2014 TRI-NATIONAL HAZARDOUS MATERIALS TABLETOP EXERCISE

AFTER ACTION REPORT

MAY 21, 2014

Yuma County Library
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Yuma, AZ 85364

RRT9

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1 EXECUTIVE SUMMARY

The 2014 Tri-National Hazardous Materials Tabletop Exercise was designed to coordinate and build relationships between tribal, local, state, and federal partners in the Yuma/San Luis Río Colorado area, to improve hazardous materials emergency response to a train derailment resulting in known hazardous materials released into the Colorado River and the downstream notification/communication process. The exercise was also an excellent opportunity for the response community to review and verify emergency response information in the Area 3 Section of the Lower Colorado River Geographic Response Plan (LCRGRP). The exercise planning team was composed of numerous and diverse local, state, tribal, and federal agencies.

Figure 1: The Exercise Participants.

Based on the planning team's deliberations, the following objectives were developed for the exercise:

- Identify who must be included in the "Whole Community" and discuss integration of all involved in the formulation of Tri-National Hazmat Incident Response Plans.
- Discuss communications systems available for entities participating in the response to a Tri-National Hazmat Incident to identify those systems which are currently interoperable and those systems not currently interoperable.

- Discuss current barriers to establishing and maintaining a Unified and Coordinated operational structure integrating all critical stakeholders in responding to a Tri-National Hazmat Incident.
- Identify and discuss barriers to establishing and maintaining a Common Operational Picture for all entities participating in response to a Tri-National Hazmat Incident.
- Identify key stakeholders required to participate in Tri-National Hazmat incidents to ensure Natural and Cultural Resources are protected to the maximum extent possible and damage is mitigated for those resources affected.

1.1 PRIMARY STRENGTHS

The major strengths identified during this exercise are as follows:

- Strong Cross-Border Relationships. The exercise demonstrated that along the lower Colorado River there is a strong desire to collaborate between response agencies, the railroad, tribes, and local and state emergency management agencies on both sides of the U.S./Mexico border.

Good Representation. The exercise demonstrated a strong capacity in Southern Arizona for coordination between Mexico, tribal entities, local, state, and federal partners.

- Feedback for Improvement of Plans. Exercise participants applied the discussion of how the response would play out to inform future updates to Tribal, Mexican, Federal, State and local response plans. Through strengthening of relationships and increasing awareness of existing plans and

Figure 2- Enhanced with real-time interpretation.

procedures, the exercise will lead to greater coordination between planning efforts, and ensure regular review and update of the LCRGRP.

1.2 PRIMARY AREAS FOR IMPROVEMENT

Throughout the exercise, several opportunities for improvement along the lower Colorado River corridor from Yuma, Arizona thru to the Morelos Dam areas were discussed with reference to a train derailment/hazardous materials incident were noted. The primary areas for improvement, including recommendations, are as follows:

- LCRGRP Plan Updates. The need was identified for a comprehensive review of local and tri-national plans that support emergency response efforts. In particular, contacts, communication, protocols for alerts/warnings and the dissemination of public information need to be reviewed and updated.
- Hazardous material release notification protocols to the Tribes and Mexico for materials released into the Colorado River were not clear. Who makes these notifications? How is the information disseminated in a timely manner for these Tribes and Mexico to prepare to respond or evacuate?
- Interoperable Communications. The ability of local responders to communicate with resources outside of the area, as well as the ability for agencies to communicate to the tribes and across the border, was identified as a continuing challenge.

As with all exercises, the work done here should be built upon in future training and exercises. Drawing on the information presented in this report, emergency response planners and responders in the Yuma/San Luis Río Colorado area should conduct operational exercises focusing on the objectives above, with an emphasis on data management and risk communications.

2 EXERCISE OVERVIEW

2.1 EXERCISE SUMMARY

NAME	2014 Tri-National Hazardous Materials Tabletop Exercise
TYPE	Tabletop Exercise
DATE	8:00am – 4:00pm
LOCATION	Yuma County Library, 2951 S. 21st Drive, Yuma, Arizona 85364
SPONSORS	Arizona Department of Emergency Management (ADEM), Border 2020/Frontera 2010, California Governor's Office of Emergency Services (Cal OES), Regional Response Team (RRT) 9, Yuma County, Union Pacific Railroad, United States Environmental Protection Agency (USEPA)
SCENARIO TYPE	Train Derailment/Hazardous Materials Release (Styrene Monomer Crude Oil)
CORE CAPABILITIES	Planning, Operational Coordination, Operational Communications, Situational Assessment, Natural and Cultural Resources

