

MEXUS GULF EXERCISE 2004*

Warren T. (Tommy) Hutto
Shell Exploration & Production Company
P.O. Box 61933
New Orleans, LA 70161

Lieutenant Commander David Pertuz, U.S. Coast Guard
U.S. Coast Guard, Eighth District
500 Poydras St. Suite 1340
New Orleans, LA 70130

ABSTRACT

The Agreement of Cooperation Between the United States of American and the United Mexican States Regarding Pollution of the Marine Environment by Discharges of Hydrocarbons and Other Hazardous Substances signed in February 2000 by the U.S. Coast Guard and the Secretaria de Marina-Armada de Mexico, established the beginning of a successful bilateral cooperation between both countries for the preparation and response to pollution incidents that could affect the coastal waters of both countries. The agreement calls for joint pollution response exercises to be conducted to exercise the bilateral coordination and joint response system.

In May 2004, the Shell Exploration and Production Company acted as the Responsible Party in such a joint exercise, denominated MEXUS GULF 2004. The exercise was conducted in Matamoros, Tamaulipas, Mexico May 25-27, 2004. Building on a previously conducted exercise in 2002, the objectives of the 2004 exercise were to exercise and identify joint response procedures following a significant impact to the shared shorelines. Specifically, the four identified objectives included:

- *Identify Natural Resources Damage Assessment (NRDA) Procedures in Mexico.*
- *Address transboundary movement Procedures of collected waste and contaminated equipment with emphasis on movement from Mexico to the U.S.*
- *Identify joint procedures for clean-up and rehabilitation of oiled wildlife.*
- *Exercise Joint Command and Control Procedures including transboundary and field communications*

Shell Exploration and Production Company (SEPCo), working jointly with the U.S. Coast Guard, and the Mexican Secretaria de Marina—Armada de Mexico and with outstanding support from the National Oceanographic and Atmospheric Administration, The U.S. Fish and Wildlife Service, the Minerals Management Service and the Texas General Land Office designed and executed an outstanding exercise well lessons learned were captured and shared.

This paper will cover the planning, logistical considerations, execution and lessons learned from the joint exercise as well as the successful use of the Incident Command System as an incident response management tool for bilateral cooperation.

INTRODUCTION

MEXUS Gulf exercise 2004 was held on May 25-27, 2004 at the Holiday Inn Convention Center, Matamoros, Tamaulipas, Mexico. Shell Exploration and Production Company sponsored the exercise in partnership with the U.S. Eighth Coast Guard District (CGD8) and the Mexican Navy First Naval Zone. MEXUS Gulf 2004 was the third joint MEXUS Gulf exercise and was designed to further the cooperation from both nations by addressing joint response efforts following a significant impact from an offshore oil spill to the coasts shared by both nations. The exercise was designed by representatives from Shell Exploration and Production Company (SEPCo), Eighth Coast Guard District Marine Safety Division Response Branch (CGD8 mor), Marine Safety Office (MSO) Corpus Christi, National Oceanic and Atmospheric Administration (NOAA), Minerals management Service (MMS), United States Fish and Wildlife Service (USFWS) and the Texas General Land Office (TGLO) for the United States, and the First Naval Zone (ZN-1) and Naval Subsector Matamoros (SUBNAVMAT). During the afternoon of the first day of the exercise, a player's and Incident Commander's briefs were conducted. This was followed by a breakout into work groups for exercise assignments and strategies. The second day was reserved for a full joint tabletop exercise using the Incident Command System, including a field deployment of bi-national Shoreline Clean-up Assessment Teams (SCAT) to Playa Bagdad, Tamaulipas and Boca Chica Beach, Texas. During the morning of the third and final day, a joint exercise evaluation was conducted including recommendations for improvement of future joint exercises. In this exercise no equipment was deployed. The exercise main objectives were:

- Identification of Natural Resources Damage Assessment (NRDA) Procedures in Mexico.
- Addressing transboundary movement Procedures of collected waste and contaminated equipment with emphasis on movement from Mexico to the U.S.
- Identification of joint procedures for clean up and rehabilitation of oiled wildlife.
- Exercising Joint Command and Control Procedures including transboundary and field communications.

Over 200 members representing 30 different entities from local, state, federal and private industry agencies from both countries participated in the exercise, and, it was generally agreed that the exercise was successful and met all the objectives.

The participation of the right bilateral agencies, level of participation, eagerness to cooperate and enthusiasm from the participants and, the commitment, leadership and coordination from the sponsor, Shell Exploration and Production Company, made the MEXUSGULF 2004 exercise a great success.

