line, belonging to Texaco. On 21 October all pipelines were ordered shut in by the Texas Railroad Commission and the U.S. Office of Pipeline Safety. Additional evacuations were ordered by Harris County officials due to the fire and to avoid any toxic fumes in the smoke.

d. In addition to the oil from the pipelines, the flood waters carried household hazardous waste, medical waste and drums from storage yards and dump sites. As the waters receded, these items and oil were distributed throughout the residential areas extending the evacuation period and causing additional damage. The fire damaged a number of homes, at least one commercial building and between one and two dozen boats and cars.

e. A number of barges were also involved in the fire and were damaged. The owner of a barge, set on fire by the burning oil, notified the Unified Command that burning flotation foam in the barge may produce cyanide gas. This prompted additional evacuations in the vicinity of the release site.

f. At the onset of the spill, a verbal agreement was made between the EPA and the Coast Guard On Scene Coordinators. The Coast Guard would focus on responding to the oil spill in the area below the dam at Lake Houston. The EPA would focus on the cleanup of the hazardous waste. This division along functional line versus geographic boundaries was unanticipated in the Area Plan, but capitalized on each agency's strengths and involvement with the disaster prior to the discharge of oil.

g. The Area Plan establishes a Unified Command organizational structure where the forces of the Federal OSC join with the State OSC and the Responsible Party. Colonial Pipeline and Texaco were the responsible parties, the Texas General Land Office (TGLO) represented the State and the Coast Guard acted as Federal On-Scene Coordinator. The Federal OSC was the Commanding Officer of the Coast Guard Marine Safety Office (MSO) in Houston. The command post was initially located at MSO Houston.

h. The Exxon refinery in Baytown offered the use of their emergency command post the evening of 20 October. This facility had been used as the command post for a PREP drill conducted in the area eight months earlier. The State and the responsible parties moved into this facility on 21 October. The Coast Guard moved into the facility 22 October.

i. Realizing the magnitude of the spill, the Eighth Coast Guard District Commander, in coordination with MSO Houston, directed over 100 technical specialists and support personnel to MSO Houston. Most of these personnel came from the other Marine Safety Offices and units as well as the Eighth District staff. The OSC initiated requests for assistance to the Gulf Strike Team (GST), located in Mobile Alabama and the National Strike Force Coordination Center (NSFCC) in Elizabeth City North Carolina. Over 19 Coast Guard shore stations, air stations and cutters provided personnel and support for this spill. All were rapidly mobilized and coordinated in a matter of hours.

j. On 23 October, an in-situ burn of pooled oil was conducted. This burn and the burning accompanying the initial discharge are reported to have consumed most of the estimated 100,000 barrels of oil discharged during this incident. The intentional in-situ burn is reported to have consumed over 25,000 barrels of oil. During the ignition of the oil on 23 October, there was a breakdown in communication concerning timing and authorization. The burn was initiated by personnel operating outside the Unified Command without authorization and before notifications and safety precautions were fully completed.

k. By 24 October, the diesel fire was extinguished and on-water oil spill response operations began to wind down. The focus then shifted to the development of plans for the cleanup of the shoreline. Demobilization was given strong emphasis. The last fire was extinguished on 26 October. The Exxon command center was demobilized on 29 October. The remainder of the

shoreline cleanup was routine and was completed on 6 December, 1994.

3. SUMMARY OF FINDINGS. The focus areas used for this ISPR were: Area Contingency Plan; Command, Control, Communications/Incident Command System (C3/ICS); Interagency Coordination and Public Affairs; Logistics; Finance; and Miscellaneous.

a. Area Contingency Plan.

(1) Use of the Unified Command approach of ICS doctrine enabled the successful execution of this response. With this well defined organization, all response needs are well addressed and the roles of the personnel involved are well defined. The ability of a response organization to rapidly grow, by absorbing an influx of personnel who are "outsiders" to the area, is a large factor in its success or failure. The core group of Federal and State personnel were trained in ICS doctrine and exercised together. Many of the outside personnel had at least basic ICS familiarity and fit in quickly. Those that arrived with no such training created burdens rather than assistance. In all, the value of the ICS approach, augmented by trained outside personnel was proven on this response. The drills and exercises held prior to the incident were a critical success factor.

(2) Even with this well trained core group, the successful growth of the response organization would have been fatally impeded without the Exxon Baytown or other similar command post facility. Even though the organization quickly outgrew the confines of this facility, it gave the response a ready made place to operate. Since the facility was built, it facilitated good ICS doctrine. The PREP exercise a few months before practiced in this facility reducing start up time and confusion. If the Unified Command had been faced with the establishment of a capable command post while this incident unfolded, the incident would have been substantively over before the command post was functional. Identification of properly equipped Command Posts should be a high priority for Area Plan development.

(3) Many Regional Response Teams have made significant progress developing approval protocols for the use of chemical countermeasures and other non-mechanical methods of cleanup. Once approval is obtained, the need for an execution protocol that ensures site safety and notification of all the parties affected is needed to safely and effectively carry out the intended action. While in-situ burning was not directly addressed in Annex H to the ACP (Health and Safety), its discussion was adequate to cover this response option. Realization of the need for a site safety plan on the part of those who set the fire would have eliminated the problems encountered on this response. Some editing of the ACP would

likely be beneficial, but drills and training that go beyond the approval process and include considerations for executing a safe in-situ burn would probably provide the most benefit. This is an RRT level issue that spans the coastal and inland zones.

(4) Some of those interviewed mentioned there was some confusion concerning whether the OSC was giving direction or making suggestions. These comments were often made at the mid-manager level. The top of the Unified Command stated there was no such problem since the intensity of the event and short duration required clear expression of direction from State and Federal authorities. A declaration of substantial threat to public health or welfare (NCP, 40 CFR 300.130 & 300.305(d)(2)) would have made matters more clear. Guidance on these declarations should be included in the Regional Plan and reflected in the Area Plan.

b. Command, Control and Communications / Incident Command System.

(1) Critical to the successful conduct of any response is the recognition that the lead agency is a coordinator of the state or federal effort. Each of the many agencies of government involved has specialized skills, authority and experience to bring to the incident. Their involvement should be facilitated by identification of positions within the response structure and careful attention to keeping them informed. There were complaints from some State agencies that their input was not facilitated.

(2) In order for the Unified Command to truly affect the direction of the response, the operation must shift from a reactive mode to the execution of a plan. Highly trained ICS teams can accomplish this in 24 - 36 hours. By some accounts, the nature of this incident and the training levels of key personnel, delayed this transition for approximately 7 days, a few days before the disestablishment of the command post. This should be a focus area for PREP exercises and training programs.

(3) The safety program established for this response was very successful (no major injury) and is directly related to the emphasis it was given. The evidence of this emphasis is the staffing (20-25) provided by industry, Coast Guard and the State of Texas. To adequately cover the issues and ensure consistent and timely distribution of critical safety information to field personnel takes more people than is reflected in most Area Plans.

(4) This was a high visibility incident with high level interest. The incident affected two operating agencies of the Department of Transportation (USCG, RSPA/OPS). Each agency had its own information sources and assembled its own brief for the Secretary of Transportation (SECDOT). The inevitable, minor conflicts between the briefs were not reconciled prior to delivery to SECDOT. The resulting uncertainty was exacerbated by

media's ability to update information more quickly than official channels. One creative approach attempted on this response was the dispatch of "recorders" from the District Office. They collected information and provided briefs relieving a significant burden from the OSC. Communications during an emergency response has always been problematic. Rapid, accurate information flow from the deck plates of the response to the Unified Command, thence on to the highest levels of Government is needed. To solve this problem will take the resources and technical skill of a Headquarters level project. Delivering accurate information to SECDOT at the same rate the media can deliver is a difficult but necessary standard.

c. Interagency Coordination and Public Affairs.

(1) JIC. The parties of the Unified Command and some supporting State and Federal agencies provided representatives to a Joint Information Center (JIC). The JIC issued information representing the Unified Command, presenting a coherent image to the media and the public. The relationships in various Areas and the circumstances of a specific incident may require more or less cooperation among the Unified Command members. It should always be clear that each entity has the right and obligation to issue independent press releases as necessary. The JIC worked well on this response. JIC formation and rules of operation should be explored during PREP exercises.

(2) There were some comments that the first press brief was too short and communities were not kept informed. Providing press and community briefings is a time consuming process that cannot be avoided. The impacts on the response organization can be minimized by dividing the briefing tasks among the staff and ensuring that deputies are empowered to make decisions in the chief's absence. The approach of holding town meetings was used during this response and worked very well. The time impact on the Unified Command is extreme, but necessary. This must be planned for and practiced in exercises.

(3) The technical and regulatory aspects of pipeline operation were outside the State and Federal OSC's expertise and authority. Local RSPA/OPS technical specialists were busy in the field and were not able to dedicate sufficient resources to the Unified Command to adequately meet their needs for oversight. Existing maps of pipeline routes were not updated or sufficiently detailed. Accurate and complete information and pipeline expertise is necessary in the Unified Command for these incidents. They should be provided for in plans and exercised.

d. Logistics. The dense infrastructure of the governments and industry surrounding the Gulf of Mexico enabled the mobilization and delivery of significant resources to the Unified Command. This in no way lessens the achievement of the Unified Command, State and Federal supervisors and many professional

response contractors who recognized needs and delivered solutions in a remarkably compressed time frame.

(1) The need for "automatic" mobilization plans was made evident by this incident. The onset of an incident is the worst time for an OSC to have to define personnel needs and officially request them. This is a planning function that needs careful consideration and coordination.

