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**EPA RRT 9/Border 2020**  
**2013 Binational**  
**Environmental Response**  
**Tabletop Exercise**



**AFTER ACTION REPORT**

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**March 20, 2013**

**Rio Rico Fire District Training Facility**

**957 Calle Calabasas, Rio Rico, AZ 85648**

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## Handling Instructions

The formal title of this document is “2013 Binational Environmental Response Tabletop Exercise After Action Report.”

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## Executive Summary

The 2013 Binational Environmental Response Tabletop Exercise was designed to coordinate and build relationships between local, state, and federal partners on both sides of the border in the Nogales, Arizona/Nogales, Sonora area. The exercise planning team was composed of numerous and diverse local, state, and federal agencies.

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

1. Upon alert of an incident, conduct all required initial notifications within one (1) hour of the incident.
2. Conduct subsequent notifications and activations, including provision of appropriate and consistent situational information to response agencies, government stakeholders, and the public, within four (4) hours of the incident.
3. Establish and document appropriate command structures using the Incident Command System incorporating principles of Area Command/Unified Command.

The purpose of this report is to analyze exercise results, identify strengths to be maintained and built upon, identify potential areas for further improvement, and support development of corrective actions.

### MAJOR STRENGTHS

The major strengths identified during this exercise are as follows:

- **Strong Cross-Border Relationships.** The exercise demonstrated that there is a strong desire to collaborate between response agencies 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 local, state, and federal partners.

### PRIMARY AREAS FOR IMPROVEMENT

Throughout the exercise, several opportunities for improvement in the Nogales, Arizona/Nogales, Sonora area's ability to respond to a train derailment/hazardous materials incident were noted. The primary areas for improvement, including recommendations, are as follows:

- **Plan Updates.** The need was identified for a comprehensive review of local and binational plans that support emergency response efforts in Ambos Nogales. In particular, protocols for alerts/warnings and the dissemination of public information need to be reviewed and updated.

- **Ability of First Responders to Enter Mexico.** It was noted that, at this time, first responders from Nogales, Arizona are not able to enter Mexico and provide support due to liability issues that remain to be addressed.
- **Interoperable Communications.** The ability of local responders to communicate with resources outside of the area, as well as the ability for agencies to communicate 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 Southern Arizona should conduct operational exercises focusing on the objectives above, with an emphasis on data management and risk communications.



*Lida Tan (US EPA) introducing the exercise.*



*Players' table at the exercise.*



*The exercise was enhanced with real-time interpretation services.*

## EXERCISE OVERVIEW

### EXERCISE DETAILS

**Exercise Name:** 2013 Binational Environmental Response Tabletop Exercise

**Type of Exercise:** Tabletop Exercise (with Communications Drill)

**Date:** Wednesday, March 20, 2013

**Duration:** 7:30am – 1:00pm

**Location:** Rio Rico Fire Training Facility, 957 Calle Calabasas, Rio Rico, Arizona 85648

**Sponsors:** United States Environmental Protection Agency (US EPA) RRT 9, Border 2020 Task Force

**Scenario Type:** Rail Incident/Hazardous Materials Release (Sulfuric Acid)

**Core Capabilities Tested:** Planning, Public Information and Warning, Operational Coordination, Environmental Response/Health and Safety, Operational Communications

### ACKNOWLEDGEMENTS

#### Exercise Design Team:

- Lida Tan, US EPA
- Lance Richman, US EPA
- Chief Les Caid, Rio Rico Fire District, Border 2020 Task Force
- Mark Howard, Arizona State Emergency Response Commission
- Damian Guy, Union Pacific Railroad
- Eduardo Canizalez, City of Nogales Fire Department, Sonora

**Exercise Venue provided by:** Rio Rico Fire District

### PARTICIPATING ORGANIZATIONS

- Agency for Toxic Substances and Disease Registry
- Arizona Department of Environmental Quality (ADEQ)
- Arizona Department of Public Safety
- Arizona Division of Emergency Management
- Arizona Governor's Office of Energy
- Arizona State Emergency Response Commission
- Bomberos, Nogales, Sonora
- Communications, Computer, Command, and Control (C-4), Nogales, Sonora
- City of Nogales Fire Department
- City of Nogales Police Department

- City of Nogales, Sonora
- Civil Protection, City of Nogales, Sonora
- Civil Protection, State of Sonora
- Cochise County Emergency Services
- Douglas Fire Department
- Federal Police, Nogales, Sonora
- Ferrocarril Mexicano
- Holy Cross Hospital Emergency Department
- La Procuraduría Federal de Protección al Ambiente de México (PROFEPA)
- Nogales Suburban Fire District
- Rio Rico Fire District
- Santa Cruz County Local Emergency Planning Committee
- Santa Cruz County Emergency Management
- Tubac Fire District
- United States Coast Guard
- United States Department of State
- United States Environmental Protection Agency (US EPA)
- University of Arizona Medical Center