2.2 ACKNOWLEDGEMENTS

2.2.1 EXERCISE DESIGN TEAM

- Jim Acosta, Cal OES
- John Allen, ADEM
- Trevor Anderson, Cal OES
- Tony Badilla, Yuma County OEM
- John Dirickson, ADEM
- Mike Erfert, Yuma Fire Department
- Nichole Fortson, ADEM
- Mark Howard, Arizona State Emergency Response Commission
- Chuck Kmet, ADEM
- Jan Lindner, ADEM
- Mike Malone, Arizona Department of Environmental Quality

- Kenneth Nelson, Union Pacific Railroad
- Steve Nunez, Cal OES Southern
- Courtney Perrier-Bear, Arizona Department of Transportation
- Lance Richman, USEPA, RRT 9
- Billy Ross, ADEM
- Dan Shane, USEPA
- Jeff Smith, United States Bureau of Reclamation
- Lida Tan, USEPA
- Dan Varner, ADEM
- Ken Waters, National Weather Service (NWS)
- Facilitator: Dan Varner, ADEM
- Venue: Yuma County Library District

2.2.2 PARTICIPATING ORGANIZATIONS

- 9th Civil Support Team
- Agency for Toxic Substances and Disease Registry
- American Red Cross - Grand Canyon
- American Red Cross - Yuma
- Arizona Department of Environmental Quality
- Arizona Department of Transportation
- Arizona Division of Emergency Management
- Arizona State Emergency Response Commission
- Baja Proteccion Civil
- Bomberos Municipales
- Bomberos Rurales
- Bomberos Volunterios
- California Department of Fish and Wildlife
- California Department of Fish and Wildlife – Colorado River District
- California Highway Patrol – Winterhaven
- California Oil Spill Prevention and Response
- City of Yuma
- Cocopah Indian Tribe Cultural Resources
- Cocopah Indian Tribe Office of Emergency Management
- Cocopah Police Department
- Cocopah Tribal Health
- Imperial County Environmental Health
- Imperial County Fire Department
- Imperial County Operational Office of Emergency Services
- International Boundary and Water Commission
- Kinder Morgan
- Mexico Red Cross
- National Oceanic and Atmospheric Administration
- National Weather Service
- Policia San Luis Sonora
- PROAES
- PROFEPA
- Proteccion Civil – San Luis
- Quechan Police Department
- Quechan Tribal Security
- Rio Rico Fire District
- Rural Metro Yuma Fire Department

- Salvation Army
- San Diego County Environmental Health Department
- San Luiz Fire Department (Arizona)
- Santa Cruz County Emergency Management
- Somerton/Cocopah Fire Department
- Union Pacific Railroad
- United States Army Garrison – Yuma Proving Ground
- United States Bureau of Land Management – Yuma Field Office
- United States Bureau of Reclamation – Lower Colorado Regional Office
- United States Bureau of Reclamation – Yuma
- United States Coast Guard
- United States Coast Guard - Nogales
- United States Consulate - Nogales
- United States Consulate - Nogales
- United States Consulate – Tijuana
- United States Environmental Protection Agency
- United States Marine Corp Air Station Yuma – Office of Emergency Management
- Yuma Area Communications Services
- Yuma County Auxiliary Communications
- Yuma County Finance
- Yuma County Fire Department
- Yuma County General Services
- Yuma County Maintenance
- Yuma County Office of Emergency Management
- Yuma County Office Specialist
- Yuma County Police Department
- Yuma County Public Defender
- Yuma County Public Health
- Yuma County Public Works
- Yuma County Sheriff's Office
- Yuma County Utilities
- Yuma County Water Utilities

PLAYERS: 100

FACILITATORS: 1

EXERCISE SUPPORT: 4

TOTAL: 105

3 EXERCISE DESIGN

3.1 EXERCISE GOALS

The goals of this exercise are to improve hazardous materials emergency response to a train derailment and subsequent hazardous materials release through:
Planning

1. Operational Coordination
2. Operational Communications
3. Situational Assessment
4. Natural and Cultural Resources

3.2 EXERCISE OBJECTIVES

- The following objectives were identified by the Exercise Design Team to test in the communications drill and tabletop exercise:
- Identify who must be included in the "Whole Community" and Discuss integration of all involved in the formulation of Tri-National Hazmat Incident Response Plans.
- Discuss communications systems available for entities participating in the response to a Tri-National Hazmat Incident to identify those systems which are currently interoperable and those systems not currently interoperable.
- Discuss current barriers to establishing and maintaining a Unified and Coordinated operational structure integrating all critical stakeholders in responding to a Tri-National Hazmat Incident.
- Identify and discuss barriers to establishing and maintaining a Common Operational Picture for all entities participating in response to a Tri-National Hazmat Incident.