(2) Some comments were received that contractors were given too much access to the Command Post and were therefore able to capitalize on the timely information and influence hiring decisions. We found no evidence of inappropriate behavior. This perception can be minimized by the provision of contracting personnel to the command post. A clearly defined set of rules for contractor behavior including limiting access to places and personnel should be developed.

e. Finance.

(1) Personnel, unfamiliar with how the Incident Command System apportions responsibilities among the Planning, Logistics and Finance Sections became frustrated by perceived road blocks. Translating the equipment needs of the planners into reality is a negotiated process that requires matching needs to what is available. Local knowledge is essential and these functions are not best conducted by "outsiders". This aspect of response is often overlooked during exercises.

(2) Field personnel are the beginning of a long line of information and documentation. Verification of invoices begins at the work site. This aspect of field operations needs to be emphasized in formal schools, unit training and exercises.

(3) Demobilization was given a high priority and was conducted efficiently. This saved the Government and the Responsible Parties a significant amount of money. The contractual arrangements for this spill kept equipment "on the books" while awaiting decontamination. Managing the decontamination and waste disposal processes added significant burdens to the Unified Command. Making decontamination the responsibility of the contractor would allow the equipment to be taken off the books sooner. The contractor could charge a flat rate or include decontamination as part of the rental costs. This would simplify management and will probably save money.

f. Miscellaneous.

(1) The record keeping for a large response is essential for successful cost recovery and documentation. A notable success was the realization of this need and the call out of an experienced historian.

(2) The Unified Command developed creative solutions to operational and organizational challenges.

(a) Special teams were assembled to meet information collection and dissemination needs with minimal impact on the operation.

(b) Long range planning was accomplished at night, when the operational tempo slowed down.

APPENDIX A
DETAILED FINDINGS IN PLLS FORMAT

PLLS LONG REPORT

1. FOCUS AREA: ISPR #1.1 - Area Contingency Plan, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: COMMAND POST, AREA CONTINGENCY PLAN
4. TITLE: Command Post Pre-Identification
5. OBSERVATION: Exxon Baytown Command Post provided an outstanding operational facility for the Unified Command.
6. DISCUSSION: The Exxon Baytown training facility was an ideal command post for this spill response. It was pre-wired for phones, and additional electrical power support, Exxon had a security program already in place for personnel control. This facility had been used as a command post in a recent Area PREP drill, therefore many of the response participants were familiar with its arrangement.
7. LESSONS LEARNED: The successes of the Exxon Baytown Command Post points out the need for pre-identified potential command posts within the ACP. These sites should be able to accept the communication and administrative equipment, as well as the personnel, normally expected during a large unified response.
8. RECOMMENDED ACTION: Based on a most likely need, The Area committee should identify the number and location of predesignated command posts within the ACP. The command posts should be outfitted to accommodate expected communications and administrative support equipment. Different command posts for different size spills and different locations within the Area should be considered.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #1.2 - Area Contingency Plan, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: ACP, MAPPING
4. TITLE: Mapping Capabilities
5. OBSERVATIONS: The ACP did not provide adequate mapping information of the spill area. In addition, the command post was not equipped to produce modified maps to accommodate changes to the river caused by flooding.
6. DISCUSSION:
 - a. The limited number of maps within the ACP were not found to be useful by many responders. The maps provided by the NOAA SSC and TGLO were the most useful.
 - b. The flooding caused the route of the San Jacinto River to change (flowing straight through oxbows). Incorporating these changes was a challenge to the assigned staff and the computing systems used.
 - c. Adequate, detailed maps showing the pipeline routes were not readily available.
 - d. This spill occurred in EPA's jurisdiction, but the response was coordinated by the Coast Guard. Compatible mapping standards and techniques are needed in near coastal locations.
7. LESSONS LEARNED:
 - a. The ACP should have an adequate number of detailed maps to show sensitive areas, pipeline locations, oxbows in rivers near critical areas, etc.
 - b. The command center should have the capability to modify these maps to show response sites and modify the maps as needed to facilitate the response.

8. RECOMMENDED ACTION:

a. Area Committees should identify required mapping information and incorporate it into the ACP. Further, the Area Committee should identify a resource capable of updating or modifying maps for use by the OSC.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #1.3 - Area Contingency Plan, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: IN-SITU BURN
4. TITLE: In-Situ Burning
5. OBSERVATION:

In-Situ burning did reduce the environmental impact of the oil discharged from the broken pipelines.
6. DISCUSSION: The various in-situ burns eliminated thousands of barrels of oil on the San Jacinto River and probably prevented any significant oil impact in Galveston Bay.
7. LESSONS LEARNED:
 - a. In-Situ Burning is a valuable tool for reducing the impact of an oil spill. This is especially true when other cleanup techniques are ineffective (skimming in high currents) or precluded from consideration (dispersents).
8. RECOMMENDED ACTION:
 - a. RRT's should accelerate efforts to establish guidelines and approval procedures within their regions.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #1.4 - Area Contingency Plan, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: THREAT DECLARATION, SAFETY, HEALTH
4. TITLE: Declaration of Threat to Human Health and Safety
5. OBSERVATIONS: The OSC did not formally declare a threat to human health and safety in accordance with the National Contingency Plan, Section 2.3.(c).
6. DISCUSSION:
 - a. A formally declared threat to human health and safety authorizes the OSC to officially direct (vice coordinate) cleanup efforts. The accompanying natural disaster and reports of some of the interactions between the RP and the OSC indicate that this was being dealt with as a threat to human health and safety. This cleanup was apparently not hampered by the informal understanding among the Responsible Parties and the OSC, but the potential for confusion existed.
 - b. Such a declaration also allows waiving of the technical requirements of the Federal Procurement Regulations, but it is unclear what effect, if any, such a declaration would have had on the conduct of finance and logistics activities.
7. LESSONS LEARNED:
 - a. Prior to taking a directive role in a response, it would probably be advisable for the OSC to formally declare, in writing, a threat to human health and safety.
8. RECOMMENDED ACTION:
 - a. The criteria and procedures for such a declaration should be described within the ACP. The protocols for this declaration should be included in exercise and training evolutions.
 - b. G-MEP in cooperation with other programs should define how such a declaration affects procurement activities during a response.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #1.5 - **Area Contingency Plan**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: HEALTH, SAFETY OFFICER, SAFETY
4. TITLE: **Public Health Officials' Role Within the Response Management System**
5. OBSERVATIONS: The Coast Guard Industrial Hygienist (Safety Officer) performed some of the functions normally reserved for local public health officials.
6. DISCUSSION:
 - a. The Coast Guard Safety Officer and his staff found themselves enmeshed in public health issues such as: the effects of toxic fumes on public health, potable water, food supply, shelter, public safety in flood stricken areas, disease prevention, and health considerations of oil and HAZMAT contaminated residential areas. Coast Guard Safety Officers do not have the authority and may not have the expertise to handle local public health issues.
 - b. Biologists were sent in to assess housing areas for clean-up methods and determine when cleanup was completed. Public health officials were not on this assessment team despite obvious public health issues.
7. LESSONS LEARNED:
 - a. Local public health officials should be incorporated into the response management system and their participation sought at all levels of planning and preparation for response. Local public health officials are the best and should be the only source of public health guidance and information.
 - b. Plans should provide for augmentation of the public health staff with careful consideration of the need to keep local officials in contact with the public.
 - c. To the extent possible, Coast Guard and other response safety personnel should avoid being placed in a position to provide such advice.
8. RECOMMENDED ACTION:
 - a. Area Committees should invite local public health officials to engage in the Area Planning process so their

concerns and expertise can be reflected in the ACP.

b. Response plans should provide for public health official representation in appropriate sections of the command system and field teams (e.g. SCAT, sampling, in-situ burn).