#### NUMBER OF PARTICIPANTS

- Players (Operations Group): 24
- Players (Policy Group): 12
- Observers: 22
- Facilitators: 3
- Exercise Support: 3
- **TOTAL: 64**

## EXERCISE DESIGN SUMMARY

### EXERCISE GOALS

The goals of this exercise were to improve hazardous materials emergency response to a railcar incident in the Arizona (Nogales) border area through:

1. Ensuring coordination and cooperation between:
  - Local, state, and federal response organizations (e.g., Regional Response Team IX, Santa Cruz County Emergency Management, C-4, Sonora Emergency Management, etc.),
  - Local, state, and federal government agencies (e.g., US EPA, PROFEPA, U.S. Customs and Border Protection, etc.), and
  - Private parties (e.g., Union Pacific Railroad, FerroMex, etc.); and
2. Reconciling state, local, and federal response plans as they relate to supporting a binational hazardous materials emergency response (e.g., Binational Sister City Plan, Regional Contingency Plan, state and county Emergency Response Plans, etc.).

### EXERCISE OBJECTIVES

The following objectives were identified by the Exercise Design Team to test during the communications drill and tabletop exercise:

1. Upon alert of an incident, conduct all required initial notifications within one (1) hour of the incident;
2. Conduct subsequent notifications and activations, including provision of appropriate and consistent situational information to response agencies, government stakeholders, and the public, within four (4) hours of the incident; and
3. Establish and document appropriate command structures using the Incident Command System, incorporating principles of Area Command/Unified Command.

### CAPABILITIES TESTED

This exercise utilized the Core Capabilities outlined in the National Preparedness Goal to serve as a basis for evaluating exercise play. The key Core Capabilities that were tested are listed below. The Core Capabilities were designed to replace the Target Capabilities previously identified by the federal government. Recognizing that many organizations are transitioning use between these two concepts, the related Target Capabilities for each Core Capability are also included. A crosswalk of Target Capabilities to Core Capabilities can be found at <http://www.fema.gov/pdf/prepared/crosswalk.pdf>.



**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.
  - **Related Target Capabilities:** Planning
- **Public Information and Warning to the Response Community.** Deliver coordinated, prompt, reliable, and actionable information to the whole response community through the use of clear, consistent, accessible, and culturally and linguistically appropriate methods to effectively relay information regarding any threat or hazard, as well as the actions being taken and the assistance being made available, as appropriate.
  - **Related Target Capabilities:** Emergency Public Information and Warning
- **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.
  - **Related Target Capabilities:** Emergency Operations Center (EOC) Management, On-Site Incident Management

**Response**

- **Environmental Response/Health and Safety.** Ensure the availability of guidance and resources to address all hazards, including hazardous materials, acts of terrorism, and natural disasters, in support of the responder operations and the affected communities.
  - **Related Target Capabilities:** Environmental Health, Responder Safety and Health, Weapons of Mass Destruction (WMD) and Hazardous Materials Response and Decontamination
- **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.

**Related Target Capabilities:** Communications

## SCENARIO SUMMARY

### Initial Scenario

It is the morning of March 20, 2013 at the Port of Entry between Nogales, Sonora and Nogales, Arizona. It is a typical day, with a significant amount of both vehicular and pedestrian traffic moving across the border. At the pedestrian crossing, there are approximately 150 people waiting in line, and traffic is backed up approximately one-half of a mile from the gate. It can be up to a 45-minute wait to get through.

At 8:30 a.m., three railcars carrying sulfuric acid tankers crash through the border railroad gate. According to unofficial sources, the railcars became detached from a train approximately 7 miles south of the U.S./Mexico border.

It is unclear whether there has been a sulfuric acid release, but the accident has resulted in a fire alongside the railroad tracks. The accident is also in close proximity to the Nogales Wash.



*Port of Entry – 10 Feet West of Incident*



*Port of Entry – 100 Yards East of Incident*

### Communications Drill

Local dispatch agencies on both sides of the border immediately receive notification of the accident from bystanders. Unfortunately, reports are providing conflicting information on the status of the scene, including whether there has been a release.

### Module 1: Initial Operations

Through initial site assessment, it has been determined that the tanker has been breached. Local response agencies have been dispatched to the scene. Multiple victims have been identified within the hazard zone and require immediate medical care. The hazard zone includes a residential area.