PARTICIPATING FEDERAL, STATE, LOCAL AND PRIVATE AGENCIES:

The following agencies participated in the exercise:

From the United States of America:

- Department of Homeland Security (DHS)—United States Coast Guard (USCG), and Customs and Border Protection (CBP)
- Department of Interior (DOI)—Office of Environmental Policy and Compliance (DOI Region VI), Minerals Management Service (MMS), U.S. Fish and Wildlife (USFWS)
- Department of Commerce (DOC)—National Oceanographic and Atmospheric Administration (NOAA)
- Department of State (DOS)—U.S. Consulate Matamoros, Mexico
- The Environmental Protection Agency (EPA)
- Texas General Land Office (TGLO)
- Texas Commission of Environmental Quality (TCEQ)
- Texas Parks and Wildlife Department (TPWD)
- Shell Exploration and Production Company (SEPCo)

From Mexico:

- The Secretariat of Marine—Armada of Mexico (SEMAR)
- The Secretariat of Foreign Relations (SRE)—Mexican Consulate, Brownsville
- The Secretariat of the Environment and Natural Resources (SEMARNAT)
- The Federal Environmental Protection Agency (PROFEPA)
- The Secretariat of Communication and Transport (SCT)
- The Secretariat of Interior (SG)—Customs Matamoros and National Immigration Institute
- The Secretariat of Agriculture, Cattle Ranching, Rural Development, Fishing and Food (SAGARPA)
- The Secretariat of Health (SSA)
- The National Water Commission (CNA)
- Mexican Petroleum Company (PEMEX)
- Protección Civil, Estado de Tamaulipas
- The Autonomous University of Tamaulipas
- Port of Tampico's Integral Port Authority Administration,
- The Agricultural Technologic Institute (ITA-4)
- The Secretariat of Housing and Public Credit (SHCP)
- The Attorney's General Office for the Republic (PGR)
- The Preventive Federal Police (PFP)

MEXUS BACKGROUND

"The Joint Contingency Plan Between the United Mexican States and the United States of America Regarding Pollution of the Marine Environment by Discharges of Hydrocarbons or Other Hazardous Substances" was signed in February 2000. The Mexico-U.S. (MEXUS) Plan provides for bilateral cooperation in response to pollution incidents that could seriously affect the coastal waters and coastal region of both countries. This plan also addresses pollution incidents that impact the waters of one country, which would prompt requesting assistance from the other country. In either case, the MEXUS plan provides concepts, operational provisions and protocols for both countries to follow.

Two geographic annexes, MEXUS Gulf and MEXUS Pacific, compliment the MEXUS Plan. These annexes establish

procedures, responsibilities and regional areas outlined in the MEXUS Plan.

Since the signing of the MEXUS Plan, the U.S. Coast Guard and Mexican Navy have actively engaged and built strong cooperation aimed at protecting the marine environment and guaranteeing the health and well being of the citizens of both nations. The joint efforts have produced significant advances with mutual cooperation in the response systems from both countries for better preparation and collaboration if there ever is a need to react to a pollution incident that could impact the coastal waters shared by both nations. The joint cooperation has been very successful in great part due to the full engagement and support of member agencies of the Joint Response Team (JRT) from both nations, identified in the Plan, and the complete integration, participation and support from private industry.

In May of 2002, the first joint exercise MEXUS Gulf 2002 was conducted in South Padre Island, Texas. This exercise saw, for the first time, a joint response effort from JRT agencies from both nations working together under one roof to achieve common objectives. The exercise, sponsored by UNOCAL, focused on the joint response to a significant oil spill that threatened the coasts of South Texas and Northern Tamaulipas. The exercise saw a bi-national response effort, using a Unified Command under the Incident Command System, addressing among other subjects, the use of dispersants to mitigate the impact of the spill, bilateral movement of personnel and equipment and joint command and control. It also saw U.S. Coast Guard and Mexican Navy response vessels working in a coordinated response to the simulated spill and dispersant deployment operations. The exercise was a success.

In August of 2003, a second joint MEXUS Gulf pollution response exercise was conducted in Tampico, Tamaulipas. Called "Sabalo 2003", the exercise saw, once again, JRT member agencies working jointly under a unified command using the Incident Command System to address a pollution incident that threatened the Tamaulipas and South Texas coasts. This exercise, sponsored by the Mexican Navy, addressed on water response and recovery, strategic protection of sensitive areas, shoreline cleanup assessment and response techniques, and addressed the potential impact to protected species. The exercise served to identify common areas that require additional work to establish joint response capabilities. As was the first exercise, "Sabalo 2003" was a success.

MEXUS GULF 2004 DESIGN PROCESS

SEPCo, CGD8 mor and the ZN-1 initiated planning discussions for the MEXUS Gulf exercise 2004 in the fall of 2003 immediately following the joint "Sabalo 2003" exercise. A design team was assembled with representatives from SEPCo, CGD8 mor, ZN-1 and SUBNAVMAT, NOAA, USFWS, MMS, TGLO and MSO Corpus Christi, TX.

