AREA COMMAND EXECUTIVE SUMMARY / SITUATION REPORT
AREA COMMAND (U.S. EPA REGIONS 8, 6 AND 9)
GOLD KING MINE RELEASE INCIDENT
U.S. ENVIRONMENTAL PROTECTION AGENCY

Water quality monitoring at the Gold King Mine diversion channel

Subject:	**EXECSUM / SITREP #19** **Gold King Mine Release Incident** **San Juan County, Colorado** **Latitude: 37.8945 Longitude: -107.6384**
From:	Area Command Situation Unit
Date:	30 August 2015
Reporting Period:	0700 29 August 2015 through 0700 30 August 2015
Website:	www.epa.gov/goldkingmine

For Internal Use Only

EXECUTIVE SUMMARY

Situation Summary

United States Environmental Protection Agency (U.S. EPA) Area Command (AC), comprised of U.S. EPA Regions 8, 6 and 9, is continuing strategic management of the response Unified Incident Command Posts (ICPs).

Highlights, Key Updates/Changes

- AC is developing a strategy for transitioning and watershed monitoring plan, in conjunction with U.S. EPA Headquarters.
- AC is monitoring drinking water sampling performed, results and dissemination of results within Regions 8, 6 and 9.
- AC continues to monitor relations with the Navajo Nation, including security.

Area Command Emphasis

For the next operational period, the AC command emphasis will be:

- Positive and professional communications with stakeholders and response personnel.
- Safety and well-being of citizens and response personnel.
- Comprehensive sampling data processing process.
- Coordinate response between Regions 8, 6 and 9; and response transition.
- Develop a global message that supports transition to watershed monitoring plan.

The metrics provided in this Situation Report represent quantities reported for work completed on 29 August 2015. Metrics and information highlighted in yellow represent a change from the previous day's Situation Report. Press releases are presented in Attachment 1. Attachment 2 includes situation reports from Regions 8, 6 and 9.

1.0 OPERATIONS

1.1 Sampling Operations

Operations sampling activities are summarized below. Sample quantities are based on the SCRIBE database, and include field samples and quality assurance/quality control (QA/QC) samples.

Table 1 - Operations Sampling Summary

Matrix	U.S. EPA Region	Qty. (29 August 2015)	Qty. (Cumulative)
Private Drinking Water Well Samples	8	3	346
	6	0	284
Surface Water Samples	8	7	283
	6	9	238
	9	0	228
Sediment Samples	8	0	67
	6	9	251
	9	0	180

There has not been sampling of private drinking water wells in U.S. EPA Region 9.

The quantities shown above may vary from the quantities shown in Attachment 2 because the database is dynamic and changes continuously as samples are collected and recorded. In addition, time during which the samples are recorded and entered into the database within the operational period and preparation of the various situation reports also introduces a variable that affects the quantities reported at a given time.

1.2 Water Distribution and Transportation Branch

AC continues to monitor potable water, agricultural water and agricultural food deliveries. U.S. EPA purchased 1,232 cases of bottled water to supply the community. Public support activities completed are summarized below.

Table 2 - Public Support Summary

Activity	U.S. EPA Region	29 August 2015			Cumulative		
		Deliveries (each)	Qty. (gal)	Qty. (hay bales)	Deliveries (each)	Qty. (gal)	Qty. (hay bales)
Potable Water Deliveries	8	1	46,000		36	803,800	
Livestock / Agricultural Water Deliveries	8	0	0		47	141,980	
	6				59	1,104,990	
	9	0	0		13	218,400	
Agricultural Food Deliveries	6				1		244
	9	1		374	12		4,698

Bottled water was also provided to one other residence in Region 8. The Navajo Tribal Utility Authority is handling water deliveries in Region 9. The Region 6 agriculture and livestock team demobilized on 20 August 2015. There have not been potable water deliveries by the U.S. EPA in Regions 6 and 9; nor agricultural food deliveries by U.S. EPA in Region 8.

1.3 Community Engagements

Community engagements reported are summarized below.

Table 3 - Community Engagement Summary		
Description	**U.S. EPA Region**	**Qty. (29 Aug 2015)**
Community Engagements	8	0
	6	0
	9	0

1.4 Anticipated Events: VIPs/Congressional Visits and Public Events

Known site visits and public events for the next 7 days are summarized below.

Table 4 - Anticipated Site Visits and Public Events Summary		
U.S. EPA Region	**Planned Event**	**Anticipated Date**
Area Command	Colorado State Senator Ellen Roberts is meeting with AC	31 August 2015
	Meeting to consider possible formation of Coalition of Animas River Spill Partners	31 August 2015
	Southern Ute Tribal Leaders visit Gold King Mine site	2 September 2015
8	Senator Udall will visit Shiprock, New Mexico	2 September 2015
6	Animas River Recovery Open House (Farmington, NM)	1 September 2015
9	None scheduled	N/A

1.5 Community Relations Branch

Effective 27 August 2015, calls to the Regional Call Center (970-385-8700) regarding the Gold King Mine Release Incident are being directed to the National Call Center (844-607-9700). The National Call Center is now being operated by U.S. EPA Headquarters. A total of 809 calls were received at the Regional Call Center during its operation by AC. A total of 223 calls were received at the National Call Center during its operation by AC, this included 120 calls related to Region 8, 67 calls related to Region 6 and 38 calls related to Region 9.

