

U.S. ENVIRONMENTAL PROTECTION AGENCY
 POLLUTION/SITUATION REPORT
 Joplin Missouri Tornado 2011 - Polrep/Sitrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 Region VII

Subject: **SITREP #3**
Progress
Joplin Missouri Tornado 2011

Joplin, MO
Latitude: 37.0842271 Longitude: -94.5132810

To: Ken Buchholz, EPA
 Scott Hayes, EPA
 Don Lininger, EPA
 Mary Peterson, EPA
 Robert Stewart, Department of the Interior
 Janice Kroone, EPA
 David Bryan, EPA
 Cory Jorgensen, MDNR
 Alan Reinkemeyer, MDNR
 Brian Allen, MDNR
 Cecilia Tapia, EPA
 Pam Hackler, MDNR
 John Phillips, EPA
 Rick Gann, MDNR
 Laura Webb, EPA
 Greg Crable, EPA
 Jean Schumacher, US Army Corps of Engineers
 Daniela Heppard, MDNR
 Doug Thompson, MDNR
 Wendell Hall, MDNR
 Randall Willoughby, MDNR
 Bill Bider, KDHE

Thru:

From:

Date: 6/1/2011

Reporting Period: June 2nd through June 4th, 2011

Executive Summary

At approximately 1800 CDT on May 22, 2011, a strong tornado flattened a large area of Joplin, Missouri and heavily damaged numerous structures (up to 8,000 structures) including a major hospital and nursing home. The tornado traveled an estimated 6 miles with a width ranging from .5 to .75 miles wide starting west of 28th St. and McClellan Blvd and moved eastward to 20th St. and Prosperity Road.

According to the Missouri Department of Public Safety, confirmed fatality count stands at 123 as of May 31, 2011, with 10 people still unaccounted for and more than 750 injured. Search and rescue operations continue while debris removal and recovery plans rapidly take shape.

1. Introduction

1.1 Background

Site Number:		Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	Stafford Act	Response Type:	
Response Lead:	EPA	Incident Category:	
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	5/23/2011	Start Date:	5/23/2011

Demob Date: **Completion Date:**
CERCLIS ID: **RCRIS ID:**
ERNS No.: **State Notification:**

1.1.1 Incident Category

Stafford Act response to tornado event.

1.1.2 Site Description

The city of Joplin, Missouri sustained heavy damage from a massive tornado on May 22, 2011. To date, the confirmed number of fatalities is 123 with several hundred injured and 10 still missing. An estimated 2,000 structures have been destroyed and thousands more have been damaged.

1.1.2.1 Location

The city of Joplin is located in southwest Missouri. The tornado affected approximately a third of the city, with an impact zone approximately 6 miles long and 1/2 mile wide through the heart of the city. The local Emergency Operations Center (EOC) is located at 303 East 3rd Street in Joplin. EPA Region 7 has co-located its mobile command post with the EOC at the 303 East 3rd Street location.

1.1.2.2 Description of Threat

Environmental threats resulting from the tornado include potential releases from oil and chemical storage or manufacturing facilities, hospitals and medical facilities, and household hazardous wastes and white goods from residential structures.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The EPA Region 7 is currently assessing damage to regulated facilities within the impacted area. To date, the locations of various types of facilities have been mapped, including FRPs, RMPs, ASTs, USTs, Superfund sites, and RCRA Large Quantity Generators and Small Quantity Generators, TRI facilities, Tier II facilities, Schools, Nursing Homes, Pharmacies, Air Release facilities, and Observation facilities (damaged facilities noticed during field recon that were not listed in another category). Field recon of known regulated facilities within the affected area have been completed at 86 facilities as of 6/1/11.

There was no visual evidence of catastrophic release during the EPA assessment at the regulated facilities identified and assessed during the rapid needs assessment. However, many of them were completely destroyed.

EPA has integrated into the Debris Management Task Force along with the Corps of Engineers (USACE), MDNR, City of Joplin, and the National Guard. USACE estimates 3 million cubic yards of debris resulted from the tornado (similar to volume of debris from World Trade Center), and projects 6-9 months for debris removal.

1.2 Incident Objectives

1. Complete facility assessments as part of the Rapid Needs Assessment.
2. Complete mapping of assessment information as it develops.
3. Staff the FEMA JFO and State EOC.
4. Ensure safety and well-being of on site workers.
5. Support field operations with REOC activation.
6. Identify and procure suitable household hazardous waste collection and staging area.