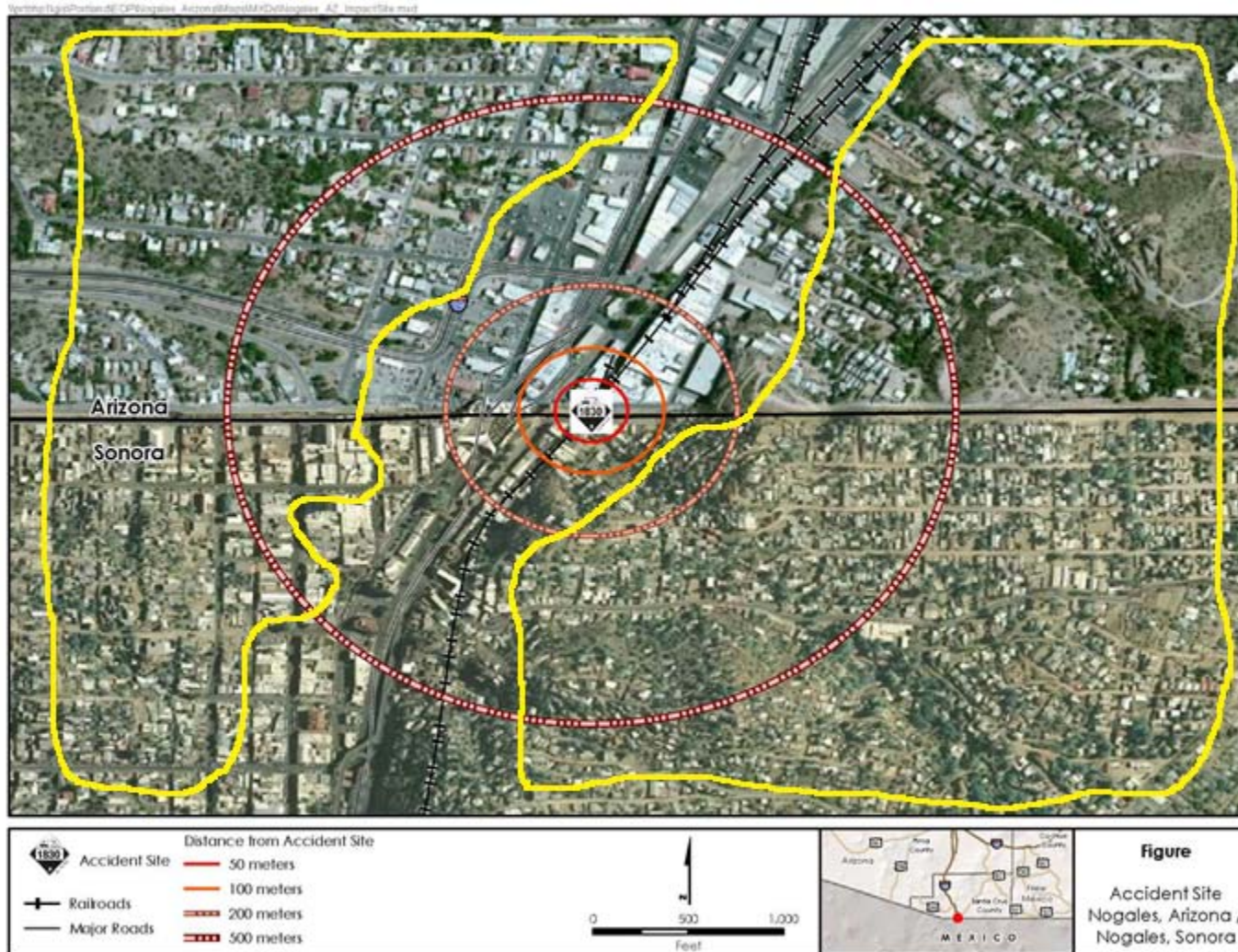
**Module 2: Sustained Operations**

Due to the area and impact of the release, resources from both sides of the U.S./Mexico border are required to support the incident. Additionally, local media on both sides of the border are gathering at the scene seeking additional information.



*Photo of 1983 train derailment incident south of Nogales, Arizona*

SCENARIO MAP (NOTE: Yellow outline indicates residential areas.)



## 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.

### 1 GENERAL OBSERVATIONS

#### Observation 1-1: *Strength – Exercise Value*

**Analysis:** The majority of participants agreed that the exercise met their expectations and that it was a great step toward enhancing coordination of emergency planning in Ambos Nogales.

**Recommendations:**

1. Conduct a follow-up operational exercise (functional or full-scale) based on this scenario.

**References:** Observer/Evaluator Notes

#### Observation 1-2: *Strength/Area for Improvement – Exercise Participation*

**Analysis:** The exercise brought together key players from both sides of the U.S./Mexico border and facilitated an engaged discussion and exchange of information. 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, while there was a federal presence at the exercise, key federal agencies were not represented as players, including the Federal Emergency Management Agency, U.S. Customs and Border Protection, and a US EPA pre-designated On-Scene Coordinator.