- Identify key stakeholders required to participate in Tri-National Hazmat incidents to ensure Natural and Cultural Resources are protected to the maximum extent possible and damage is mitigated for those resources affected

3.3 CORE CAPABILITIES

The National Preparedness Goal, released in September 2011, defines what it means for the whole community to be prepared for all types of disasters and emergencies.

Figure 3- Mark Howard (AZSERC) discussing the Core Capabilities.

These risks include events such as natural disasters, disease pandemics, chemical spills and other manmade hazards, terrorist attacks and cyber-attacks. The National Preparedness Goal identified 31 core capabilities—these are the distinct critical elements needed to achieve the goal. These capabilities are referenced in many national preparedness efforts, including the National Planning Frameworks. The Goal grouped the capabilities into five mission areas (prevention, protection, mitigation, preparedness, response, and recovery). Pursuant to PPD-8 this exercise was designed to evaluate plans, policies, and procedures though the lens of the Core Capabilities List. The following Core Capabilities were evaluated as part of this exercise:

"A secure and resilient nation with the capabilities required across the whole community to prevent, protect against, mitigate, respond to, and recover from the threats and hazards that pose the greatest risk." – The National Preparedness Goal

3.3.1 COMMON

- PLANNING: Conduct a systematic process engaging the whole response community as appropriate in the development of executable strategic, operational, and/or community-based approaches to meet defined objectives.
- OPERATIONAL COORDINATION: Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

3.3.2 RESPONSE

- OPERATIONAL COMMUNICATIONS**:** Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.
- SITUATIONAL ASSESSMENT: Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

3.3.2 RECOVERY

- NATURAL AND CULTURAL RESOURCES: Protect natural and cultural resources and historic properties through appropriate planning, mitigation, response, and recovery actions to preserve, conserve, rehabilitate, and restore them consistent with post-disaster community priorities and best practices and in compliance with appropriate environmental and historical preservation laws and executive orders.

3.4 SCENARIO SUMMARY

3.4.1 INITIAL SCENARIO

On May 21, 2014 at approximately 0800 hours, a Union Pacific Rail Road, west-bound freight train, derailed on the railroad bridge, east of the Ocean to Ocean Bridge, located at 100 N Quechan Road in Yuma, Arizona. The slow speed (15mph) derailment was caused by a hot box (seized wheel bearing), on the forward truck of a DOT 111A 100W1 tank car, bearing TILX 260259, and transporting Styrene Monomer. There are additional DOT 111A tank cars in front of the subject car, transporting the same commodity. Directly behind TILX 260259 are several tank cars containing Petroleum Crude Oil, being shipped from Cushing, Oklahoma.

As the wheel on the forward truck malfunctioned, the wheels of the truck derailed, and the truck dislodged for the car. As the tank car continued forward, the truck cut into the bottom of the tank, causing a 4 inch by .75 inch tear. The 4 inch bottom outlet valve is immediately aft of the tear.

The breech of the tank is allowing Styrene Monomer to release into the Colorado River, and the beach area immediately below the bridge.

The first tank car directly behind the Styrene Monomer car is a DOT 111A 100W1 tank car, bearing GATX 205560, and a red placard with the ID Number 1267. During the incident, this tank car also sustained damage to the under carriage and is leaking product from a cracked weld, near the barrel and the head of the tank. The crack is approximately 12 inches in length, and allowing crude oil to leak from the tank.

The entire train measures approximately 6, 000 feet, and weighs approximately 9,000 tons. At the time of the incident, the locomotives were in the state of California.

3.4.2 MODULE 1: INITIAL OPERATIONS

Immediately after the incident, UP would make the initial notifications to the NRC and their dispatch.

3.4.3 MODULE 2: SUSTAINED OPERATIONS

It is now four hours since responders arrived on scene. Initial containment operations are underway in the immediate vicinity of the release. Air monitoring has been

established by the local responders. Downstream receptors are preparing to be impacted.

3.4.4 MODULE 3: PLAN REVIEW AND COORDINATION

Twelve hours after the initial release local clean-up is well underway and notifications for downstream have been made utilizing information described in the LCRGRP. Locally Key stakeholders have gathered for an after action review of the response with a focus on what went well and what could be improved upon. The response continues downstream as the material reaches the Mexican border.