1.3 Critical Resource Needs

Initial MA for staffing of the JFO and state EOC expires June 6, 2011 - this will need to be extended to continue this support. Also, additional funding will be needed to complete the Rapid Needs Assessment and to staff the JIC in Joplin.

Resource needs in terms of personnel to execute the MA for HHW disposal are being examined by the REOC management team.

Identification and procurement of a suitable household hazardous waste collection and staging area.

1.4 Strategic Considerations

For Rapid Needs Assessment, facilities inside the high impact zone were prioritized by level of potential threat to public health and/or the environment, with those posing the highest potential level of threat being assessed first.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Current field operations consist of completing facility assessments, conducting air monitoring, and preparing for HHW collection and disposal.

2.1.2 Response Actions to Date

The mobile command post has been deployed and is co-located with the EOC in Joplin. EPA representatives are staffing the FEMA JFO in Columbia, Missouri and State EOC in Jefferson City, Missouri. The EPA Regional Operations Center (REOC) is staffed and operational 0800-1600 M-F. The REOC is expected to operate a minimum of four hours per day over the weekend 6/4-5/11.

Field teams have completed 86 facility assessments as of 6/01/11. Including two public schools within the affected area and met with the school officials from Joplin High School regarding their chemistry labs. Facility breakdown is as follows:

RCRA	30
TRI	7
RMP	3
CERCLIS	2

Tier II	8
UST	14
AST	2
Air release facilities	4
Schools	4
Nursing homes	4
Pharmacy	2
Observation	6

EPA has coordinated internally regarding the city's plans to burn vegetative debris. MDNR has waived normal permitting requirements for this activity. The EPA has also advised the State with regard to asbestos-containing debris and compliance with applicable regulations.

On 5/27/11, EPA deployed two additional OSCs (Schmaedick and Johnson) and 1 START contractor to conduct air monitoring operations. To date, multiple samplers have been deployed on a daily basis and air samples are being collected and analyzed for particulates and asbestos.

EPA has integrated into the Debris Management Task Force with USACE, MDNR, City of Joplin, and National Guard. OSC John Frey is coordinating the siting of a staging area with local officials, MDNR, and REOC management.

EPA Spill Line received a report on 5/28/11 of an injured response worker. EPA coordinated with ATSDR who has been in contact with the worker's immediate family and is providing advice/assistance.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

N/A

2.1.4 Progress Metrics

<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

Facility assessment activities are expected to be completed during this planning period. However, mapping and QA review of facility assessment data may continue into next week if needed. Air monitoring activities are ongoing and will continue during debris segregation and removal activities. EPA expects to secure a household hazardous waste staging area during this planning period, and transition from Rapid Needs Assessment into HHW collection and disposal.

2.2.1.1 Planned Response Activities

EPA will continue air monitoring and will begin HHW collection and disposal. On site personnel will continue coordination with Unified Command. EPA will continue to support the planning of response operations by staffing the FEMA JFO, the State EOC, and the REOC. In addition, EPA R7 may deploy a PIO to the JIC in Joplin.

2.2.1.2 Next Steps

EPA will work to obtain access for a staging area needed to support HHW collection and disposal.

2.2.2 Issues

On site personnel report numerous inquiries about asbestos and worker protection. The EPA R7 PIO has coordinated with numerous other entities and submitted a final asbestos fact sheet to the JIC about asbestos messaging so that a consistent message can be delivered.

2.3 Logistics Section

Logistics section has not yet been activated for this response. Lodging for deployed personnel has been a constant challenge.

2.4 Finance Section

2.4.1 Narrative

EPA has received the following Mission Assignments:

1980DR-MO-EPA-01 - Conduct Rapid Needs Assessments and staff the RRCC and SEOC. \$135,000.00

1980DR-MO-EPA-02 - Conduct air monitoring for asbestos and particulates. \$100,000.00

1980DR-MO-EPA-03 - Conduct household hazardous waste operations. \$3,000,000.00

In addition, the NPRC has authorized \$25,000 for petroleum related response work resulting from the tornado.

Burn rates for the current mission assignments have been calculated and are reflected in the table below reflects burn rates through 6/01/11.

