# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT

American Samoa Earthquake and Tsunami - Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region IX

Subject: POLREP #8

American Samoa Earthquake and Tsunami American Samoa Earthquake and Tsunami

Pago Pago, American Samoa, AS

Latitude: -14.2794000 Longitude: -170.7006000

To:

From: Cameron McDonald, Situation Unit leader

Date: 10/6/2009

**Reporting Period:** 5 October 2009 0700 0 1900 SST (1100-2300 PDT)

#### 1. Introduction

## 1.1 Background

 Site Number:
 American Samoa
 Contract Number:
 NA

 D.O. Number:
 NA
 Action Memo Date:
 9/30/2009

 Response Authority:
 Response Type:
 Emergency

 Response Lead:
 FEMA
 Incident Category:
 Removal Assessment

 NPL Status:
 Non NPL
 Operable Unit:
 American Samoa

 Mobilization Date:
 9/30/2009
 Start Date:
 9/30/2009

**Demob Date:** 9/30/2010 **Completion Date:** 

CERCLIS ID: NA RCRIS ID: NA

ERNS No.: NA State Notification: American Samoa

FPN#: NA Reimbursable Account #: NA

## 1.1.1 Incident Category

Earthquake Tsunami

## 1.1.2 Site Descrip

American Samoa is an unincorporated territory of the US, located in the South Pacific Ocean southeast of the sovereign state of Samoa (formerly known as Western Samoa). The main (largest and most populous) island is Tutuila, with the Manu'a Islands, Rose Atoll, and Swains Island also included in the territory. The 2000 census showed a total population of 57,291. The total land area is 200.22 km² (77 sq mi), slightly more than Washington, D.C.

Damage is widespread with 32 known fatalities on American Samoa, and 1 missing. Most damage occurred at Pago Pago Harbor and Village, and at the western end of the island, at Leone and surrounding villages.

# 1.1.2.1 Location

American Samoa

# 1.1.2.2 Description of Threat

On 29Sep at 1048 hrs PST, (0648 Samoa Standard Time) an 8.0 magnitude earthquake occurred 120 mi southwest of American Samoa. The 6:48 am local time (1048 hrs PST) earthquake triggered a tsunami that struck American Samoa (population 65,000) with a series of five waves. All waves struck the island and Pago Pago, the main village. The Pacific Tsunami Warning Center reported the wave height at 15 feet for Pago Pago, American Samoa. Over 73 aftershocks have been reported, including nine aftershocks ranging from magnitudes 4.5 to 6.3.

## 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

EPA Chris Reiner (OSC) was deployed on 9/30 to make the assessment.

# Situation Summary

On 09/29 at 1048 hrs (PST) an 8.0 magnitude earthquake occurred southwest of American Samoa. The earthquake triggered tsunamis that struck American Samoa (population 65,000) with one wave reported at 15 feet striking Pago Pago, the main village. Damage is widespread with 32 known fatalities, hundreds injured and many pulled out to sea. 73 aftershocks have been reported.

Power outages continue on the east side of the island. LBJ Hospital is operational.

- · Airport is operational
- · Communication is spotty; only cell phone service is local from Samoa Teleco or Bluesky
- Local Coast Guard personnel and EPA OSC Chris Reiner report no large oil or hazmat releases;
- Community water systems suffered some damage, but they have almost been fully restored
- The governor of AS requested a federal disaster declaration on 9/29.

## Operational Status:

- EPA R9 has received a number of mission assignments to staff the ESF-10 desk at the FEMA RRCC in Oakland, CA and to provide an on-scene coordinator to deploy to AS to conduct a rapid needs assessment with the FEMA team. The MA is currently for \$316,000.
- EPA R9 is operating under a Pre Declaration Disaster Surge Account (7220SU-AS-EPA-02), covering RRCC activation and the rapid needs assessment on AmSam. The projected end date for this MA is 10/09/2009. The Region has also received a new, post declaration MA (1859DR-AS-EPA-02) for the same activities. The projected end date for this MA is 10/10/2009.
- FEMA is establishing a JFO on American Samoa. ERT's Duane Newell is staffing the ESF-10 desk at the JFO
- Concurrent with the establishment of the JFO, the FEMA Region IX RRCC is winding down. EPA is no longer staffing the ESF-10 desk there.
- EPA R9 continues to provide situational awareness from the Regional EOC. OSC Craig Benson is the duty officer this week.

### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

See Situation Summary at Section 1.1.3, above.

## 2.1.2 Response Actions to Date

EPA OSC Chris Reiner was deployed on 9/30 to American Samoa, along with 1 START support staff, to perform a Rapid Needs Assessment:

## Operational Status:

- OSC Chris Reiner arrived in AS as ESF-10 support at 2300 SST on 9/30, with one EPA START contractor
- OSC Reiner completedassessments in Pago Pago and Leona area with ASEPA and identified several drums of waste oil and hazardous material. Pulled drums from the tide line and temporarily staged them along road with collection TBD. Mitigated released oil along main road with sorbent material.
   OSC Reiner is using assistance of 10 Civil Support Team (CST) member plus 30 National Guard
- availability of these additional assets is uncertain.