**Recommendations:**

1. Include the following agencies in future response and recovery exercises:
  - Key Federal Agencies (e.g., Federal Emergency Management Agency, U.S. Customs and Border Protection, US EPA pre-designated On-Scene Coordinator)
  - Union Pacific Railroad

**References:** Observer/Evaluator Notes

#### Observation 1-3: *Area for Improvement – Implementation and Update of Binational Plan*

**Analysis:** It was noted that the protocols described in the Binational Prevention and Emergency Response Plan between Nogales, Arizona and Nogales Sonora (Binational Plan) were not being followed. The Plan was last updated in July 2005. Discussion was held about the need to update the Plan more frequently and ensure that emergency contact lists and directories are up-to-date.

Additionally, it was noted that Santa Cruz County and the City of Nogales, Arizona need to update their Continuity of Operations (COOP) plans.

**Recommendations:**

1. Update the Binational Plan with a focus on communications and public information protocols.
2. Update County and City COOP plans.

**References:** Observer/Evaluator Notes

## 2 COMMUNICATIONS DRILL

### **Observation 2-1:** *Strength – Initial Notifications, Mexico*

**Analysis:** Initial notifications from C-4 to Mexican response partners went smoothly and effectively. Within minutes of receiving notification of the alert, notifications had been provided from C-4 to the City of Nogales Fire Department, Sonora, American Red Cross, and state and federal police agencies. Within 10 minutes, U.S. Customs and Border Protection and Civil Protection had been notified. Within 15 minutes, PROFEPA had been notified. Within 25 minutes, the Governor of Sonora had been notified. Notifications made by C-4 were reported out by players as they received them. Communications of what notifications were being made came through cell phone and text messaging as radio communications from Sonora were not possible. The communications drill demonstrated a strong protocol for conducting initial notifications from C-4 to local response agencies and from Civil Protection to partners at the state and federal levels.

**Recommendations:**

1. Review and update, as necessary, initial notification protocols on both sides of the U.S./Mexico border to ensure coordination and consistency with cross-border planning efforts.
2. Conduct additional regular cross-border communication drills to continue to maintain and enhance this capability.

**References:** Observer/Evaluator Notes

### **Observation 2-2:** *Area for Improvement – Initial Notifications, United States*

**Analysis:** Initial notifications from Nogales 9-1-1 to response partners did not go as smoothly as anticipated, thereby demonstrating the need for additional testing of alert and warning procedures on the U.S. side of the border. Within minutes of receiving notification of the alert, notifications had been provided from Nogales 9-1-1 to the City of Nogales Fire Department and the City of Nogales Police Department. Notifications to additional response partners were not reported, although the need to notify Santa Cruz County and perform other notifications was discussed anecdotally,

including the need to potentially send an alert through the Arizona counter-terrorism system in the event that this was a terrorism incident. Notifications made by Nogales 9-1-1 were reported out by players as they received them. Communications of what notifications were being made came through radio communications to players representing the City of Nogales Police Department. While initial communications to local response agencies (law enforcement/fire) were made, subsequent communications did not appear to take place. While this may be reflective of the need to conduct additional testing of local alert and warning protocols, it was also noted that expectations for the communications drill were not clearly communicated to dispatch.

**Recommendations:**

1. Review and update, as necessary, initial notification protocols on both sides of the U.S./Mexico border to ensure coordination and consistency with cross-border planning efforts.
2. Conduct additional regular cross-border communication drills to continue to maintain and enhance this capability.

**References:** Observer/Evaluator Notes

**3 MODULE 1 – INITIAL OPERATIONS****Observation 3-1: *Strength – State and Local Response Capabilities***

**Analysis:** It was identified that local and state response assets are available to support this type of incident. On the Arizona side, resources will be accessed through mutual aid with local fire agencies. The Arizona Division of Emergency Management will be notified through Santa Cruz County Emergency Management and will provide support through the agencies such as the Arizona Department of Public Safety. The State of Arizona may also receive notification of incident from other involved State agencies, such as ADEQ. If needed, the State of Arizona may dispatch an agency representative from the State Emergency Operations Center (EOC) to work in the County EOC, though this requires three hours of travel time out of Phoenix. On the Sonora side, resources will be accessed through Civil Protection. The exercise demonstrated a strong relationship between local response agencies and emergency management programs, as well as state-level emergency response agencies on both sides of the U.S./Mexico border. Mechanisms exist for requesting and providing resources to support a hazardous materials incident.