3.5 SCENARIO MAPS

Location: Outside Yuma, AZ

Latitude: 32^0 43' 43" N

Longitude: 114^0 36' 55" W

Time: 1500Z (0800 local)

Date: 21MAY2014

Hazard/Release:

16,000 gal (121,162 lbs) Styrene

30,000 gal of Crude Oil

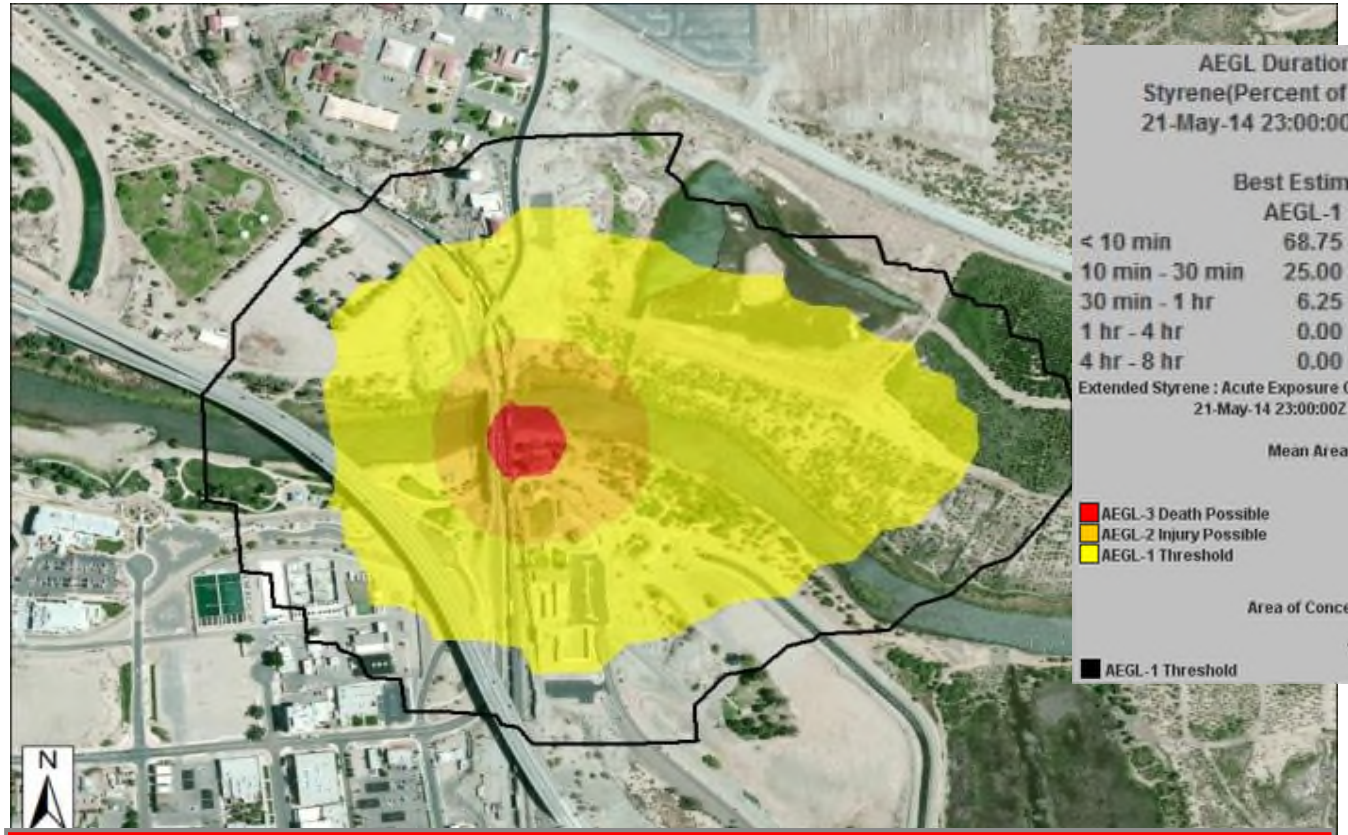
Weather: Varies

Wind Direction: From 270^0

Wind Speed: 5-10 mph

Temperature: 79-100^0 F

Humidity: 5-10%



Death Possible (AEGL-3): The concentration in air of a substance at or above which it is predicted that the general population could experience life-threatening health effects or death.

Injury Possible (AEGL-2): The concentration in air of a substance at or above which it is predicted that the general population could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

Threshold (AEGL-1): The concentration in air of a substance at or above which it is predicted that the general population could experience notable discomfort, irritation, or certain asymptomatic non-sensory effects. However, the effects are not disabling and are reversible upon cessation of exposure.

4 EXERCISE ANALYSIS

This section of the report reviews the performance of exercised capabilities. Based on the format and structure of the exercise, observations are organized by objective. Each objective is followed by related observations, which include analysis and recommendations for program enhancement. Also included is a set of general observations about level of exercise participation. All observations are based on documented exercise feedback and observer/evaluator notes.