c. Local officials should be invited to participate in PREP drills to test their ability to fulfill their mandate and exercise their authority. During these exercises, particular attention should be given to augmentation needs during a major spill.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #1.6 - **Area Contingency Plan**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/95.
3. KEYWORDS: PREPAREDNESS FOR RESPONSE EXERCISE PROGRAM (PREP), MULTI AGENCY TEAM ENHANCEMENT SYSTEM (MATES), AREA CONTINGENCY PLAN
4. TITLE: **Recognize Importance of Drills and Exercises.**
5. OBSERVATION: Drills and exercises held prior to the San Jacinto spill contributed significantly to the overall success of the response. This experience highlights the need to incorporate lessons learned from drills and exercises into response plans.
6. DISCUSSION:
 - a. A PREP drill was conducted in the Houston Area eight months prior to this incident. During the PREP drill shortfalls in the ACP were identified. For example, under-utilization of state agencies was recognized during a drill and some establishment of the necessary relationships were accomplished prior to this spill. The response would have been smoother if this action item had been completed.
 - b. The command post for this spill was identified during the PREP drill and this contributed significantly to the success of the response.
7. LESSONS LEARNED: The PREP program of drills and exercises is a valuable and necessary component for achieving and maintaining preparedness for spill response.
8. RECOMMENDED ACTION: Continue with PREP for government agencies and invite potential spill responders to participate as players in government led drills and exercises. Continue development of PREP enhancements (e.g. MATES).
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #1.7 - **Area Contingency Plan**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: AREA CONTINGENCY PLAN
4. TITLE: **Area Contingency Plan Improvements**
5. OBSERVATIONS: The ACP was seldom used by responders, although many of the successful processes used during the response are described in the manual. We heard several complaints concerning the size and complexity of the manual.
6. DISCUSSION: Some constructive criticism toward the ACP included "... the ACP needs to be more "user friendly", ... lists of key personnel and local resources should be identified in the front of the manual, ...separate the manual into administrative and operational volumes, ... there should be a communications plan in the ACP."
7. LESSONS LEARNED:
 - a. This ACP and the comments received are not unique. Similar comments could be said about most, if not all, Area Plans. Area Committees should consider editing their ACPs to be a more "user friendly" document. For example, time critical information could be made readily available in an appendix. As Area Committees consider this issue, any solutions they find should be shared among other Area Committees.
 - b. Area Committees should provide for a communications plan for vertical and horizontal communications within the command post and field locations.
8. RECOMMENDED ACTION:
 - a. G-MEP should determine the feasibility of reconfiguring the ACP format requirements. If a standardized response management system is adopted, the ACP should be reconfigured to best support this organization.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.1 - Command, Control and Communication/ Incident Command System, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/95.
3. KEYWORDS: STATE AGENCIES, ICS, UNIFIED COMMAND, INFORMATION FLOW, CHAIN OF COMMAND
4. TITLE: Lead Agency Responsibilities.
5. OBSERVATION: Some State agencies providing support felt the State's lead agency was not responsive. The result during the response was State agencies linking with their Federal counterparts to bring their issues forward. This sort of disconnect is not unique to any State or any Federal response organization.
6. DISCUSSION:
 - a. Certain state agencies were relying on their lead agency as their link to the Unified Command. When they felt their issues were unheard, they routed their concerns through their Federal counterpart within their response unit to the Unified Command. While this ability to accommodate alternative pathways for information flow is a clear indication of the flexibility of ICS, it does point out a challenge for State and Federal responders.
 - b. During PREP drills and exercises, it is difficult to anticipate all the issues that will be faced and agencies that will be involved during a response. Many State and Federal supporting agencies do not attend drills and exercises as they are not funded or staffed for this activity. This creates a significant disconnect between lead agencies and supporting agencies and compromises the effectiveness of PREP.
7. LESSONS LEARNED:
 - a. Drills should be designed to test the interaction between lead and support agencies for both state and federal responders. Sensitive or controversial issues should be squarely faced during these drills.
8. RECOMMENDED ACTION:
 - a. Area Committees should ensure all Federal and State support and resource agencies are included in PREP exercises and informal training events.

b. Lead response agencies have an obligation to make every effort to establish and maintain productive dialog with all support and resource agencies.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.2 - **Command, Control and Communication/ Incident Command System**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: INCIDENT COMMAND SYSTEM, SPILL MANAGEMENT TEAM, RESPONSE MANAGEMENT SYSTEM, CRISIS MANAGEMENT SYSTEM, UNIFIED COMMAND
4. TITLE: **Response Management System**
5. OBSERVATION:
 - a. At the time of this incident, the Coast Guard lacked a common spill response/crisis management system.
 - b. Without a common response management system (RMS) the organization, for better or worse, that randomly evolves in the first few days of a spill is the one that stays for the duration of the response.
6. DISCUSSION:
 - a. Some Coast Guard personnel and agencies did not integrate well due to a lack of familiarity with the Incident Command System (ICS). Integration was not completely successful below the Section Chief level. Many Coast Guard responders rejected ICS based upon hearsay or an inability to accommodate an unfamiliar system. Lack of a common understanding of roles led to tasks not being accomplished by the proper personnel, being done twice or more or not being done at all. For example, Logistics and Finance had to establish separate staffs to provide documentation that the monitors could have accomplished.
 - b. NSF personnel brought in to assist in forming an ICS found that the window of opportunity to establish the system was very brief. Within a few days, the organization was "gelled" and could not be changed. This meant the organization was formed by personnel with minimal training and familiarity with the Incident Command System specified in the Area Plan.
 - c. This is a significant and recurring problem faced on virtually every large-scale response. Rapid ramp-up from normal operations to an effective RMS requires a planned approach and trained personnel.
 - d. A significant percentage of the U.S. response community,

both industry and State, has accepted the Incident Command System (ICS). The similarity of ICS to other military organizations (N-Staff, J-Staff) makes this approach a close fit organizationally and culturally for the Coast Guard.

7. LESSONS LEARNED:

a. The lack of a common RMS created often insurmountable problems for the OSC during the early, critical stages of a response.

b. Since this incident, ICS has been adopted as the RMS for operations conducted under the NCP. A common RMS throughout the Coast Guard will facilitate improved response. For maximum effectiveness, this system should be compatible with systems already established at the State level. A published, uniform Coast Guard approach would allow RP's and others to better plan their coordination with the OSC's RMS. A common Coast Guard approach will net significant long term benefits by reducing training burdens on field units.

8. RECOMMENDED ACTION:

a. G-MEP should coordinate with G-P to identify personnel (or billets) eligible to be called to staff a large response organization (up to and including SONS). This would facilitate the rapid deployment of assistance. Personnel in key billets should receive requisite training and be the first called during a spill response.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.3 - **Command, Control and Communication/ Incident Command System**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: INCIDENT COMMAND SYSTEM, SPILL MANAGEMENT TEAM, CRISIS MANAGEMENT SYSTEM, UNIFIED COMMAND
4. TITLE: **Transition from Operations to Plans-Driven Response**
5. OBSERVATION: The Incident Command System for this spill had difficulty transitioning from an Operations-driven to a Plans-driven response.
6. DISCUSSION: Operations and Planning had difficulty sharing information. Because of this, the Planning Section was slow to become effective. Planning was able to catch up somewhat at night because operations slowed due to darkness, but by some accounts, it took six days to bring the Planning Section into the picture. Most, if not all, spill responses are Operations driven at the start, the quicker the shift to a Plans-driven response, the quicker the spill organization transitions from being reactive to being proactive.
7. LESSONS LEARNED: The transition from Operations to Plans-driven response is a critical phase of any response. This phase should be recognized and facilitated by the OSC.
8. RECOMMENDED ACTION:
 - a. PREP exercises should be designed to focus on the transition from Operations to Plans-driven response. Key to the proper transition is information management and empowerment of qualified personnel in the field (i.e. Strike Team or experienced MSO personnel). The goal for large spills should be to transition within the first 24 hours.
 - b. OSC's should conduct simple training on how to fill out action plans with an eye to eliminate needless volume yet still provide the required information.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.4 - **Command, Control and Communication/ Incident Command System**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: SAFETY, CHAIN OF COMMAND, INCIDENT COMMAND SYSTEM
4. TITLE: **Notable Successes - Safety**
5. OBSERVATIONS:
 - a. The Safety Officer reported directly to the OSC/Unified Command.
 - b. The Safety staff was well integrated, with representatives from industry and the Coast Guard.
6. DISCUSSION:
 - a. This spill clearly shows the importance of having the Safety Officer independent of any one response section. Safety representatives were assigned to each of the applicable sections of the command system to monitor and influence plans and operations.
 - b. The effectiveness of the safety program for this spill was a direct result of adequate staffing. Between industry and the Coast Guard, there were approximately 20-25 people assigned to the Safety Office. The all too typical one person Safety staff could not have kept up with the myriad operations of this large, complex spill.
7. LESSONS LEARNED:
 - a. The safety program was successful because of the direct reporting relationship to the Command level of the Unified Command.
 - b. Adequate staffing of the safety section (20-25 experienced/qualified personnel) also contributed greatly to the program's success.
8. RECOMMENDED ACTION: Area Committees and OSCs should review their staffing assumptions for the Safety staff with a view to provide adequate personnel to meet the demands.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.5 - **Command, Control and Communication/ Incident Command System**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/95.
3. KEYWORDS: DEPUTY INCIDENT COMMANDER, DEPUTY SECTION CHIEF, INCIDENT COMMAND SYSTEM
4. TITLE: **Deputy for Incident Commanders and Section Chiefs**
5. OBSERVATION: Response efforts slowed during Incident Commander and Section Chief briefings due to the lack of availability of decision makers.
6. DISCUSSION: Incident Commanders and Section Chiefs were unavailable for long periods of time while attending briefs, public meetings and overflights. There were reports that sections came to a stand-still during these periods because there was no delegation of decision making authority.
7. LESSONS LEARNED: Sections must continue to run while meetings are in progress. The empowerment of deputies would prevent slowing of the response.
8. RECOMMENDED ACTION: Assign deputies and empower them to make decisions during the OSC's or Section Chiefs' absence.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.6 - **Command, Control and Communication/ Incident Command System**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: INFORMATION FLOW, POLREP, SECDOT, COMMUNICATIONS, RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION (RSPA)
4. TITLE: **Information Conflicts Create Confusion and Extra Work**
5. OBSERVATION: The Secretary of Transportation (SECDOT) received conflicting information from USCG and RSPA regarding the spill. This resulted in direct telephone contact by SECDOT to the OSC to resolve these conflicts.
6. DISCUSSION:
 - a. The RSPA Office of Pipeline Safety was generating situation reports (SITREPs) in addition to the POLREPs generated by the USCG. Because RSPA's reports addressed all of the pipeline infrastructure issues in the San Jacinto area, while the POLREPs addressed only the leaking pipelines, there were some apparent numerical differences in the reported number of pipelines affected. These apparent differences were not reconciled prior to briefing SECDOT, resulting in some confusion.
 - b. RSPA was not, at the time, on the distribution list for POLREPs.
 - c. The POLREP system by itself does not have enough information to satisfy the questions asked by higher headquarters. The briefing sheets used by the Unified Command did not solve the problem as they were considered complicated and time consuming.
7. LESSON LEARNED:
 - a. RSPA should be included on the distribution for POLREPs for interstate pipeline spills.
 - b. Integration of the field information needs to occur prior to delivery to SECDOT as it is important for all transportation modes to speak with one voice when providing information to the Secretary.