**Recommendations:**

1. Conduct a cross-border capability assessment to better understand what resources are available to support a hazardous materials incident at the local, state, and federal levels. The assessment should include an analysis of the response time of identified assets.

**References:** Observer/Evaluator Notes

**Observation 3-2: Area for Improvement – Lack of City Emergency Manager**

**Analysis:** At the local level, there is no designated individual responsible for coordinating emergency operations for the City of Nogales, Arizona who can liaise with counterparts in Sonora and funnel requests for support to Santa Cruz County. It is critical to have someone in this role to ensure that the City's emergency management program and response capabilities are maintained and to help drive an effective response.

**Recommendations:**

1. Designate an emergency manager for the City of Nogales to take the lead in coordinating the City's emergency management program.

**References:** Observer/Evaluator Notes

**Observation 3-3: Strength – Hazardous Materials Personnel**

**Analysis:** A Countywide Hazardous Materials Team was referenced in discussion consisting 38 technicians in Santa Cruz County. Additionally, there are approximately 30 technicians in Sonora, Mexico. However, it was noted that hazardous materials (HAZMAT) personnel from the City of Nogales cannot travel into Mexico due to existing liability issues.

**Recommendations:**

1. Review legal issues and liability provisions that limit the ability of City of Nogales first responders to enter Mexico.
2. Review training certifications for HAZMAT technicians on both sides of the U.S./Mexico border and schedule additional trainings, as needed.
3. Conduct a joint HAZMAT certification and knowledge exchange with personnel on both sides of the border.

**Observation 3-4: Strength/Area for Improvement – Mass Casualty Operations**

**Analysis:** There is basic capability to address mass casualty operations on both sides of the U.S./Mexico border. Primary health impacts would be burns and respiratory issues. Triage would be conducted by local fire and emergency management service agencies and emergency management agencies would notify area hospitals. There are mass casualty incident trailers prepositioned in Tubac and Green Valley. Local hospitals have limited decontamination capabilities; however, there are three decontamination tents available for set up onsite. On the Mexico side of the border, the Fire Department could set up an improvised decontamination area and would then direct victims to local hospitals and clinics. In a medical surge scenario, the eight hospitals in Nogales, Sonora could handle an additional 200 victims. Emergency medical resources would be taxed or overwhelmed quickly in a mass casualty incident. Prompt notification to area hospitals and medical facilities would need to be conducted, and additional emergency medical resources may need to be accessed



through the Metropolitan Medical Response System. It was also noted that more work may need to be done to identify how to address emergency medical needs for Mexican nationals in the United States and vice versa. Additionally, the University of Arizona Medical Center is available, via its radio room, to support Incident Commanders with disbursement of patients from mass casualty incidents.

**Recommendations:**

1. Review and update, as necessary, mass casualty incident protocols on both sides of the U.S./Mexico border to ensure coordination and consistency with cross-border planning efforts.
2. Conduct a functional mass casualty incident exercise that involves moving patients/resources across the U.S./Mexico border, and/or involves care of Mexican nationals in the United States or vice versa.

**References:** Observer/Evaluator Notes

**Observation 3-5: Area for Improvement – Interoperable Communications**

**Analysis:** It was noted that interoperable communications was an area of concern. In Santa Cruz County, it was noted that resources arriving from outside the County would not have local radio frequencies. It was also noted that one solution may be to establish a command communications network to ensure that command communications are on a common frequency. The discussion identified the need to anticipate which agencies would be participating in the response and begin identifying tactical channels that are commonly understood to be used during a response.

**Recommendations:**

1. Conduct a cross-border communications capability assessment to determine what systems are being used and how agencies can better communicate with each other during an incident.
2. Identify equipment needs and funding sources.
3. Conduct training on usage of the Arizona Interoperable Radio System (AIRS) which is available to all responders.

**References:** Observer/Evaluator Notes

**Observation 3-6: Area for Improvement – Notification of Environmental Protection Agencies**

**Analysis:** One area for discussion that did not come out in the tabletop exercise in any level of detail was the extent to which state and federal environmental protection agencies (ADEQ and US EPA) would be notified and activated to support the incident. While issues of environmental response were discussed throughout the exercise, it was not noted until much later in the event that notification should have gone directly to ADEQ to provide incident support. One observer noted that

the National Response Center should be notified immediately and can assist with notifications on behalf of first responders from Mexico and the United States.

**Recommendations:**

1. Review local and binational plans to ensure they accurately reflect how to notify state and federal environmental protection agencies in the event of a hazardous materials spill.

**References:** Observer/Evaluator Notes

**Observation 3-7: Area for Improvement – Local Mass Notification Capability**

**Analysis:** It was noted that the City of Nogales and Santa Cruz County do not currently have the capability to conduct mass notifications.