4.1 GENERAL OBSERVATIONS

O.1.1 EXERCISE VALUE STRENGTH

ANALYSIS

The majority of participants agreed that the exercise met their expectations and that it was a great step toward improving communication and coordination of emergency responses along the Colorado River. Participants appreciated being able to network with other agencies and hope that more exercises will be conducted. The exercise was well planned out by a lot of very knowledgeable individuals. Overall it was an excellent training exercise because new participants were able to see how the community and other agencies can come together to solve issues. The exercise brought together federal, tribal, state and local agencies and their roles and responsibilities were explained and discussed.

RECOMMENDATIONS

R.1.1.1 Conduct follow up exercises to further explore coordination of response activities in the Yuma/San Luis Río Colorado area.

References: Observer/Evaluator Notes

O.1.2 EXERCISE PARTICIPATION STRENGTH AREA FOR IMPROVEMENT

ANALYSIS

The exercise assembled over 100 key players representing Federal agencies (U.S. and Mexico), State agencies (Arizona and Sonora), two Tribes, and response agencies from the Yuma/San Luis Río Colorado area. The exercise successfully facilitated an engaged discussion and exchange of information for the topic of this TTX. It was noted, however, that some key players who were absent from the exercise could have added to the discussion. In particular, it was noted that, the Morelos Dam is overseen by the Baja California response agencies. There was no representation of agencies from Baja, California or Baja, Mexico.

RECOMMENDATIONS

R.1.2.1 Include the following agencies/groups in future response and recovery exercises:

- Response agencies from Baja California, Mexico
- Including regulatory authority over Morelos Dam
- United States Fish and Wildlife Service
- Yuma Water Users Association
- United States Department of Agriculture
- Health Departments
- Arizona Game and Fish Department
- Expanded participation from City government (Yuma, San Luis Río Colorado)
- Expanded participation by Mexican response partners

- Expanded participation by Tribal response partners (including Tribal Council representatives)

References: Observer/Evaluator Notes

O.1.3 EXERCISE SCENARIO AREA FOR IMPROVEMENT

ANALYSIS/RECOMMENDATION

R.1.3.1 A future exercise should address how sensitive habitat and threatened and endangered species along the river will be protected during response and recovery activities.

References: Observer/Evaluator Notes

O.1.4 VENUE LOGISTICS AREA FOR IMPROVEMENT

ANALYSIS

The exercise brought together a large contingent of responders from Arizona, California, Tribes and Mexico, for the area along the Colorado River between Yuma, Arizona and Morelos Dam in Mexico. The translators were helpful in enabling the Mexican responders to participate in group discussions. Unfortunately, the translating took a lot of time away from additional discussion that could have occurred from other agencies and/or stakeholders. In smaller groups this could have been conducted in a more time efficient manner. The TTX should have started with the incident response and recovery instead of the facilitator shaping the conversation.

RECOMMENDATIONS

R.1.4.1 Consider alternate formats for future exercises including utilization of small group or break out discussions to maximize participation and feedback.

R.1.4.2 Ensure adequate audio support including extra microphones to ensure that all participants can hear player questions and responses.

R.1.4.3 Provide conference call capability for future exercises to allow better participation by those who cannot attend in person.

References: Observer/Evaluator Notes

4.2 PLANNING OBSERVATIONS

O.2.1 LCRG RESPONSE PLAN STRENGTH AREA FOR IMPROVEMENT

ANALYSIS (STRENGTHS)

In February 2014 EPA finalized the Lower Colorado River Geographic Response Plan (LCRGRP) and distributed to all agencies that participated in the creation/update of this 1997 document. During the past 5 years EPA worked with tribes, local, state and federal agencies and other stakeholders along the river to help develop and collect pertinent information for the plan. There are 3 parts to the LCRGRP: Area 1 (Hoover Dam to Davis Dam), Area 2 (Davis Dam to Parker Dam), and Area 3 (Parker Dam to Morelos Dam). Key elements of the plan include the mandatory and downstream notification lists, agency roles and responsibilities, spill response capabilities/resources, sensitive environmental and public areas, social and cultural resources, and detailed maps.

RECOMMENDATIONS

R.2.1.1 Educate local, state, and tribal partners on how to access and use the plan. This may be done through webinar style awareness training. The epaosc.net website link was posted for all to be able to access the LCRGRP.

R.2.1.2 Since it has been three years we should take the time to update the plan for the Yuma Area and provide the names and contact information for the County agencies which were not included in the February 2014 version of the plan.