8. RECOMMENDED ACTION:

a. The POLREP system should be modified or augmented to reflect advances in communications technology and to capture the type of information that upper echelons want. Some modification of the ICS Action Plan and a report from the Situation Unit would probably meet most information needs.

b. Another complimentary approach would be to schedule a daily conference call with the staffs of the: OSC, the Coast Guard District Commander, Coast Guard Headquarters, and any representatives from RSPA to provide an opportunity to integrate the information.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.7 - Communications and Information Flow, submitted by the San Jacinto River Incident Specific Preparedness Review team, (202) 267-6570.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: COMMUNICATIONS, INFORMATION FLOW
4. TITLE: Field Communications and Information Flow
5. OBSERVATION: Communication flow was a problem throughout the Unified Command organization, both within the Unified Command Post and between the Command Post and field units.
6. DISCUSSION:
 - a. There were problems with the communications hardware and with information flow. Radio frequencies were quickly overloaded and different agencies were on incompatible frequencies.
 - b. The information flow problems were characterized by field people not getting the information they needed from the Unified Command, poor information flow back to the command post from the field, and poor information flow between the sections of the unified command.
 - c. These problems happen on every response. This response organization devised some ingenious solutions and work-arounds.
7. LESSONS LEARNED:
 - a. The Unified Command provided pagers and cellular phones to field supervisors. Cell phones were left off to conserve the battery until a call was initiated from the field supervisor or the pager was activated by the Command Post.
 - b. The command post also used fax machines with "broadcast" capability i.e. the ability to simultaneously transmit faxes to multiple recipients, which saved a great deal of time.
 - c. Within the command post, one person in each section of the unified command was issued a headset radio, which allowed for instantaneous communication with other sections in the command post to update status boards, etc.
 - d. The twice-daily command briefings also served as an effective way to share information within the Unified Command.

8. RECOMMENDED ACTION: Area Committees should identify adequate communications hardware to address the command post's need to be in contact with field units and facilitate internal communications.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.8 - **Command, Control and Communication/ Incident Command System**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: IN-SITU BURN
4. TITLE: **In-situ Burn Protocol**
5. OBSERVATIONS: There was an unauthorized in-situ burn incident.
6. DISCUSSION: The proposed authorization for an in-situ burn had been discussed at the command level and concurrence received from the RRT; however no command to the field was given. Field personnel ignited a burn without obtaining permission from the Command. The root cause of the incident was an apparent lack of a defined in-situ burn protocol that defined the relationship between the field and the Command Post and a lack of communication from the field.
7. LESSONS LEARNED: All personnel involved in potentially hazardous activities must be trained in the proper protocols and safety procedures.
8. RECOMMENDED ACTION: Due to the inherent danger of any in-situ burn, the Area Committee should consider including an in-situ burn protocol in the ACP.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #2.9 - **Command, Control and Communication/ Incident Command System**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: WORK SCHEDULE, SHIFT ROTATIONS
4. TITLE: **Personnel Fatigue**
5. OBSERVATIONS: Personnel were working excessive hours (18+ in some instances) in all sections of the response crisis management structure.
6. DISCUSSION: Personnel working excessive hours suffer a significant degradation of their effectiveness and could be a hazard to themselves and others. Working many days with little sleep has in many ways become part of the ethic of spill responders. In today's multi-agency responses with intense public scrutiny, responders need problem-solving skills, patience and a positive attitude. Excessive fatigue leads to degradation of these skills and attributes.
7. LESSONS LEARNED:
 - a. A work schedule that provides adequate rest for personnel needs to be established at the earliest possible time after a major incident begins.
 - b. The Command Staff should be the example for the rest of the organization.
8. RECOMMENDED ACTION:
 - a. Offer a work schedule policy that recognizes the need for regular shift changes.
 - b. The provision of an adequate number of trained personnel is critical to the establishment of an effective work schedule. Area Committees should review plans to ensure an adequate number of personnel are identified for the response (see SJISPR 2.2).
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #3.1 - **Interagency Coordination and public affairs**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/95.
3. KEYWORDS: PUBLIC AFFAIRS, JOINT INFORMATION CENTER
4. TITLE: **Joint Information Center (JIC) Coordination**
5. OBSERVATION: The members of the JIC recognized the need for coordination, cooperation and the value of a unified team.
6. DISCUSSION:
 - a. Representatives of all responding agencies, as well as, representatives from responsible parties came together to form a joint information center and through their teamwork handled all media and public outreach issues successfully.
 - b. This took a certain amount of diplomacy on everyone's part. The fact that the spill response was part of an overall disaster response helped to keep sensitivities to a minimum. In most pollution response cases, it can be very difficult to bring everyone together and maintain a common public and press posture. Some would argue that in some cases the best interests of their agency or company are served by a separate approach. Each member of the Unified Command needs to evaluate their participation in a JIC carefully in the context of that particular event.
 - c. Even if the parties in the Unified Command carry out a separate press policy, the nature of the Unified Command and its joint briefings and press conferences will require some overlap. There are significant benefits to establishing a JIC, if only as a common information clearing house.
7. LESSONS LEARNED:
 - a. Joint Information Centers are valuable for the central collection and dissemination of information among the Unified Command members as well as with communities and the public. This requires a cooperative attitude and a willingness to work together with all other members in the JIC to collect and distribute information to everyone involved.
 - b. A rapid activation of the Situation Unit is essential to keeping the JIC effective.

8. RECOMMENDED ACTION:

a. OSCs should hold meetings with potential JIC members and media representatives periodically to develop familiarity and relationships prior to an event.

b. Agencies should develop realistic procedures and policies for their agency participation in JIC formation and operation.

9. COMMENTS: None

PLLS LONG REPORT

1. FOCUS AREA: ISPR #3.2 - Interagency Coordination and Public Affairs, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: PUBLIC AFFAIRS
4. TITLE: Early Press Conferences
5. OBSERVATION: Not enough time was scheduled for the first press conference.
6. DISCUSSION: The first press conference was scheduled for 30 minutes. This did not allow enough time for the amount of information that needed to be passed. The result was that the press gathered around the table and trapped the Unified Command for another hour of questioning.
7. LESSONS LEARNED:
 - a. A balance must be struck between the needs of the media and the needs of a proper response effort. One way to minimize the impact on the response organization is to have appropriate Section Chiefs give a briefing on areas under their direction, be available for questions, then leave. The Situation Unit Leader can update the press on the status of the incident and leave the OSC and the other members of the Command Staff free to answer questions and wrap up.
8. RECOMMENDED ACTION:
 - a. OSCs should plan for initial press conferences lasting over an hour due to the amount of basic information that must be passed to the public.
 - b. OSCs should use various response personnel for brief periods to provide a well rounded briefing with minimal impact on the response organization.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #3.3 - **Interagency Coordination and Public Affairs**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: PUBLIC AFFAIRS, JOINT INFORMATION CENTER, COMMUNITY RELATIONS
4. TITLE: **Community Relations**
5. OBSERVATION:
 - a. Community relations did not receive direct, upper level Unified Command attention until local citizens confronted the Coast Guard Public Affairs Officer.
 - b. Once notified and engaged, the Unified Command skillfully addressed community concerns and facilitated community input with a series of town meetings.
6. DISCUSSION: In any response, resources should be allocated to keep the communities informed. The more critical the event (i.e. evacuations, personal property damage, etc.) the higher the level the attention should come from. Contact with community leaders should be established as a matter of course during response planning and immediately at the outset of an incident.
7. LESSONS LEARNED:
 - a. Community relations need attention early and proactively.
 - b. The town meeting format worked well in this case and should be considered as a method of addressing public concerns.
8. RECOMMENDED ACTION:
 - a. The Command Staff and Public Affairs personnel should have community relations high on their agenda and establish links with the public early.
 - b. Civic representatives should be given full access to the Situation Unit and every effort taken to facilitate information flow to the communities.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #3.4 - **Interagency Coordination and Public Affairs**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: NATIONAL CONTINGENCY PLAN, FEDERAL RESPONSE PLAN, FEDERAL EMERGENCY MANAGEMENT AGENCY, STAFFORD ACT, FEDERAL COORDINATING OFFICER
4. TITLE: **Coordination between USCG Unified Command and Federal Emergency Management Agency (FEMA)**
5. OBSERVATION: The interface between flood relief efforts and the oil spill response was adequate in scope and was effective.
6. DISCUSSION: The response to the oil spill was led by the Federal On-Scene Coordinator (OSC) operating under his authority from the National Contingency Plan and the Clean Water Act, using resources from the Oil Spill Liability Trust Fund. The FEMA response to the flood disaster was led by the FEMA Federal Coordinating Officer (FCO) operating under his authority from the Federal Response Plan and the Stafford Act, using resources from FEMA's Stafford Act disaster funds.

Due to the nature of this incident, there was only minimal coordination needed between the Unified Command (UC) and FEMA's Disaster Field Office. This coordination was facilitated by the EPA ESF#10 representative, who did an excellent job of keeping the FCO informed. There was some very beneficial coordination between FEMA and USCG in the areas of public affairs (daily radio broadcast updates) and conducting public meetings with local residents, but little interaction between the two organizations for any other purpose.