**Recommendations:**

1. Review City of Nogales/Santa Cruz County alert and warning capabilities and investigate strategies to enhance the ability to provide localized mass notifications in the event of an emergency.

**References:** Observer/Evaluator Notes

#### **4 MODULE 2 – SUSTAINED OPERATIONS**

**Observation 4-1: Strength/Area for Improvement – Command Structure**

**Analysis:** For the U.S. side of the border, the need for implementation of county-wide mutual aid and a Unified Command structure to manage the incident was immediately recognized. To engage with operations in Nogales, Sonora, a request would be made through the Incident Commander to Nogales, Sonora Fire to provide a liaison. Mostly likely, the Nogales, Sonora Fire Chief would stay in Mexico and would assign a representative to the EOC. For the Mexico side of the border, under their concept of operations, the Mayor of Nogales, Sonora has ultimate control of operations and would contact the State Governor directly requesting support and to notify the Governor that they may be requesting additional support from the United States. When State of Sonora Civil Protection is notified, they will reach out to the Arizona Division of Emergency Management to coordinate support. While it appeared that players on both sides of the border had a clear understanding of how they would stand up their own operations, it was unclear how the two emergency command structures would coordinate with each other. The need for bilingual liaisons with appropriate technical backgrounds that could respond to an EOC on the other side of the border was identified. One observer noted that, while there was talk about utilizing an Incident Management Team to support cross-border operations, it was not fully discussed as to how this would occur.

**Recommendations:**

1. Conduct additional Incident Command System training for local officials.
2. Review the need for a protocol to provide liaisons to Incident Command from the United States to Mexico and vice versa.
3. Identify Incident Management Team support resources and how they would be accessed to support a binational response.
4. Explore the possibility of a joint operations center for binational operations.

**References:** Observer/Evaluator Notes

**Observation 4-2: Area for Improvement – ICS 207**

**Analysis:** The expected outcome from this module was development of an ICS 207 organizational chart describing what cross-border operations would look like. While good discussion was held, it became clear that the organizational structures being used on each side of the border did not fit neatly into an ICS 207-style organization chart, and a final output was not developed during the exercise.

**Recommendations:**

1. See Observation 4-1 above.

**References:** Observer/Evaluator Notes

**Observation 4-3: Strength – Nogales Wash Emergency Response Plan**

**Analysis:** It was noted that the Nogales Wash Emergency Response Plan provides valuable guidance for cross-border operations and escalation of an incident from basic to more complex operations. The Nogales Wash Emergency Response Plan was not tested during exercise play, but should be considered as an important source document in updating the Binational Plan to ensure consistency between emergency response plans in Ambos Nogales.

**Recommendations:**

1. Review the Nogales Wash Emergency Response Plan and use as a source document for future Binational Plan updates.

**References:** Observer/Evaluator Notes

**Observation 4-4: Area for Improvement – Public Information**

**Analysis:** On the Mexico side of the border, the Fire Chief serves as the Incident Commander and the Mayor or State Governor provides policy direction and public information support. On the United States side of the border, the Incident Commander, or a designated Public Information

Officer, will be responsible for the creation and dissemination of emergency public information. Concerns were raised around the coordination of public information activities on both sides of the U.S./Mexico border, particularly as they relate to the dissemination of information on protective actions. One observer noted that there may be some value in conducting a cross-border training on the use of WebEOC to share situational information and public messaging. It was also noted that concepts of a Joint Information System, such as establishing a Joint Information Center, were not addressed.

**Recommendations:**

1. Develop a cross-border public information protocol that coordinates dissemination of public information between command structures.
2. Update the Binational Plan to be consistent with this protocol.
3. Consider conducting cross-border training on WebEOC or other incident management software, as appropriate.
4. Conduct further training on Joint Information System principles.

**References:** Observer/Evaluator Notes

**5 ADDITIONAL OBSERVATIONS****Observation 5-1: Area for Improvement – Railroad Engineering Controls**

**Analysis:** It was discussed that the engineering controls in place near the U.S./Mexico border gate, including de-railers, may not be adequate and that the issue should be reviewed more thoroughly. One observer noted that US EPA could contact the U.S. Department of Transportation/Association of American Railroads to have an engineering task force review the border rail operations and look into whether additional derails can be placed in Mexico, or if a passive catchment system could be constructed at the border to intercept runaway railcars.

**Recommendations:**

1. Explore what engineering controls could be put in place to mitigate the impacts of a rail incident at the border crossing.

**References:** Observer/Evaluator Notes



*Players at the Policy Group Table*



*Representatives from Sonora, MX at the Players' Table*

## CONCLUSION

The 2013 Binational Environmental Response Tabletop Exercise and Communications Drill 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 Ambos Nogales to continue to build its response and recovery capabilities.