REGION 7 JOPLIN TORNADO									
RESPONSE									
Daily Cost Estimates Report									
29-May-2011									
Funding Source	Est. Personnel	Est. Travel	IAGs / Contracts	TOTALS		Authorized	Balance	Est. Daily Burn Rate	Est. Days Remaining
FEMA-1980-DR-MO-EPA-01 07W0XCP	\$56,760	\$7,900	\$ 35,135	\$99,795		\$135,000	\$35,201	\$7,510	5
Coast Guard-FPN-E11705 07W0XCN	\$2,970	\$1,250	\$8,000	\$12,220		\$25,000	\$12,780	\$215	59
FEMA-1980-DR-MO-EPA-02	\$4,230	\$1,650	\$40,000	\$45,970		\$100,000	\$54,030	\$1,380	39
JOPLIN - TOTAL	\$64,050	\$10,800	\$83,135	\$157,985		\$260,000	\$102,215		

2.5 Other Command Staff

2.5.1 Safety Officer

Safety and Health Message #3 Sit-Rep

General Safety Precautions to Avoid Injuries

Be careful when entering any structure that has been damaged.

Wear safety boots, safety glasses a hard hat, long sleeves, and gloves when handling or walking on or near debris.

Be aware of hazards from exposed nails and broken glass.

Do not touch downed power lines or objects in contact with downed lines. Report electrical hazards to the police and the utility company.

Cooperate fully with public safety officials.

Wear hearing protection when working around construction equipment.

Vehicle Traffic

Obey all traffic regulations and speed limits

Know where you are going and let someone you work with know where you are going- maintain accountability of personnel

Watch out for pedestrians and animals

Maintain awareness of construction equipment being moved. Keep your distance from this equipment watch out for the "swing" zones and blind spots.

Inspecting the Damage

After a tornado, be aware of possible structural, electrical, or gas-leak hazards and household hazardous materials in homes.

In general, if you suspect any damage to a structure, make sure that electrical power, natural gas, and propane tanks are shut off to avoid fire, electrocution, or explosions.

If you see frayed wiring or sparks, or if there is an odor of something burning, you should immediately shut off the electrical system at the main circuit breaker if you have not done so already.

If you smell gas or suspect a leak, leave the structure immediately. Notify the gas company, the police or fire department, and do not turn on the lights, light matches, smoke, or do anything that could cause a spark.

Safety During Clean Up

Wear safety boots, safety glasses and a hard hat and if feasible long sleeves and leather gloves. Wear hearing protection in high noise levels.

Wear sun screens to minimize sunburns.

Drink plenty of water to stay hydrated.

Safety Officer Roy Krueger conducted on site safety audits in Joplin on Tuesday, May 31, 2011. He continues to coordinate on site safety issues with field personnel and MDNR safety officers.

2.6 Liaison Officer

A Liaison Officer has not been activated for this response.

2.7 Information Officer

2.7.1 Public Information Officer

The PIO, Chris Witley, is coordinating with FEMA External Affairs, MDNR, USACE, and SEMA. A final asbestos fact sheet was sent to the JIC regarding messaging for asbestos related concerns. General messaging for debris and HHW collection have also been issued and posted on the EPA R7 website, which can be accessed through the "links" tab on the heading bar of this website.

3. Participating Entities

3.1 Unified Command

EPA has integrated into Unified Command and has set up the mobile command post at the EOC in Joplin. In addition, EPA is closely coordinating with FEMA and MDNR by staffing of the JFO in Columbia, Missouri and the State EOC in Jefferson City, Missouri. EPA continues to fulfill ESF#10 duties as requested and assigned by the FEMA FCO in Joplin.

3.2 Cooperating Agencies

FEMA Region 7
 US Army Corps of Engineers
 Missouri Department of Natural Resources
 State Emergency Management Agency
 Missouri Department of Health and Senior Services
 Agency for Toxic Substances and Disease Registry
 City of Joplin
 Missouri National Guard

4. Personnel On Site

Joplin:

5 EPA OSCs
 2 START
 1 ERRS RM

State EOC: 1 EPA

FEMA JFO: 1 EPA

EPA REOC: variable

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report
www.joplinmo.org and the JIC 417.438.2287

6.2 Reporting Schedule

The next Sitrep is scheduled to be completed Saturday, June 4, 2011 at 1600.

7. Situational Reference Materials

Facility location maps and a map of the tornado path have been posted on the epaosc.org site.