7. LESSONS LEARNED:
 - a. Because the USCG and FEMA had different missions, statutory authorities and resources, it was not necessary for their command structures to closely coordinate operational activities during this incident.
 - b. The ESF#10 representative is an excellent source of information for the FCO.
 - c. Keeping coordination at the level dictated by the situation kept valuable response personnel free to attend to their operational missions and facilitated decision making.

8. RECOMMENDED ACTION:

a. The Area Committee should address this issue in its Area Contingency Plan to provide guidance on establishing coordination between an OSC and FEMA's FCO when there is an oil spill that takes place during a Presidentially declared disaster. The recommended goal is to establish the proper level of coordination mandated by the details of the incident rather than a goal of simply maximizing coordination.

b. OSCs should become familiar with the FEMA disaster response capabilities so an informed decision as to the extent of integration can be made during an incident.

c. OSCs should make every effort to keep the ESF#10 representative well informed during a joint incident.

9. COMMENTS: NONE

PLLS LONG REPORT

1. **FOCUS AREA:** ISPR #3.5 - **Interagency Coordination and Public Affairs**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. **TYPE:** Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. **KEYWORDS:** RESEARCH AND SPECIAL PROGRAMS ADMINISTRATION, OFFICE OF PIPELINE SAFETY, PIPELINES
4. **TITLE:** **Role of Research and Special Programs Administration (RSPA) and State Pipeline Agencies**
5. **OBSERVATION:** During this incident, pipeline expertise and regulatory authority was lacking on the OSC staff. Shutting down an interstate pipeline can be technically and operationally complex. The OSC had no regulatory jurisdiction over the pipelines.
6. **DISCUSSION:**
 - a. The RSPA Office of Pipeline Safety is the Federal entity which regulates onshore transportation related facilities such as pipelines, their pumps, and break-out tanks. The Office of Pipeline Safety (OPS) collects, reviews, and approves oil pipeline operators' Facility Response Plans under the Oil Pollution Act of 1990.
 - b. Because it is the Federal government's repository of pipeline expertise, it is critical for the RSPA Office of Pipeline Safety to promptly provide a liaison officer to answer the OSC's questions regarding pipeline operations & maintenance and help guide appropriate action. The liaison officer could also facilitate the issuance of RSPA OPS hazardous facility orders or other administrative orders from RSPA OPS to the pipeline operators (for line shut-in or pressure reduction, etc.)
 - c. In the first few days after the spill, OPS field personnel were so busy overseeing the pipeline operators' repair and source control efforts, that they were unable to spare someone for full-time liaison officer duties.
7. **LESSONS LEARNED:**
 - a. In the event of a pipeline spill, RSPA Office of Pipeline Safety should provide a full-time liaison officer to the OSC as soon as the Unified Command is stood up.
 - b. The corresponding State agency for intrastate pipelines should also be available.

8. RECOMMENDED ACTION:

a. The Coast Guard and RSPA should consider the establishment of a MOU to help coordinate these agencies' activities and provide expertise and regulatory authority during a response involving pipelines in the Coastal Zone.

b. The EPA and RSPA should seek a similar arrangement for the Inland Zone.

c. State pipeline agencies and the lead spill response agency for the State should enter into similar agreements.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #3.6 - **Interagency Coordination and Public Affairs**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/95.
3. KEYWORDS: VIP VISITS, VIP BRIEFINGS
4. TITLE: **VIP Visits**
5. OBSERVATION: VIP visits need prior planning and significant support to avoid disrupting the response organization.
6. DISCUSSION: The Coast Guard District Commander escorted and briefed VIPs, leaving the OSC free to concentrate on the response effort.
7. LESSONS LEARNED: Senior Federal and State leaders can facilitate the briefing of VIPs during a major response and minimize the impact on the response organization.
8. RECOMMENDED ACTION: Senior agency leaders should establish policies that facilitate VIP briefings and tours with minimal impact on the response organization.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #4.1 - **Logistics**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: CONTRACTOR CONTROL
4. TITLE: **Contractor Personnel Within the Spill Management System.**
5. OBSERVATIONS: There were many contractor and subcontractor representatives located within the sections of the command structure (particularly Operations, and Planning).
6. DISCUSSION:
 - a. While it is convenient and, in some cases essential, to have contractors located within the command system, there were too many contractor representatives in the command post. Interference with the exchange of information and slowing of the decision process resulted.
 - b. Some reported contractors had access to sensitive information which could have given them an opportunity to create needs to match their resources.
 - c. It is unlikely a blanket exclusion of contractors is the best route. Especially early in the response, there has to be a matching of task to resources that requires the expertise and up-to-date equipment status information only possessed by the contractor who owns those resources.
7. LESSONS LEARNED:
 - a. Control contractor representatives' access to the command system. Contractors can not be allowed to unduly influence the planning process, or be allowed to interfere with the free flow of information within the command system.
 - b. Contractors need to be given limited access to the command post.
 - c. A set of rules for contractor behavior in the Command Post should be developed and enforced.
8. RECOMMENDED ACTION: The ACP should define policy guidance for controlling contractor representatives' access to and behavior in the command post.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #4.2 - Logistics, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: RESOURCE DEPLOYMENT, NOTABLE SUCCESS
4. TITLE: **Notable Successes - Available Resources Provided in a Timely Manner**
5. OBSERVATIONS:
 - a. Coast Guard senior leadership realized the significance of this incident early-on and sent large quantities of resources to the OSC without waiting for a request.
 - b. In the rush of the early stages of a major spill, it is unrealistic to wait for a formal request for resources from those deeply involved in the response.
 - c. The Gulf Coast area has a well equipped infrastructure for spill response.
6. DISCUSSION:
 - a. The senior leadership in the Eighth Coast Guard District correctly anticipated the needs of the OSC and didn't wait for a formal request. A C-130 aircraft was dispatched to pick up cadres of spill response personnel from each of the Marine Safety Offices in the District. These people were then delivered to the OSC within hours of notification of the spill.
 - b. Proper response planning can quickly identify in a broad sense the personnel, expertise and equipment that will need to be imported to properly conduct a response to a major oil discharge. There is much to be gained in having a system that automatically dispatches this assistance upon notification that a major spill has occurred. Getting the OSC's staff ahead of the issues and able to properly plan a large response requires a correspondingly large number of capable personnel. To wait for an OSC to request this assistance builds in an unnecessary delay.

c. Accomplishing this was relatively easy on the Gulf Coast where spill response resources and expertise are in great supply. Proper planning for this is more critical where resources are less available and logistics more difficult.

d. Automatic dispatch of resources requires that the OSC have an organizational structure and a command post that can effectively absorb this influx.

7. LESSONS LEARNED: The automatic ramping up of resources for a large spill is recommended. It is better to deploy too much rather than too little, as it is easier to ramp-down than to ramp-up.
8. RECOMMENDED ACTION: The ACP should establish criteria for automatic dispatch of sufficient resources to respond to various types of incidents. The quantity of resources ordered should reflect known needs, provide for the usual under-reporting of volumes spilled and prepare for the potential worst case escalation of the incident.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #5.1 - **Finance**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: CHAIN OF COMMAND, CONTRACT OFFICER, LOGISTICS, FINANCE
4. TITLE: **Contracting Staff Chain of Command**
5. OBSERVATION: The contracting staff, at times informally reported and received information directly to/from the Logistics Section rather than through the Finance Section chain. The ACP does not have a description of the Contract Supervisor's responsibilities.
6. DISCUSSION:
 - a. Section B-II-2 of the ACP, indicates that the flow of information from the contracting staff must go through the Finance Section Chief.
 - b. When orders for equipment, contractors and supplies were approved, they went through Logistics, to Finance then to the Contracting Officer. During these many steps, some of the information and details in the order were lost. To clarify the order, the Contracting Officer or purchasing agent had to go back to the Logistics staff to find out exactly what was needed.
7. LESSONS LEARNED: Adherence to a rigid structure during a fast moving response can cause unnecessary delay. Cross-Section working groups should be empowered to accomplish tasks within predefined limits. Due to the nature of their work, Contracting Officers and procurement agents should work closely with representatives from Logistics and Planning to procure needed materials.
8. RECOMMENDED ACTION: The preferred solution is for OSCs to seek out and remove bottlenecks. Staff members should seek whatever empowerment is needed to accomplish the job. The best time to sort these matters is during exercises and drills.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #5.2 - Finance, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: CONTRACT OFFICER
4. TITLE: Contracting Officer Verifications
5. OBSERVATION: The prompt processing of daily field work verification records was disrupted at times by invoice submittals and daily sheets that were not signed-off by an authorized OSC representative.
6. DISCUSSION:
 - a. Unsigned invoices caused additional work for the contracting staff. The additional research, although not detrimental to the response effort, increased the staff work load and slowed the processing of some of the contractor invoices.
 - b. Some OSC representatives and monitors seemed well versed in directing the tactical cleanup but less aware of their responsibilities for tracking man/hours and equipment use.
7. LESSONS LEARNED: Provide an adequate number of trained field and contract personnel to perform the contracting functions.
8. RECOMMENDED ACTION:
 - a. Ensure the Contracting Officer is supported by sufficient staff to ensure the accounting work is completed accurately and in a timely manner.
 - b. Ensure monitors are trained and held accountable to provide all the necessary information for the tracking of contracts and procurements.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #5.3 - **Finance**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: DEMOBILIZATION
4. TITLE: **Demobilization of Equipment**
5. OBSERVATION:
 - a. In general, demobilization of equipment was conducted in a timely manner. It was a high priority issue with the Command Staff early-on and is an approach that should be emulated; however, managing the decontamination process was labor and resource intensive.
 - b. The process did not prioritize equipment by cost.
6. DISCUSSION: The demands on the Finance and Logistics sections to manage the decontamination process were burdensome. In addition, high cost equipment was kept "on-the-books" while awaiting decontamination.
7. LESSONS LEARNED:
 - a. Making decontamination of response equipment the responsibility of the cleanup contractor would eliminate the need for additional decontamination contracts. A flat rate (perhaps varying by type of oil) for decontamination of equipment could be negotiated as part of the BOA, or the cost could be included as part of the rental cost. The contractor would then own the problem of decontamination once the equipment was declared demobilized and "off the books" by the OSC.
 - b. High cost equipment and idle equipment should be the first to be demobilized as soon as the need for it is over.