References: Observer/Evaluator Notes

ANALYSIS (AREA FOR IMPROVEMENT)

When discussing who would be responsible for making the notifications during the early part of a response, it was mentioned that during the Area 3 Committee meetings it was decided that the Incident Commander (IC) would be responsible for making the notifications to the NRC, AZDEM and CalOES. Most of the exercise participants were not familiar with the LCRGRP. In preparation for the exercise some of the participants reviewed the LCRGRP for the first time and were quite impressed at the collection of information that was assembled in the document. It was noted that the contact information for LCRGRP- Area 3 was collected three years ago and required an update for Yuma and Imperial County agencies. It is the responsibility of the agency to notify EPA with their contact information

RECOMMENDATIONS

R.2.1.3 Update local, state, tribal and federal contact information and resource information in the LCRGRP on an annual basis including:

- Contacts
- Radio Frequencies
- Roles and Responsibilities
- Capabilities and Resources

References: Observer/Evaluator Notes

4.3 MODULE 1 OBSERVATIONS

O.3.1 INITIAL NOTIFICATIONS STRENGTH AREA FOR IMPROVEMENT

ANALYSIS

It was identified that Union Pacific (UP) would receive an internal notification of the release from the train or their dispatch. UP dispatch would begin contacting the local

responders and determine what level of response was required. If the material released reaches the river, it becomes a Level 3 response, which would drive activation of the railroad's emergency response contractors. Locally, the call would come into the Communications Center. The Fire Department would respond to the location and set up a Command center that would include the railroad. The National Response Center would be notified who would in turn notify the local and downstream agencies and stakeholders including Mexico.

Additional observations include:

- There was no mention of the Sister City Border Plan which would probably be activated in this type of scenario.
- There seemed to be a lot of confusion from the Mexican contingency about their decision making on where they would allow the contaminated flow to go (river bed or irrigational canal).
- The Environmental Unit was not addressed in the exercise.
- There was no discussion regarding evacuation (e.g. triggers, notification to NGOs, etc.).

RECOMMENDATIONS

R.3.1.1 Conduct a series of communications drills to ensure that the information is being effectively communicated to the appropriate response agencies, tribes and to the appropriate agencies in Mexico.

R.3.1.2 Response agencies along the lower Colorado River should be familiar with the LCRGRP to ensure response plans are up-to-date and agencies share a common operating picture.

R.3.1.3 Efforts should be to facilitate better coordination and communication between Tribal Communities and Mexican response agencies made (e.g. shared trainings, additional discussion-based exercises, etc.).

References: Observer/Evaluator Notes

O.3.2 RESPONSE RESOURCES STRENGTH AREA FOR IMPROVEMENT

ANALYSIS

The exercise revealed resource availability as a hindrance to response capability. Most of the railroad's resources required for spill containment are hours away from the impact area. Additional Railroad owned assets are available out-of-state by air only. Air monitoring equipment is potentially available within one hour from Imperial County California; however, it is unclear how those assets would be requested, received, and integrated into the larger response effort. None of the local response agencies maintain or has access to booming equipment to stop or contain any spilled material in the River.

RECOMMENDATIONS

R.3.2.1 A cache of booms and other equipment for river responses needs to be created for the Yuma Response Area.

R.3.2.2 Jurisdictional issues (State/Tribe) surrounding responsibility for the river need to be addressed.

R.3.2.3 Draft a plan to restock the caches of equipment at the end of an emergency.

R.3.2.4 Identify a secure place to manage the caches of response equipment.

R.3.2.5 Conduct trainings on the proper use of spill response equipment for local responder s as appropriate.

R.3.2.6 Revisit the concept for a protocol for an international liaison exchange with Mexican response agencies.

R.3.2.7 Identify what resources an Incident Management Team (IMT) could bring to bear in large scale International (United States, Mexico, and tribal nations) hazardous materials response and draft protocols to access those resources.

R.3.2.8 Explore a concept of operations for an international Joint Operation Center.

R.3.2.9 Integrate local, state, and federal responder access and credentialing plans, policies, and procedures into the LCRGRP.

R.3.2.10 Develop a MOU/MAA between California and Arizona as needed, and determine the role of the national Emergency Management Assistance Compact (EMAC) in supporting interstate resource management.

R.3.2.11 Establish resource sharing agreements between Sonora and Baja California

R.3.2.12 Develop communication protocols between dam facilities on either side of the US/Mexico border.

References: Observer/Evaluator Notes

O.3.3 LIFE SAFETY AREA FOR IMPROVEMENT

ANALYSIS

Despite there being several recreational areas along this stretch of the river there was no discussion of the immediate threats to life safety. Unresolved immediate human impact concerns include, but are not limited to:

- Public notification and warning (including the local agricultural community)
- Food and water safety

RECOMMENDATIONS

R.3.3.1 Discuss the creation of an interstate Joint Information System

R.3.3.2 Determine who would be responsible for notifying the agricultural water users along the river

References: Observer/Evaluator Notes

4.4 MODULE 2 OBSERVATIONS

O.4.1 INCIDENT COMMAND STRENGTH AREA FOR IMPROVEMENT

ANALYSIS

Four to six hours after the initial notification of spill it is anticipated agencies from outside the local area will arrive to support operations. This influx of response agencies raises a number of command and control questions such as:

- Would this type of incident be best handled from a single Incident Command
- Post (ICP), multiple ICPs (Area Command) or as part of a Unified Command?
- How will a large multi-national response integrate into an ICS –based Unified Command?
- What will the on-site incident command structure look like 4-6 hours into the incident?
- How is the overarching response managed as spill material travels downstream?
- How will the transitions from Local agency lead to state or federal lead be conducted?