Pursuing a progressive approach to build on the previous two exercises, a joint decision was made to focus the 2004 exercise on joint operations following a significant pollution impact to the coast shared by both countries, with an emphasis on shoreline clean up & response procedures in Mexico. It was jointly agreed not to include open water recovery operations as they were exercised in the previous two drills, but to focus instead on protection of sensitive areas, natural resources impact, rehabilitation and damage assessment, and transboundary movement of personnel, equipment and recovered material.

The design team held its initial joint meeting on February 4, 2004 immediately following the conclusion of the 2004 MEXUS Gulf Joint Response Team meeting held in Tampico, Tamaulipas. A second and final joint meeting was held on 15 April, 2004 in Matamoros, Tamaulipas. Prior to the April 15 meeting, an over flight was conducted of the targeted impact area in South Texas and Northern Tamaulipas by way of a U.S. Coast Guard helicop-

ter from U.S. Coast Guard Air Station, Corpus Christi. A NOAA representative on the exercise design team captured digital aerial images from the targeted beaches. These images were altered to include simulated oil impact of the area. This technique successfully gave responders a visual reference of the areas impacted and the level of impact. Following, on April 16, a team of representatives from NOAA, USFWS, U.S. Coast Guard and Mexican Navy visited Playa Bagdad with the purpose of conducting a pre-impact assessment and to capture additional digital images. This provided responders with visual assistance of areas impacted for cleanup assessment. Not only did these digital images enhance the credibility of response operations, it also provided baseline information for future planning activities. These activities were coordinated with the Mexican Navy and all clearances and approvals conducted by way of the American Embassy, Mexico City. Prior to, during and following these activities, additional informal meetings and phone conferences were held at various times and locations in both Mexico and the U.S. by the respective Joint Response Team members, all led by, or in coordination with, SEPCo, the U.S. Coast Guard and the Mexican Navy.

All meetings and coordination were successful in great part by the participation and engagement of the JRT member agencies. Decisions made during formal and informal meetings included but were not limited to:

- Agreement of joint objectives for the exercise.
- Use of the Incident Command System as joint Incident Management Tool.
- Identification of needed Joint training.
- Identification of the Joint Command Center location.
- Identification of local, state and federal agencies that needed to participate.
- Agreement to conduct the exercise without any equipment deployment.
- Agreement on field operations and their locations.
- Identification and agreement of logistic needs including, radio frequencies and permits, lodging and meals, translation assistance, transportation and public outreach.

On May 24, 2004 a day prior to the exercise, NOAA and the USFWS conducted joint training on Shoreline Clean-up Assessment and Natural Resources Damage Assessment. The morning of May 25, the Coast Guard Gulf Strike Team conducted a half-day basic ICS training course. All training was conducted in Matamoros, Tamaulipas and was aimed primarily to personnel from the Mexican delegation.

EXERCISE SCENARIO

On May 13, 2004, a Shell Exploration and Production Company (SEPCo) leased drill ship, conducting explorations in the Alaminos Canyon area, suffered an incident that resulted in the surface release of crude oil. Following the initial failure, SEPCo conducted immediate actions to secure the release; 24 hours later, approximately 24,000 bbls of a medium crude oil are reported lost in the Gulf of Mexico. The spill location is approximately 200 miles East of South Padre Island, Texas, and approximately 20 miles north of Mexican territorial waters. Initial trajectories have the oil slick traveling westward towards the South Texas coast with a potential for the slick to enter Mexican territorial waters if no response actions are taken. After receiving the initial notification, the U.S. Eighth Coast Guard District proceeded to notify the Mexican First Naval Zone of the situation and potential impact to Mexican waters. The respective Commanders agreed to follow up with the developments, and notify their respective JRTs of a potential activation.

SEPCo initiated a rapid response to mitigate the pollution incident including deployment of 5 offshore skimming vessels

and the application of 23,000 gallons of dispersants over a three-day period; efforts were effective to minimize a coastal impact. On Day 4 of the spill, a tropical depression forms southeast of the spill site forcing a halt to offshore response actions. By Day 7, when response actions are able to resume, no residual oil was visible in the sea surface from several over flights conducted by SEPCo and the U.S. Coast Guard, however trajectory analysis supported by deployed drifter buoys and the realization that more than 5000 bbls of oil remain unaccounted leave the shorelines of Southern Texas and Northern Tamaulipas at risk. On Day 10 (May 22), weathered oil began to impact beaches near Bagdad Beach in Northern Tamaulipas. The U.S. Coast Guard and Mexican Navy JRT chairs after consultations with SEPCo, agree to activate the MEXUS Plan and its MEXUS Gulf Annex and began to mobilize equipment and personnel to form a Unified Command in Matamoros, Mexico, to respond to the beach impact.