  Collected 35 drums, 1 250-gal marine fuel bladder, approximately 12 compressed gas tanks and cylinders, 20 car and marine batteries, and 30-40 smaller containers of various hazardous materials. Collected materials were taken to staging area in Tafuna. This included material strewn about Pago Pago streets, park, and shoreline, as well as some containers floating in the harbor. This work was carried out by EPA, USCG Pacific Strike Team, and Civil Support Team, Hawaii National Guard. The most surprising finds were a damaged 55-gallon drum of isocyanates, and 3, 1-gallon cans of isocyanates.

personnel to begin gathering and staging household hazardous waste for disposal. The continued

- OSC Reiner built 6 containment cells at the Department of Public Works yard in Tafuna, for storage of collected materials. (3 Oct)
- Hazard categorization work has commenced on the containers collected to date and stored at the DPW Tafuna yard.
- R9 GIS support continues to develop facility location data and update the EOC Google map display.
   R9 EOC is working on getting facility info uploaded into Response Manager Manager.
- R9 EOC has sent material and equpment (palltes, overpacks, drums, containers, tyveck, gloves, etc.) to American Samoa for OSC Reiner to use in securing the househod hazardous waste (HHW). This material should arrive in AS by 10/10.

Personnel & Supplies									
Date	Time	People	People Agency S		Equipment/Supplies				
30-Sep	0700 hrs	Gov Tulafono							
	0700 hrs	FEMA Coordinating Office (Kenneth Tingman)	FEMA						
	0700 hrs	Defense Coordinating Officer (Col. James George)	DOD						
	0700 hrs	initial response team	FEMA	50	team supplies for 7 days				

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	1900 hrs SST	Incident Management Assistance Team	FEMA			
		regionally based 'strike team'	FEMA			
		Disaster Medical Assistance Team	FEMA			
		USCG Strike Team	USCG	26		
	2300 hrs SST	EPA OSC & 1 START contractor	EPA	2		
		USS frigate USS Ingrahm	US Navy		food, water, commodities, 2 Seahawk helicopters	
1-Oct	0100 SST	National Guard personnel	Hawaii National Guard	40	4 vehicles, hazmat materials, communications equipment, cots blankets, food and water	
	0400 SST	National Guard personnel	Hawaii National Guard	20	5 vehicles, hazmat materials, communications equipment, cost, blankets, food and water	
		National Guard CERF-P Search & Rescue Teams			vehicles, trailers and cargo	
2-Oct	2200 SST		FEMA		3 pallets & 2 large boxes of medical supplies	

# 2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs) Not Applicable

# 2.1.4 Progress Metrics

Not yet applicable

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

# 2.2 Planning Section

# 2.2.1 Anticipated Activities

EPA has 1) deployed one OSC and 1 START to AS; 2) activated the EOC in Region 9; and 3) deployed ERT to staff the ESF-10 desk at the JFO which is being established.

# 2.2.1.1 Planned Response Activities

EPA Chris Reiner and 1 START have conducted a Rapid Needs Assessment. Reiner and START are currently collecting and staging orphan containers.

## 2.2.1.3 ISSUES

- The main priorities of the disaster operations remain focused on restoration of commercial power in the
  eastern district, and repairs and restoration of the region's infrastructure.
- FEMA reports electricity restored to 1/3 to ½ of Tutuila Island. One of two island power plants
  continues to be offline.
- The only international airport in AS is operational; a limited supply of jet fuel may become a logistical problem. As of 1600 PST (2000 SST) 01Oct, 500,000 gallons of aviation fuel was verified on Tutuila Island.
- U.S. Army Corps of Engineers reports the water system on American Samoa is functioning to near normal capacity but pressure is limited in some areas.
- Both canneries remain closed.
- A damaged section of the Leone/Auma bridge has been temporarily repaired for emergency vehicles only.
- Roughly 65,000 cubic yards of debris has already been identified for removal.
- More than 20 generators have already been deployed to American Samoa, with several already supplying power to critical infrastructure.

#### 2214 WEATHER

## AMERICAN SAMOA ZONE FORECAST

NATIONAL WEATHER SERVICE PAGO PAGO AS 700 AM SST TUE OCT 06 2009

ASZ001>003-070200- TUTUILA-AUNUU-MANUA-SWAINS- 700 AM SST TUE OCT 06 2009

TODAY - PARTLY CLOUDY WITH ISOLATED SHOWERS. HIGH IN THE MID 80S. EAST WINDS 5 TO 15 MPH.

TONIGHT THROUGH WEDNESDAY - PARTLY CLOUDY WITH ISOLATED SHOWERS. HIGHS IN THE MID 80S. LOWS IN THE UPPER 70S. EAST WINDS 5 TO 15 MPH.

THURSDAY THROUGH MONDAY - PARTLY CLOUDY WITH ISOLATED SHOWERS. HIGHS IN THE MID 80S. LOWS IN THE UPPER 70S. EAST TO SOUTHEAST WINDS 5 TO 15 MPH. HIGH YESTERDAY WAS 88. LOW THIS MORNING WAS 80.

#### TIDES AT PAGO PAGO HARBOR

HIGH TIDE AT 823 AM TUE 2.4 FT LOW TIDE AT 226 PM TUE 0.1 FT HIGH TIDE AT 848 PM TUE 2.7 FT

TIDES AT TAU HARBOR

HIGH TIDE AT 749 AM TUE 3.7 FT LOW TIDE AT 124 PM TUE 0.1 FT HIGH TIDE AT 810 PM TUE 4.1 FT

SUNSET TUE...620 PM SUNRISE WED...601 AM

## 2.3 Logistics Section

No information available at this time.

## 2.4 Finance Section

No information available at this time.

## 2.5 Other Command Staff

No information available at this time.

# 3. Participating Entities

## 3.1 Unified Command

EPA is coordinating its efforts under FEMA. No formal ICS structure has been established to date for the ESF-10 function.

## 3.2 Cooperating Agencies

EPA is working with FEMA and local authorities in American Samoa.

## 4. Personnel On Site

Chris Reiner has been deployed as OSC. Seth Heller is START in support of Reiner. Duane Newell of ERT is in transit to AS and will staff the ESF-10 desk at the JFO.

## 5. Definition of Terms

No information available at this time.

## 6. Additional sources of information

No information available at this time.

## 7. Situational Reference Materials

