

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  
American Samoa  
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

|                            |                |                                |                    |
|----------------------------|----------------|--------------------------------|--------------------|
| <b>Site Number:</b>        | American Samoa | <b>Contract Number:</b>        | NA                 |
| <b>D.O. Number:</b>        | NA             | <b>Action Memo Date:</b>       | 9/30/2009          |
| <b>Response Authority:</b> |                | <b>Response Type:</b>          | Emergency          |
| <b>Response Lead:</b>      | FEMA           | <b>Incident Category:</b>      | Removal Assessment |
| <b>NPL Status:</b>         | Non NPL        | <b>Operable Unit:</b>          | American Samoa     |
| <b>Mobilization Date:</b>  | 9/30/2009      | <b>Start Date:</b>             | 9/30/2009          |
| <b>Demob Date:</b>         | 9/30/2010      | <b>Completion Date:</b>        |                    |
| <b>CERCLIS ID:</b>         | NA             | <b>RCRIS ID:</b>               | NA                 |
| <b>ERNS No.:</b>           | NA             | <b>State Notification:</b>     | American Samoa     |
| <b>FPN#:</b>               | NA             | <b>Reimbursable Account #:</b> | 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 km<sup>2</sup> (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 completed assessments 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 personnel to begin gathering and staging household hazardous waste for disposal. The continued 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.
- 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 equipment (palltes, overpacks, drums, containers, tyveck, gloves, etc.) to American Samoa for OSC Reiner to use in securing the household hazardous waste (HHW). This material should arrive in AS by 10/10.

| Personnel & Supplies |              |  |        |               |                          |
|----------------------|--------------|--|--------|---------------|--------------------------|
| Date                 | Time         | People   | Agency | Unit Strength | 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 |
|                      | 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

| <i>Waste Stream</i> | <i>Medium</i> | <i>Quantity</i> | <i>Manifest #</i> | <i>Treatment</i> | <i>Disposal</i> |
|---------------------|---------------|-----------------|-------------------|------------------|-----------------|
|                     |               |                 |                   |                  |                 |
|                     |               |                 |                   |                  |                 |
|                     |               |                 |                   |                  |                 |

**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.

**2.2.1.2 Next Steps**

Schedules have been prepared for to staff the EOC for the next week (thru 10/9).

**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 1/2 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.

#### 2.2.1.4 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

#### 2.4.1 Narrative

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 received additional post declaration MAs (1859DR-AS-EPA-02) for the same activities. The projected end date for this MA is 10/10/2009. The current total moneys allocated to EPA R9 is \$316,000.

The following is a list of Mission Assignments currently being coordinated by EPA:

| Mission Assignments  | Funded            | Obligations       | Amount Available | Daily Burn Rate  |
|--|-------------------|-------------------|------------------|------------------|
| <b>7220SU-MP-EPA-01:</b> Activate EPA to FEMA R9 RRCC or other locations as directed by FEMA to perform duties of ESF #10, in support of Pre-Declaration disaster operations. In response to Typhoon Melor (FEMA_R9_CNMI-TS-Melor-20W_09-30-2009.) | \$ 25,000         | \$ 10,800         | \$ 14,200        | \$ 1,350.00      |
| <b>1858DR-AS-EPA-01:</b> Activate EPA to the FEMA NRCC to perform duties of ESF #10 in support of Post-Declaration disaster operations in response to Earthquake Tsunami 1859-DR AS.   | \$ 10,000         | \$ 7,000          | \$ 3,000         | \$1,750.00       |
| <b>1859DR-AS-EPA-02:</b> Activate EPA to the FEMA R9 RRCC to perform duties of ESF #10 in support of Post-Declaration disaster operations in response to Incident: 2009092901 - Earthquake, Tsunami and Flooding.                                  | \$ 10,000         |                   |                  |                  |
| <b>1859DR-AS-EPA-02: Amendment #1:</b> Increase Funding for MA 1859DR-AS-EPA-02 from \$10,000 to \$100,000   | \$ 90,000         |                   |                  |                  |
| <b>1859DR-AS-EPA-02-01: Amendment #2:</b> Increase Funding for MA 1859DR-AS-EPA-02-01 from \$100,000 to \$281,000. Increase by \$181,000.  | \$ 181,000        | \$ 132,000        | \$ 49,000        | \$16,500.00      |
| <b>Total</b>   | <b>\$ 316,000</b> | <b>\$ 149,800</b> | <b>\$ 66,200</b> | <b>\$ 19,600</b> |

Costs incurred R9 EOC: R9 EPA Salary & Contractor Costs incurred

Costs Incurred R9 Field : Includes obligations for EPA personnel and contractor resources.

## **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**

No information available at this time.

POLREP #8 Last Updated 10/7/2009