On Day 12 (May 24), some 60 miles of beaches in both Northern Tamaulipas and South Texas are reported impacted. Wildlife, Environmental and Economic Sensitive areas are reported impacted or at risk.

On the afternoon of Day 13 (May 25), a Joint MEXUS Gulf Unified Command is established at the Holiday Inn, Matamoros, to respond to the shoreline impact phase of the incident.

EVALUATION

Overall, the Response team did a tremendous job in meeting the objectives of the exercise. The SEPCo Spill Management Team and the various Agencies provided an experienced group to address many difficult bi-national issues successfully within an ICS framework. The key learnings from the exercise led to recommendations that formal bi-national work groups be formed to develop protocols and procedures for handling NRDA issues, movement of collected waste, and clean-up and rehabilitation of oiled wildlife.

EXERCISE FACILITATION

On May 25-27, 2004, a joint tabletop exercise was conducted with JRT Member agencies from both countries at the Holiday Inn Convention Center, Matamoros, Mexico. SEPCo deployed a significant portion of its spill management team mostly based in New Orleans, Louisiana and Houston, Texas. SEPCo complemented its spill management team with several contractors that assisted with specific duties including preparation of Incident Action Plans, exercise management, radio communications and oiled wildlife rehabilitation specialists. SEPCo assumed the role of the Responsible Party and assumed the Incident Commander role under a Unified Command along with representatives from the U.S. Coast Guard, Mexican Navy, Texas General Land Office and Proteccion Civil representing the State of Tamaulipas.

On the afternoon of May 25, 2004 (Day 13), after quick introductions, a press conference and a player's brief, the exercise started with an Incident Commander's brief and distribution of the Day 14 Incident Action Plan (IAP) in English and Spanish. Following the directions from the Incident Commander, the different Incident Command System work groups got together to receive directions and discuss IAP implementation strategy. Six bilingual translators were clearly identified and assisted the different groups with bilingual communications. SEPCo provided and maintained the lead of all the divisions and work groups with the exception of the Finance and Administration Division that was led by the U.S. Coast Guard. The Mexican Navy and JRT agencies assumed deputy positions in most of divisions. As expected, flaws in the preset organizations were quickly identified and necessary adjustments made to correct them.

On May 26, 2004, the Command Post exercise started. For the exercise, the Command Post was broken down in four physi-

cal locations around the Holiday Inn and its Convention Center. The main room housed the Operations, Planning, Logistics and Finance/Administration Sections as well as the Command Staff, in addition, a communications group was also located in the main room. The Unified Command was located in a separate room near the main room. The exercise Truth Control was located in a hallway just outside the main room, and the Joint Information Center (JIC) was located in a second separate room inside the main hotel building. Phones with national and international dialing capabilities were provided for all the different groups as well as fast speed Internet connections. During the morning of May 26, two bi-national Shoreline Cleanup Assessment Teams (SCAT) were dispatched one to South Padre Island/Boca Chica Beach Texas led by the Texas General Land Office, and one to Playa Bagdad, Tamaulipas led by NOAA and the USFWS. The SCATs were provided with exercise controllers that also assisted in providing oil impact assessment and recommendations for cleanup activities, the teams observations were successfully relayed by radio to the Command Post for developing of clean-up goals and priorities. The day actions concluded with the different sections briefing the Unified Command, followed by a mocked press conference. On the morning of May 27, 2004, a joint exercise evaluation was conducted. The different response sections and work groups reassembled to identify areas that worked well, areas that needed

improvement and to provide recommendations. The exercise concluded after the different groups presented their findings to the group.

BIOGRAPHY

Warren T. (Tommy) Hutto is the Emergency Response Coordinator for Shell Exploration and Production Company/EP Americas. Tommy has worked for Shell for 27 years, the last 10 as Emergency Response Coordinator. In this role he has responsibility for Oil Spill Response Plans and Training, as well as Hurricane Evacuation Efforts, Crisis Management Plans, and various general Emergency Plans for Offshore and Onshore facilities.

Lieutenant Commander David Pertuz is the Assistant Chief Response Branch and Supervisor Eighth Coast Guard District Response Advisory Team. LCDR Pertuz has led the Eighth Coast Guard District MEXUS Gulf coordination efforts since November of 2000 including main U.S. coordinator for three major MEXUS Gulf exercises.

* This article reflects the opinion of the authors and not necessarily the opinion of the U.S. Coast Guard or Shell Exploration & Production Company.