*Exercise participants, including representatives from the United States and Mexico, March 20, 2013*

**ATTACHMENT A EXERCISE FEEDBACK SUMMARY**

2013 Binational Environmental Response Exercise Feedback Summary Table

Total Respondents: 25	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
The exercise met my expectations	12	10	2	1	0
I will be able to apply the knowledge learned	12	12	1	0	0
The exercise objectives for each topic were identified and followed	9	11	4	1	0
The content was organized and easy to follow.	15	9		1	0
The materials distributed were pertinent and useful.	16	9	0	0	0
The facilitators were knowledgeable.	19	6	0	0	0
The quality of instruction was good.	18	6	1	0	0
Participation and interaction were encouraged.	19	5	1	0	0
Adequate time was provided for questions and discussion.	17	5	2	1	0
	Excellent	Good	Average	Poor	Very Poor
How would you rate the exercise overall?	17	7	1	0	0

Question	Percent of Respondents Who Answered Agree or Strongly Agree
The exercise met my expectations	88%
I will be able to apply the knowledge learned	96%
The exercise objectives for each topic were identified and followed	80%
The content was organized and easy to follow.	96%
The materials distributed were pertinent and useful.	100%
The facilitators were knowledgeable.	100%
The quality of instruction was good.	96%
Participation and interaction were encouraged.	96%
Adequate time was provided for questions and discussion.	88%

Question	Percent of Respondents Who Answered Excellent or Good
How would you rate the exercise overall?	96%

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## ATTACHMENT B IMPROVEMENT PLAN

Observation	Recommendation	Priority	Program Element	Responsible Party	Timeframe
<b>Observation 1-1:</b> <i>Strength – Exercise Value</i>	Conduct follow up operational exercise (functional or full scale) based on this scenario.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Exercise	Border 2020 Task Force	2014
<b>Observation 1-2:</b> <i>Strength/Area for Improvement – Exercise Participation</i>	Include identified agencies in future response and recovery exercises.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Exercise	Border 2020 Task Force	2014
<b>Observation 1-3:</b> <i>Area for Improvement – Implementation and Update of Binational Plan</i>	Update the Binational Plan with a focus on communications and public information protocols.	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Border 2020 Task Force	2014 – 2015
<b>Observation 1-3:</b> <i>Area for Improvement – Implementation and Update of Binational Plan</i>	Update County and City Continuity of Operations (COOP) plans.	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Santa Cruz County Emergency Management City of Nogales Emergency Management	Ongoing
<b>Observation 2-1:</b> <i>Strength – Initial Notifications, Mexico</i>	Review and update, as necessary, initial notification protocols on both sides of the border to ensure coordination and consistency with cross-border planning efforts.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Nogales Police Department (9-1-1) C-4	2014
<b>Observation 2-1:</b> <i>Strength – Initial Notifications, Mexico</i>	Conduct additional regular cross-border communication drills to continue to maintain and enhance this capability.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Exercise	Nogales Police Department (9-1-1) C-4	Ongoing (Annually)

Observation	Recommendation	Priority	Program Element	Responsible Party	Timeframe
<b>Observation 2-2:</b> <i>Area for Improvement – Initial Notifications, United States</i>	Review and update, as necessary, initial notification protocols on both sides of the border to ensure coordination and consistency with cross-border planning efforts.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Nogales Police Department (9-1-1) C-4	2014
<b>Observation 3-1:</b> <i>Strength – State and Local Response Capabilities</i>	Conduct a cross-border capability assessment to better understand what resources are available to support a hazardous materials incident at the local, state and federal levels. The assessment should include an analysis of the response time of identified assets.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Planning	Emergency Management Fire Departments/Districts Civil Protection	2014 – 2015
<b>Observation 3-2:</b> <i>Area for Improvement – Lack of City Emergency Manager</i>	Designate an emergency manager for the City of Nogales to take the lead in coordinating the City’s emergency management program.	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Organization	City of Nogales	Immediate
<b>Observation 3-3:</b> <i>Strength – Hazardous Materials Personnel</i>	Review legal issues and liability provisions that limit the ability of City of Nogales first responders to enter Mexico.	<input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low	Organization	City of Nogales	2013 – 2014
<b>Observation 3-3:</b> <i>Strength – Hazardous Materials Personnel</i>	Review training certifications for hazmat technicians on both sides of the border and schedule additional trainings as needed.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Training	Fire Departments/Districts Civil Protection	2014