RECOMMENDATIONS

R.4.1.1 Conduct Incident Command System training for local officials along the river corridor. Ensure that responding agencies can integrate with the local response operations and maintain jurisdictional authority.

R.4.1.2 Identify Incident Management Team support resources and determine how they would be accessed to support a bi-national and tribal response.

References: Observer/Evaluator Notes

O.4.2 PROTECTIVE ACTIONS STRENGTH AREA FOR IMPROVEMENT

ANALYSIS

A large spill may require an evacuation and/or shelter-in-place orders for persons living or traveling along the river corridor. Questions to consider:

- Who is responsible for making public notifications and by what methods?

- If an evacuation is required where will evacuees be evacuated to?

RECOMMENDATIONS

R.4.2.1 Plan and train response agencies on the use of local and national public warning systems

R.4.2.2 Develop an interagency/interstate Joint Information System

R.4.2.3 Work with local NGOs to develop notification procedures for mass care and sheltering.

References: Observer/Evaluator Notes

O.4.3 ENVIRONMENTAL SENSITIVITIES AREA FOR IMPROVEMENT

ANALYSIS

The exercise did not allow for a robust discussion of additional key issues surrounding environmental and cultural impacts of a large spill including:

- The identification and locations of sensitive species and sensitive cultural areas
- The role of the natural resources trustees in the response, remediation and environmental restoration.

RECOMMENDATIONS

R.4.3.1 Partner with Tribal Nations to understand protected areas

R.4.3.2 Develop a bi-national and tribal operational plan specific to the sensitive areas, populations, and species.

R.4.3.3 Determine who is responsible for managing tribal natural and cultural resources

R.4.3.3 Recognize Tribal, historic, and culturally significant sites along the river

R.4.3.4 Draft a plan to renew or replace natural habitats damaged or destroyed from a hazardous materials incident occurring along the lower Colorado River.

References: Observer/Evaluator Notes

4.5 MODULE 3 OBSERVATIONS

At this point in the exercise instead of discussing the specifics of long term clean-up operations, the exercise participants opted to use this time for additional Lower Colorado River Geographic Response Plan (LCRGRP) discussion. Talking points included:

- Most of the players were unfamiliar with the LCRGRP; however, the exercise aroused interest for some.
- Some participants expressed an interest in becoming more familiar with the LCRGRP and updating sections of the plan for their particular agency or organization.
- Yuma County agency section of the plan is severely lacking contact information. Each Yuma County organization will need to submit their contact information to Dan Shane at Shane.Dan@epa.gov for inclusion in the Area 3 update.
- Dispatch centers meet monthly. They discuss radio frequencies and how dispatch serves as a communications hub for this response area. Next month EPA will attend their meeting in an attempt to collect contact and resource information for inclusion into the plan.

4.6 ADDITIONAL OBSERVATIONS

ANALYSIS

It was agreed that we had identified the “whole community” aspect of this type of response. Agencies and Stakeholders need to share their information. The ICS is all about information sharing. Overall the exercise was very informative was very well

organized. This type of exercise was good for this particular group because the regular ICS type exercise would not nearly be as productive for all the players. In preparation for an incident, the locals might like to pre-prepare a Unified Command Group to test the notification system.

RECOMMENDATIONS

R.6.0.1 Limitations in achieving clear communications between responding groups, are inoperable communication systems and WebEOC accessibility.

R.6.0.2 Test the notifications system.

R.6.0.3 Continue having these exercises.

5 CONCLUSION

The 2014 Tri-National Hazardous Materials Tabletop Exercise provided an opportunity for local, state, and federal stakeholders on both sides of the U.S./Mexico border to explore the community's ability manage a cross border train derailment and hazardous materials release. The exercise resulted in an improvement plan that provides guidance for American and Mexican response agencies, tribal entities, and private entities to continue to build its response and recovery capabilities.