8. RECOMMENDED ACTION:

a. MLCs should ensure that cleanup contracts and BOAs include decontamination of equipment as a contractor responsibility.

b. Area Committees should establish demobilization procedures within the ACP to rapidly identify equipment and personnel no longer actively engaged in oil recovery or protection of sensitive areas.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #5.4 - Finance, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: LOCAL RESOURCES, CONTRACT OFFICER, FINANCE
4. TITLE: Value of Local Knowledge
5. OBSERVATION: Even though the ACP contains a summary of available resources (Annex F), familiarity with locally available resources was in short supply within the Finance and Logistics staffs.
6. DISCUSSION: Much of the Finance and Logistics staff were not from Houston and were not familiar with the local community resources. At times, the Logistics section resorted to phone book searches for resources. The Contracting Officer wisely used the local knowledge of the First Class Storekeeper at the MSO, thus saving time and money.
7. LESSONS LEARNED: Identify and assign personnel who have experience in contracting resources from the local community to augment the contracting staff.
8. RECOMMENDED ACTION:
 - a. Area Committees should establish positions within all the sections for personnel who have knowledge of locally available resources. Provide ICS training for these personnel.
 - b. The DRAT should be trained to provide this support specifically to the Finance Section.
9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #6.1 - **Miscellaneous**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: HISTORIAN, DOCUMENTATION,
4. TITLE: **Use of the Historian**
5. OBSERVATION:
 - a. The early call-out of an experienced Historian greatly enhanced the collection and cataloging of key information.
 - b. A Coast Guard policy needs to be developed on the documentation of large spills.
6. DISCUSSION:
 - a. The OSC staff was quick to take the suggestion to bring in BM1 TRAVIS, USCGR who began to compile the paperwork for documentation and historical purposes. Upon his arrival, he was empowered to establish control procedures to ensure the capture of key information. His timely arrival and vast experience helped to coordinate the capture of important legal and historical records.
 - b. BM1 TRAVIS has perfected a cross referenced file system that maximizes the efficiency of operational information retrieval as well as long term documentation needs.
 - c. BM1 TRAVIS was assigned one part time helper. Two full time assistants would have allowed the more timely construction of files and better photo documentation.
 - d. Of particular note is the finding that PIAT/PA personnel are not trained in documenting events and do not consider documentation their mission. Public Affairs personnel are trained for, and fully employed, performing their media relations and community relations duties. The photos needed for public affairs pictures are rarely useful for documentation. For proper documentation, a small but separate staff is needed to focus on the issue.
 - e. The system devised by BM1 TRAVIS is excellent and he represents the highest level of oil spill documentation expertise in the Coast Guard; however, review of the system is needed to ensure it meets the diverse needs of those Programs impacted.

7. LESSONS LEARNED:

- a. A standardized documentation system for Federally funded and large scale responses is needed. An excellent start would be the definition of a standard file system that has been reviewed and approved by G-LCL, G-LMI and G-MEP.
- b. Documentation of major incidents requires a consistent and professional approach from the very beginning of the incident. This can only be accomplished by planning to obtain the resources necessary to accomplish this task.

8. RECOMMENDED ACTION:

- a. OSCs and Area Committees should ensure documentation is addressed in the Area Plans. OSCs should allocated personnel to the documentation task.
- b. Commandant (G-MEP) should coordinate with other programs to develop a standardized system of documentation of financial, operational and legal activity.
- c. Ensure a trained cadre of documentation personnel is available to OSCs.

9. COMMENTS: NONE

PLLS LONG REPORT

1. FOCUS AREA: ISPR #6.2 - **Miscellaneous**, submitted by the San Jacinto River, Incident Specific Preparedness Review team, (202) 267-2865.
2. TYPE: Oil spill response, Multiple Pipeline Spill, San Jacinto River, Houston, TX, 10/20/94.
3. KEYWORDS: ROVERS, PLANNING, SAFETY, NOTABLE SUCCESS
4. TITLE: **Creative Organizational Solutions to Operational and Organizational Challenges were Developed**

5. OBSERVATION:

Various creative solutions were developed that merit mention and consideration for permanent incorporation into plans.

6. DISCUSSION: During the San Jacinto oil spill a number of creative and effective solutions to problems were developed that merit consideration. The most effective noted by the ISPR Team are:

a. The use of "rovers" to collect information. Various organizational levels in the response found it useful to send members of their own staffs to collect information rather than impose this burden on the next level down. For example:

- (1) The Eighth Coast Guard District sent staff to collect information and report back. This assisted the OSC in keeping all levels of the organization briefed.
- (2) The OSC's safety staff sent people into the field for daily safety briefs and to watch for unsafe practices. This information collection technique provided valuable, practical information for the daily safety bulletins.
- (3) Logistics/Contracts sent people to verify field generated paperwork and sent independent teams out to assess resource (equipment and personnel) distribution to better target the greatest need and identify those ready for demobilization.

b. Long Range Planning. The slowing of the tempo of operations at night was capitalized upon to allow for long range planning. The Planning Section was manned at night and focused on long range plans.

7. LESSONS LEARNED:

a. The demand for information by the staffs can be met by training field personnel to provide the information, or by dispatching independent teams. Each has its place, but the use of independent teams does minimize the impact on otherwise busy responders.

b. Provision of such independent surveyors should be planned for to be effective. Such an approach exacts a high personnel cost (excess to an already large response organization) and may not be possible during the early ramp-up period.

c. Long range planning (i.e. beyond the next 24 hours) is essential to getting out in front of the incident. For incidents that have slow periods at night, a fully staffed night Planning Section can accomplish this task. For incidents that continue unabated 24 hours a day, a significant personnel increase in the Planning Section will be needed to allow a separate long range planning staff.

8. RECOMMENDED ACTION: Area Committees should consider the information and planning needs of the OSC and the response organization and make arrangements to provide the necessary resources.

9. COMMENTS: NONE

APPENDIX B
LIST OF PERSONS INTERVIEWED

TEXAS STATE AGENCIES

Texas General Land Office

Mr. Richard Arnhart
Mr. Scott Benton
Mr. Richard Bonds
Mr. R. E. Caraway
Ms. Trisha Clark
Mr. Stephen C. Cook
Mr. Jennings T. Ewing
Mr. Kraig C. Gallimore
Mr. Manuel F. Gonzalez
Mr. Niell Irvin
Ms. Rosanne Kronach
Mr. Gabriel Lugo
Mr. Russel J. Lutz
Dr. Robert Martin
Ms. Patti Martinez
Mr. Duke Mroz
Mr. Robert L. Rivera
Ms. Rena Taylor
Ms. Leah Thompson
Mr. Charlie Villa

Railroad Commission of Texas

Ms. Mary L. McDaniel

Texas Natural Resource Conservation Commission

Mr. Don Fawn
Mr. Steve Hamm

Texas Parks and Wildlife

Mr. Winston G. Denton
Mr. Jarrett O. Woodrow, Jr.

Harris County

CAPT Dan E. Doehring
LT W. T. Sparks
Ms. Lavern Thompson

COAST GUARD

Eighth Coast Guard District

RADM Robert C. North
CAPT Jim Calhoun
CDR Phil Glenn
LCDR Charles Brantley

MSO Houston

CAPT Richard E. Ford
CDR Michael Ashdown
CDR Tom Leveille
SK1 Tolhurst

National Strike Force Coordination Center

Ms. Christine Burk
LT Richard Johnson
Jerry Snider (PIAT)

Gulf Strike Team

LCDR de Bettencourt

Atlantic Strike Team

CWO2 Mike Leath

Maintenance and Logistics Command (Atlantic)

Ms. Eleanor Deegan
Mr. Peter Dinicola
Mr. Larry Mellor
Mr. Mark Snyder

FEDERAL GOVERNMENT

Environmental Protection Agency

Mr. Charles Gazda
Mr. Gary Guerra
Mr. Mike Ryan

Federal Emergency Management Administration

Mr. Charley Barnes
Mr. Del Greer
Mr. Bell Penn

National Transportation Safety Board

Mr. Larry Jackson

Department of Transportation

Ms. Linda Daugherty (RSPA/OPS)
Mr. Jim Thomas (RSPA/OPS)

Department of Commerce

Mr. Ron Gouguet

INDUSTRY

Colonial Pipeline Company

Mr. Bill Collins
Mr. Gary Shoemake
Mr. Scott Stateham

Exxon

Mr. W. B. Nethery, Jr.

Marine Spill Response Corporation

Mr. Fred Biers
Mr. A. J. Heikamp, Jr.
Ms. Caroline White

Clean Channel Association

Mr. Raymond Meyer
Mr. Edward Roe

Texaco Exploration and Production Inc.

Mr. Harry Rich
Mr. Allen J. Verret

Garner Environmental Services, Inc.