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Observation	Recommendation	Priority	Program Element	Responsible Party	Timeframe
<b>Observation 3-3:</b> <i>Strength – Hazardous Materials Personnel</i>	Conduct a joint hazardous materials certification and knowledge exchange with personnel on both sides of the border.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Training	Border 2020 Task Force	2014
<b>Observation 3-4:</b> <i>Strength/Area for Improvement – Mass Casualty Operations</i>	Review and update, as necessary, mass casualty incident protocols on both sides of the border to ensure coordination and consistency with cross-border planning efforts.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Planning	Fire Departments/Districts Area Hospitals	2014 – 2015
<b>Observation 3-4:</b> <i>Strength/Area for Improvement – Mass Casualty Operations</i>	Conduct a functional mass casualty incident exercise that involves moving patients/resources across the border, and/or involves care of Mexican nationals in the US or vice versa.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Exercise	Emergency Management Civil Protection Fire Departments/Districts Area Hospitals	2015
<b>Observation 3-5: Area for Improvement – Interoperable Communications</b>	Conduct a cross-border communications capability assessment to determine what systems are being used and how agencies can better communicate with each other during an incident.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Emergency Management Civil Protection	2014 – 2015
<b>Observation 3-5: Area for Improvement – Interoperable Communications</b>	Identify equipment needs and funding sources.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Equipment	Emergency Management Civil Protection	Ongoing

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Observation	Recommendation	Priority	Program Element	Responsible Party	Timeframe
<b>Observation 3-5: Area for Improvement – Interoperable Communications</b>	Conduct training on usage of the Arizona Interoperable Radio System (AIRS) which is available to all responders.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Training	Emergency Management Civil Protection Fire Departments/Districts Area Hospitals	2014 - 2015
<b>Observation 3-6: Area for Improvement – Notification of Environmental Protection Agencies</b>	Review local and binational plans to ensure they accurately reflect how to notify state and federal environmental protection agencies in the event of a hazardous materials spill.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Border 2020 Task Force AZ DEQ EPA	2014
<b>Observation 3-7: Area for Improvement – Local Mass Notification Capability</b>	Review City/County alert and warning capabilities and investigate strategies to enhance the ability to provide localized mass notifications in the event of an emergency.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Equipment	Nogales 9-1-1 Santa Cruz County Emergency Management	2014
<b>Observation 4-1: Strength/Area for Improvement – Command Structure</b>	Conduct additional ICS training for local officials.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Training	County/City Emergency Management	2014 – 2015
<b>Observation 4-1: Strength/Area for Improvement – Command Structure</b>	Review the need for a protocol to provide liaisons to incident command from the US to Mexico and vice versa.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Organization/ Planning	County/City Emergency Management Fire Departments/Districts Civil Protection	2014

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Observation	Recommendation	Priority	Program Element	Responsible Party	Timeframe
<b>Observation 4-1:</b> <i>Strength/Area for Improvement – Command Structure</i>	Identify Incident Management Team support resources and how they would be accessed to support a binational response.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Organization	Emergency Management Civil Protection	2014
<b>Observation 4-1:</b> <i>Strength/Area for Improvement – Command Structure</i>	Explore the possibility of a joint operations center for binational operations.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Organization	Emergency Management Civil Protection	2014 – 2015
<b>Observation 4-3:</b> <i>Strength – Nogales Wash Emergency Response Plan</i>	Review the Nogales Wash Emergency Response Plan and use as a source document for future Binational Plan updates.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Planning	Border 2020 Task Force	2014
<b>Observation 4-4:</b> <i>Area for Improvement – Public Information</i>	Develop a cross-border public information protocol that coordinates dissemination of public information between command structures.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Emergency Management Civil Protection	2014 - 2015
<b>Observation 4-4:</b> <i>Area for Improvement – Public Information</i>	Update the Binational plan to be consistent with this protocol.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Planning	Border 2020 Task Force	2014 - 2015
<b>Observation 4-4:</b> <i>Area for Improvement – Public Information</i>	Consider conducting a cross-border training on WebEOC or other incident management software, as appropriate.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Training	Emergency Management Civil Protection	2014

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Observation	Recommendation	Priority	Program Element	Responsible Party	Timeframe
<b>Observation 4-4:</b> <i>Area for Improvement – Public Information</i>	Conduct further training on Joint Information System principles.	<input type="checkbox"/> High <input checked="" type="checkbox"/> Medium <input type="checkbox"/> Low	Training	Emergency Management Civil Protection	2014 - 2015
<b>Observation 5-1:</b> <i>Area for Improvement – Railroad Engineering Controls</i>	Explore what engineering controls could be put in place to mitigate the impacts of a rail incident at the border crossing.	<input type="checkbox"/> High <input type="checkbox"/> Medium <input checked="" type="checkbox"/> Low	Equipment	Union Pacific FerroMex	2014 - 2015