A IMPROVEMENT PLAN FOR EXECUTION

OBSERVATION	RECOMMENDATION	PRIORITY	PROGRAM ELEMENT	RESPONSIBLE PARTY	TIMEFRAME
4.1 GENERAL OBSERVATIONS					
O.1.1 EXERCISE VALUE	**R.1.1.1** Conduct follow up exercises to further explore coordination of response activities in the Yuma/San Luis Río Colorado area.		Exercise	US EPA	Aspirational
O.1.3 EXERCISE SCENARIO	**R.1.3.1** A future exercise should address how sensitive habitat and threatened and endangered species along the river will be protected during response and recovery activities.		Exercise	US EPA Exercise Design Team	Aspirational
O.1.4 VENUE LOGISTICS	**R.1.4.1** Consider alternate formats for future exercises including utilization of small group or break out discussions to maximize participation and feedback.		Exercise	US EPA Exercise Design Team	Ongoing
4.2 PLANNING OBSERVATIONS					

OBSERVATION	RECOMMENDATION	PRIORITY	PROGRAM ELEMENT	RESPONSIBLE PARTY	TIMEFRAME
O.2.1 LCRG RESPONSE PLAN	**R.2.1.1** Educate local, state, and tribal partners on how to access and use the plan. This may be done through webinar style awareness training. The epaosc.net website link was posted for all to be able to access the LCRGRP.		Planning	US EPA	1-2 years
	R.2.1.2 Since it has been three years we should take the time to update the plan for the Yuma Area and provide the names and contact information for the County agencies which were not included in the February 2014 version of the plan.		Planning	US EPA	< 1 year
4.3 MODULE 1 OBSERVATIONS					
O.3.1 INITIAL NOTIFICATIONS	**R.3.1.1** Conduct a series of communications drills to ensure that the information is being effectively communicated to the appropriate response agencies, tribes and to the appropriate agencies in Mexico.		Exercise	Yuma Ct OEM/LEPC All	1-5 years
	R.3.1.2 Response agencies along the lower Colorado River should be familiar with the LCRGRP to ensure response plans are up-to-date and agencies share a common operating picture.		Training	Yuma Ct OEM/LEPC All	1-2 Years

OBSERVATION	RECOMMENDATION	PRIORITY	PROGRAM ELEMENT	RESPONSIBLE PARTY	TIMEFRAME
	R.3.1.3 Efforts should be to facilitate better coordination and communication between Tribal Communities and Mexican response agencies made (e.g. shared trainings, additional discussion-based exercises, etc.).		Planning	Mexico and Tribal Nations	1-3 years
O.3.2 RESPONSE RESOURCES	**R.3.2.1** A cache of booms and other equipment for river responses needs to be created for the Yuma Response Area.		Equipment	Bureau of Reclamation	1-5 years
	R.3.2.2 Jurisdictional issues (State/Tribe) surrounding responsibility for the river need to be addressed.		Planning	US EPA in Coordination with State/Tribe	1 year
	R.3.2.4 Identify a secure place to manage the caches of response equipment.		Planning	Yuma Ct OEM/LEPC All	1-5 years
	R.3.2.6 Revisit the concept for a protocol for an international liaison exchange		Planning	Yuma Ct OEM/LEPC All	1-5 years

OBSERVATION	RECOMMENDATION	PRIORITY	PROGRAM ELEMENT	RESPONSIBLE PARTY	TIMEFRAME
O.3.3 LIFE SAFETY					
	R.3.3.2 Determine who would be responsible for notifying the agricultural water users along the river		Planning	Bureau of Reclamation	1-2 years
4.4 MODULE 2 OBSERVATIONS					
O.4.1 INCIDENT COMMAND	**R.4.1.1** Conduct Incident Command System training for local officials along the river corridor. Ensure that responding agencies can integrate with the local response operations and maintain jurisdictional authority.		Training	LEPCs	1-2 years

OBSERVATION	RECOMMENDATION	PRIORITY	PROGRAM ELEMENT	RESPONSIBLE PARTY	TIMEFRAME
O.4.3 ENVIRONMENTAL SENSITIVITIES	**R.4.3.1** Partner with Tribal Nations to understand protected areas		Planning	US EPA and Tribal Nations	1-2 years
	R.4.3.2 Develop a bi-national and tribal operational plan specific to the sensitive areas, populations, and species.		Planning	US EPA and Tribal Nations	1-2 years
	R.4.3.3 Determine who is responsible for managing tribal natural and cultural resources		Planning	US EPA and Tribal Nations	1-5 years
4.6 ADDITIONAL OBSERVATIONS					
O.4.6 ADDITIONAL OBSERVATIONS	**R.6.0.1** Limitations in achieving clear communications between responding groups, are inoperable communication systems and WebEOC accessibility.		Planning	Yuma Ct OEM	1-5 years
	R.6.0.2 Test the notifications system.		Exercise	Yuma Ct OEM	Ongoing
	R.6.0.3 Continue having these exercises.		Exercise	RRT9	Aspirational