Mr. "Odie"

National Response Corporation

Mr. Al Wood

Waste Control Company

Ms. Veronica Gwyn

Southwestern Barge Company

Mr. Steve Reeves

APPENDIX C
SUMMARY OF THE ISPR PROCESS
AND
RECOMMENDATIONS

1. In accordance with Commandant (M) letter 16465 of 20 January 1995 an ISPR of the San Jacinto oil spill was conducted. Members of the panel were: CAPT Edmond P. Thompson, USCG, Chairman; Mr. James S. Taylor, Response Plans Officer, U. S. DOT RSPA/OPS, member; Mr. Herman L. Schmidt, Crisis Management Consultant, member; Mr. Robert W. Floerke, Assistant Deputy Administrator, California Department of Fish and Game, member; and LTJG Jeanne Reinke, USCG, recorder.

2. The ISPR met for the first time 14 March in Washington, DC to map out an approach to studying this incident. The ISPR team planned to focus on four general areas: Command, Control and Communications; Operations; Logistics; and Finance.

3. The focus issues for **Command, Control and Communications (C3)** were: mass balance determinations; public affairs; actions of the National Response Center; determination of "significant threat to human health and welfare" as provided by OPA 90; Coast Guard and non-CG POLREPs and other tactical reports; evolution of the organization over the first few days; planning; criteria for turning over the spill to trustees; and who hired/ordered response resources.

4. The focus issues for **Operations** were: hazchem/drum recovery and its relationship with the oil response; equipment deployment; meeting tier times; air monitoring; and waste disposal and its effect on the response.

5. Focus issues for **Logistics** were: handling of incoming personnel; tracking/staging equipment; and adequacy of resources available.

6. Focus issues for **Finance** were: funding of other (outside USCG) agencies; handling of third party claims; and tracking costs.

7. The ISPR team met in Houston and dispatched members to New Orleans, Dallas, and Austin. Approximately 65 people were interviewed (Appendix B) to obtain a clear view of this multifaceted response. Additional interviews were conducted in Washington, DC to explore the information flow to the Secretary of Transportation. Attachment (1) to this Appendix is the interview guide we used. Generating the guide brings the greatest value to the team as it helped us focus our thoughts. Referring to it during an interview helped keep us on track.

8. As the ISPR unfolded, some anticipated areas of emphasis waned while other issues the team felt would be of value to the response community became evident. The Area Contingency Plan and Interagency Coordination and Public Affairs were added as focus areas, Incident Command System (ICS) considerations were added to C3, Operations was dropped as a separate category and its issues were shifted mainly to C3/ICS, and a Miscellaneous focus area was added. Appendix A represents the detailed findings of the ISPR team.

9. Observations and Recommendations.

a. The ISPR process is an excellent opportunity to learn valuable lessons from incidents. Below are listed the observations made by the members:

(1) The assembly of members who represent a wide range of backgrounds provided valuable insights. For incidents involving a wide array of agencies at all levels of government having a similar spectrum of members on the ISPR was beneficial.

(2) The wide geographic spread of the members resulted in high costs and somewhat limited follow up. We accommodated this by dispatching individual team members to various areas to collect information. We then met at the NSFCC Headquarters to compile the findings.

b. The frankness and openness of all involved made information collection easier and allowed the generation of a great number of observations that should provide training and exercise development ideas for other Areas.

c. Recommendations.

(1) ISPR teams be representative of as broad a spectrum of agencies as participated in the incident.

(2) Attempt to keep the geographic dispersion of team members to a minimum.

(3) Continue with the program. It should provide the best lessons learned in the PLLS and help guide continuous improvement in our response readiness.

Attachment (1) Houston Oil Spill ISPR Questionnaire

HOUSTON OIL SPILL ISPR QUESTIONNAIRE

SUGGESTED PREAMBLE:

MY NAME IS _____. I'M ACTING AS A MEMBER OF THE HOUSTON OIL SPILL INCIDENT SPECIFIC PREPAREDNESS REVIEW TEAM. I WOULD LIKE TO ASK YOU SEVERAL QUESTIONS CONCERNING THE INCIDENT. YOUR PARTICIPATION IS VOLUNTARY. WE HAVE A NON-ATTRIBUTION POLICY IN ORDER FOR PARTICIPANTS TO FREELY PROVIDE HONEST, CANDID ANSWERS TO OUR QUESTIONS. THIS REVIEW IS NOT AN INVESTIGATION, NOR IS IT AN ATTEMPT TO IDENTIFY FAULT, BLAME OR VIOLATION OF LAWS OR REGULATIONS. OUR PURPOSE IS TO EXAMINE AND EVALUATE INTERAGENCY COORDINATION, COMMUNICATION AND COOPERATION, THEN REPORT THE THINGS THAT WORKED WELL, AND THE AREAS THAT WE THINK CAN BE IMPROVED.

GENERAL QUESTIONS (TEAM MEMBERS JOINT QUESTIONS)

1. What was your job title? Your location? The dates of your involvement?
2. Describe your duties, roles, responsibilities.
3. Who did you report to?
4. Who reported to you?
5. Who did you primarily interact with?
6. Please fax the organization diagram you worked in and your view of the overall organization diagram?
Please rate the effectiveness of this organization on a scale of 1 to 4.
7. Did your response organization interact with other organizations? Y/N If yes, which ones?
On a scale of 1 to 4, how effective was this interaction?
Comments-
Recommendations-
8. What is your past experience performing this job function?
9. What is your experience in pollution response?
10. What is your day to day job outside pollution response?
11. Are you involved in a response plan development of any kind?
If so, which one(s)?
12. Was your role in this response defined or described by a plan? Which one(s)?

13. Did you refer to or use any plan(s) during the response?
14. If so, what worked well? Where were the opportunities for improvement? Recommendations/General thoughts/Anecdotes?

AREA CONTINGENCY PLAN QUESTIONS

1. What documents and publications did you use for reference material?
2. Which ones were of most help? Least help? Why?
3. Who decided to close the water intakes?
4. What criteria was used to make the decision?
5. In your opinion, was the decision timely?
6. How did that decision flow to those who needed to take action?
7. Were Command Post Sites Predetermined within the plans (ACP)?
8. How were the command post sites selected?
9. Should the command post sites be identified within a plan? Why? Or Why not?
10. Was there confusion due to multiple RPs? If so, how was it resolved?
11. Did the ACP provide sufficient guidance for multiple RPs?
12. What are your recommendations for improving multiple RP incident responses?
13. Were there adequate area and pipeline maps available at the command center?
14. Who provided the maps?
15. What recommendations do you have to ensure the availability of adequate mapping information.
16. Were the sensitive area maps in the ACP adequate?
17. Was there any confusion concerning the location of sensitive areas?
18. Were the Pre-Impact Habitat assessment forms contained in the ACP used?
19. Ask SHPO - What were your responsibilities during the incident?

20. What was your relationship with the FOSC?
21. Were all your concerns sufficiently addressed? Please explain your answer:
22. Did you, and those you worked with, operate from a set of established guidelines/plans? Which ones?
23. To what extent did you use/refer to the ACP and/or the facility response plan during the response? What section of the plan did you use?
24. What other contingency plans, reference publications or Standard Operating Procedures (SOP's) did you use during the response? How well did these plans interact?
25. What were the strengths of the plan(s) you used? The weaknesses?
26. What plans/guidelines/directives did you follow in carrying out your role?
27. Did they, for the most part, match your expected duties?
28. Can you provide any examples of where your duties conflicted with established plans/guidelines/directives?
29. Did you participate in any drills or exercises similar to the actual response? When? Who sponsored it/them?
30. What did you experience in the drills/exercises that assisted you in the actual response? Were there differences that generated confusion? Please Explain:
31. Do you have any general comments about the frequency or types of exercises you participated in prior to the response?

COMMAND, CONTROL AND COMMUNICATION

1. Was there an official "Mass Balance Determination"?
2. Who directed the task?
3. Who performed the task?
4. Was your command system set up in accordance with an established plan or written guidelines?
5. Did your way of passing information match an established plan or written guidelines?
6. Did you encounter difficulty sending or receiving information within the command structure?

7. Did you encounter difficulty sending or receiving information from outside the command structure?
8. Who, if any, did you consider to be significant participants outside of the command structure?
9. Are you aware of any conflicting tasking or breakdown in information flow? Please explain.
10. In your opinion, was the public/media adequately informed/updated on key events? Please explain:
11. Did the media interfere with ongoing operations? If yes, How?
12. Was there enough Public Affairs support (to prevent key response personnel from being pulled away from operations)?
13. What sources of incident information were available to the local citizens?
14. Were VIPs, news media personnel, and local citizens satisfied with the flow of information?
15. Who determined what information would be provided in the "flash faxes" to other agencies?
 - Where did the information come from (SITREPs, POLREPs, PHONCON w/FOSC)?
 - Who is on the distribution for the "flash faxes"?
16. The Office of Pipeline Safety (OPS) was not on the distribution for POLREPs. How is the distribution determined?
17. Describe the relationship between the NRC and FOSC? NRC and other government agencies?
18. Ask FOSC - Did you make the determination that a threat to human health and welfare existed? If yes, was it formally or informally declared (or simply understood)?
19. Did situation reports intended for all concerned agencies flow from one source within the Unified Command Structure?
20. Was the CG POLREP the official unified report?
21. If no, who generated the "unified reports"? How often? What guidelines were used to generate the reports?
22. Please draw an organization chart showing who you worked for (by position title) and who worked for you (by position title). If the structure changed over time (between 20 October and 29 October 1994), please identify the change and the approximate date.

23. What guidelines were used to establish the Unified Command System structure?
24. What was the relationship between the FEMA Disaster Field Office and the Spill Response UCS?
25. When was the response turned over to Trusted Agents?
26. Who were the Trusted Agents?
27. How did the Trusted Agents acknowledge acceptance of Trusted Agent status? What did they agree to do?
28. What guidelines were used to make the transition?
29. When were you ordered to the scene? By whom?
30. What equipment did you bring to the site?
31. Who did you work for (who directed your daily response effort)?
32. Were you used to your full capability, or did you maintain a reserve of equipment and/or personnel?
33. Were those that you worked for aware of your full capability?
34. Is your company listed in any of the response plans? Which ones?

LOGISTICS

1. Was the logistics section managed via an ICS structure? If so, what went well, also, were there opportunities for improvement?
2. Were communications between the sections adequate? Gaps? Problems?
3. Describe shift change and relief procedures. Problems if any, such as information lost, lack of continuity, fatigue, etc.
4. Describe equipment and personnel tracking and staging procedures. Problems, if any, lost equipment or personnel? Lack of information to identify needs? Lack of feedback from field about problems, etc.
5. Were there any problems with feeding and housing? If yes, what were they? Impeded response y/n
6. Were there any performance problems with contractors and vendors? How reported to logistics and handled. Follow-up procedures?

7. How were equipment and personnel hired by the various entities coordinated. Role of unified command? Lost opportunities? Duplication? Were they coordinated at all?
8. What was your overall impression of the performance of the logistics section? Facilitated response efforts? Impeded response efforts? Describe how for both of the above. Opportunities for improvement. Too much/too little Coast Guard? Vertical/horizontal communications? "Off the wall" thoughts?

FINANCE

1. Did the finance section follow ICS structure? How did it go? Problems, if any? Describe working relationships with other sections and UC. Any problems? Recommendations?
2. Describe role of NPFC and NSFCC. Help? Hindrance? Any unfilled needs? Too much/too little Coast Guard?
3. Describe what was done to coordinate and facilitate payment for goods and services contracted for by various entities. Late payments/duplicate payments? Were verifications complete, timely, etc.?
4. How were 3rd party claims handled? Coordination/various entities? Coordination with NPFC? Problems, if any? Public outrage problems?
5. Were adequate funds available in a timely manner? Retarded response efforts? Facilitated response?
6. Describe procedures for measuring ongoing costs. Accurate? Helpful to response, P.R. or exercise to satisfy "Bean Counters"?
7. How did finance section function overall? Contributor to an adequate response effort or did finance uncertainties affect response? Did USCG finance managers perform well? Were RP and other entities given meaningful roles? Lessons learned, if any?

OPERATIONS

1. Who was the lead agency for HAZCHEM and drum recovery operations?
2. Was your agency involved? Y/N
3. If yes, what was your agency's role?
4. Were there other agencies involved? Y/N
5. (a) If yes, who were they?

- (b) What was their role?
6. How was the HAZCHEM and drum recovery operation organized?
(Please draw a picture)
 7. How did this fit with:
Oil spill response?
Fire and flood relief?
 8. Were there any reports of chemical hazards associated with the barges involved in the fires? Y/N
 9. If yes, what were the nature of the hazards and what was the resolution?
 10. How were radio system interoperability problems addressed?

HEALTH AND SAFETY

1. Did your organization develop a site safety plan for the San Jacinto response (29 CFR 1910.120(b) (4))
2. Did your organization have a dedicated safety officer?

Oil Spill Response

1. Were you involved in the oil spill response? Y/N
2. If yes, how were people briefed / trained on the health and safety concerns for the oil spill response?
3. Do you know what HAZWOPER means? Please explain in your own words.
4. Was there any air sampling conducted as part of the in-situ burning of the oil?

HAZCHEM and Drum Recovery

5. Were you involved in the HAZCHEM and drum recovery response?
Y/N
6. If yes, how were people briefed / trained on the health and safety concerns for this response?
7. Do you know what HAZWOPER means? Please explain in your own words.
8. What manner of sampling was conducted:
Air?

Water?

Soil?

Personal dosimeters?

9. How was the information from the sampling used:

For the response personnel?

For the general public?

Waste Disposal

10. Were you involved in any waste disposal operations? Y/N

11. If yes, what was the nature of your involvement?

12. How was waste processed and disposed of:

Liquid oil?

Oil contaminated solids?

HAZCHEM?

13. How efficiently was this handled?

(a) were cleanup / drum recovery / disaster operations
slowed by waste disposal issues?

PREPAREDNESS

1. (If not asked elsewhere) What was your role in the response?

2. Before the incident, how did you prepare for your role?

3. In general, do you feel you were well prepared? Y/N

(a) Why?

4. Is there any additional:

training/exercising; and/or

equipment

that would have made you better prepared?

5. Is there any group or individual that seemed the most ready
for this response?

(a) Why?

6. Is there any group or individual that seemed the least ready for this response?

(a) Why?

INTERAGENCY COORDINATION

Generic Questions for everyone

1. Did you or your organization participate in the Unified Command System (UCS) for the San Jacinto Spill?
2. Was your interaction with other entities in the Unified Command System (UCS) defined by: the National Contingency Plan (NCP, the Regional Contingency Plan (RCP), an Area Contingency Plan (ACP), a Facility Response Plan, or an Emergency Operations Plan, etc.? If so, which plan(s)?
3. How effective was your interaction with other entities in the UCS? (Scale of 1 to 4)
4. Did you have a designated point of contact in each of the other entities you needed to interact with?
5. Was any of your interaction with other agencies conducted in your capacity as a member of the Regional Response Team (RRT)?
6. How was the RRT integrated into the response?
7. Did you have any interaction with the Federal Emergency Management Agency (FEMA)? If so, describe the issue(s) that necessitated the interaction.
8. Did you have any interaction with local emergency response agencies or with the Local Emergency Planning Committee (LEPC)? Describe the interaction.
9. Did your organization participate in a joint information center (JIC) or did it deal directly with the media?

Questions for US Coast Guard On Scene Coordinator (USCG OSC)

10. How closely did the USCG OSC coordinate with the Environmental Protection Agency (EPA) OSC?
11. Were they co-located at the unified command post?
12. How often did the USCG OSC and EPA OSC meet to discuss operational and planning issues?
13. What interaction did you have with DOT Office of Pipeline Safety? How would you assess the support they provided you in your capacity as OSC? (Scale of 1 to 4)

14. How did you interact with the pipeline operator -- directly, or through another entity (Texas Railroad Commission, RSPA/OPS, etc.)?
15. Were pipeline operators with non-leaking lines asked to reduce operating pressure or shut down their lines? If so, when, and by whom?
16. Who made the decision to evacuate the area based on reports of toxic smoke from the burning barge, and what was the basis for the decision?
17. Was the evacuation decision coordinated with the OSC and the unified command or with FEMA's Disaster Field Office (DFO)?
18. How was the evacuation decision promulgated?
19. Did you have any interaction with FEMA's Federal Coordinating Officer (FCO) in their disaster field office?
20. Did you play a role in the decision to implement in-situ burning of product on the river? If so, what was your role? Who made the decision to do the in-situ burn, and how did they make it?

Specific Questions for RSPA Office of Pipeline Safety

21. What interaction did you have with the USCG OSC? What support did your organization provide to the OSC and the Unified Command?
22. Were pipeline operators with non-leaking lines asked to reduce operating pressure or shut down their lines: If so, when, and by whom?
23. To what extent was your organization involved in investigative activities related to the spill?
24. Did the size of your staff limit your ability to fully participate in the investigations and the emergency response?
25. Did your organization participate in the public affairs section of the Unified Command?
26. How did your organization handle requests for information from the news media?
27. Was there any confusion arising from the State's division of responsibilities for preparedness/prevention (Railroad Commission) and spill response (General Land Office)?
28. How could your organization have been more fully integrated into the Unified Command?

29. What support/assistance did your organization seek from the Unified Command? Was the support readily obtained?

Questions for the EPA OSC

30. How closely did you coordinate your activities with the USCG OSC?
31. Were you co-located with them at the unified command post?
32. How often did the USCG OSC and EPA OSC meet to discuss operational and planning issues?
33. Who made the decision to evacuate the area based on reports of toxic smoke from the burning barge, and what was the basis for the decision?
34. Was the evacuation decision coordinated with the OSC and the unified command or with FEMA's Disaster Field Office (DFO)?
35. How was the evacuation decision promulgated?
36. How much interaction did you have with local authorities in conducting the HAZMAT response and drum removal? Which local agencies did you interact with?
37. Did you play a role in the decision to implement in-situ burning of product on the river? If so, what was your role? Who made the decision to do the in-situ burn, and how did they make it?
38. Did you have any interaction with FEMA's Federal Coordinating Officer (FCO) in their disaster field office?
39. How could your organization have been more fully integrated into the Unified Command?

Questions for Pipeline Operators

40. How closely did you coordinate your activities with the USCG OSC?
41. Were you co-located with them at the unified command post?
42. How could your organization have been more fully integrated into the Unified Command?
43. What support/assistance did your company need from PRSP/OPS? Was it readily obtained?
44. Were pipeline operators with non-leaking lines asked to reduce operating pressure or shut down their lines? If so, when, and by whom?

45. Did your organization participate in a joint information center (JIC) or did it deal directly with the media?

U.S. Department
of Transportation

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Coast Guard**

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