2.0 DRINKING WATER SYSTEM IMPACTS

No known water systems are currently affected by the release or response operations.

3.0 FINANCE

3.1 Estimated Response Costs to Date

The table below summarizes estimated costs for the response.

Table 5 - Estimated Response Costs Reported as of 29 August 2015					
Region	**U.S. EPA Cumulative Expended Payroll**	**U.S. EPA Cumulative Expended Travel**	**U.S. EPA Cumulative Other Charges**	**U.S. EPA Cumulative Contractors Cost**	**Total Cumulative Costs**
8	$911,707	$124,473	$18,644	$2,067,473	$3,112,297
6	$406,140	$104,650	$12,989	$2,193,013	$2,716,792
9	$491,040	$77,000	$0	$769,916	$1,337,956
TOTAL	$,1808,887	$306,123	$31,643	$5,030,402	$7,177,045

3.2 Estimated Burn Rates

The table below summarizes current estimated burn rates for the response.

Table 6 - Estimated Daily Burn Rates	
U.S. EPA Region	Estimated Daily Burn Rate (as of 29 August 2015)
8	$79,705
6	$45,580
9	$60,816
Total	**$189,101**

4.0 PARTICIPATING ENTITIES

Federal, regional, local and other entities participating in the response are summarized below.

4.1 Region 8

U.S. EPA
U.S. Coast Guard (USCG)
U.S. Fish and Wildlife Service (USFWS)
U.S. Bureau of Reclamation (USBOR)
Colorado Office of Emergency Management (OEM)
Southern Ute Indian Tribe (SUIT)
La Plata County
San Juan County
Colorado Department of Public Health and Environment (CDPHE)
State of Colorado Southwest Incident Management Team (IMT)
State of Colorado Northwest IMT
State of Colorado Bolder IMT
State of Colorado Jefferson County IMT
City of Durango
San Juan Basin Health Department

4.2 Region 6

U.S. EPA
USFWS
New Mexico Environment Department (NMED)
New Mexico (NM) Department of Health
NM Office of the State Engineer
NM Department of Game and Fish
County of San Juan – New Mexico

4.3 Region 9

U.S. EPA
USCG

Navajo Nation
State of Colorado
State of New Mexico
State of Utah
State of Arizona

5.0 PERSONNEL ON-SITE

The table below summarizes staffing numbers for the federal entities and agencies active in the response.

Table 7 - Personnel On-Site

Region	Agency / Entity	Number of Personnel (29 Aug 2015)
Area Command	U.S. EPA	14
	U.S. EPA Contractors	4
	USCG	2
8	U.S. EPA	2
	U.S. EPA Contractors	38
	USCG	6
	Other Federal, State, Local and Tribal Entities	5
6	U.S. EPA	13
	U.S. EPA Contractors	9
	USCG	0
	Other Federal, State, Local and Tribal Entities	0
9	U.S. EPA	0
	U.S. EPA Contractors	1
	USCG	1
	Other Federal, State, Local and Tribal Entities	2
	Total	**97**

6.0 CRITICAL INCIDENT STRESS MANAGEMENT (CISM)

AC has implemented a CISM program for personnel involved with the response. On 29 August 2015, the CISM center received **11** visits from response personnel. To date, the CISM center has received **183** visits.

7.0 SOURCE OF ADDITIONAL INFORMATION

For additional information, refer to www.epa.gov/goldkingmine .

ATTACHMENT 1
PRESS RELEASE

PRESS RELEASE # 1

U.S. EPA Website (http://www2.epa.gov/goldkingmine)

August 29, 2015: EPA Update on Gold King Mine Response: San Juan River Data (http://www2.epa.gov/goldkingmine/epa-update-gold-king-mine-response-san-juan-river-data)

WASHINGTON – Today EPA released new water quality and sediment data for the San Juan River within the Navajo Nation as part of the ongoing Gold King Mine response.

What data is EPA posting today? Today EPA is posting August 24th sampling data results from the San Juan River in the Navajo Nation. Surface water and sediment samples were collected at 11 locations and analyzed for 24 metals, including arsenic, cadmium, lead and mercury. Concentrations of iron and other metals in San Juan River water in the Navajo Nation peaked during the week of August 10th as the mine release moved through the Navajo Nation, but have since trended to pre-release conditions.

What do the sample results show?

Based on the comparison of pre-event data with data collected over the past two weeks, the pre-event sampling data show that concentrations for all 24 metals in surface water have trended to pre-event conditions, well below Recreational Screening Levels. The metal concentrations of the samples were also below soil / sediment recreational screening levels. Based upon the sediment sampling results, sediment sample concentrations are trending toward pre-event conditions as well.

View the data here.

GOLD KING MINE DATA, AUGUST 29, 2015

Data from Gold King Mine Response

EPA sediment and surface water samples collected on August 24th from locations along the San Juan River have been validated.

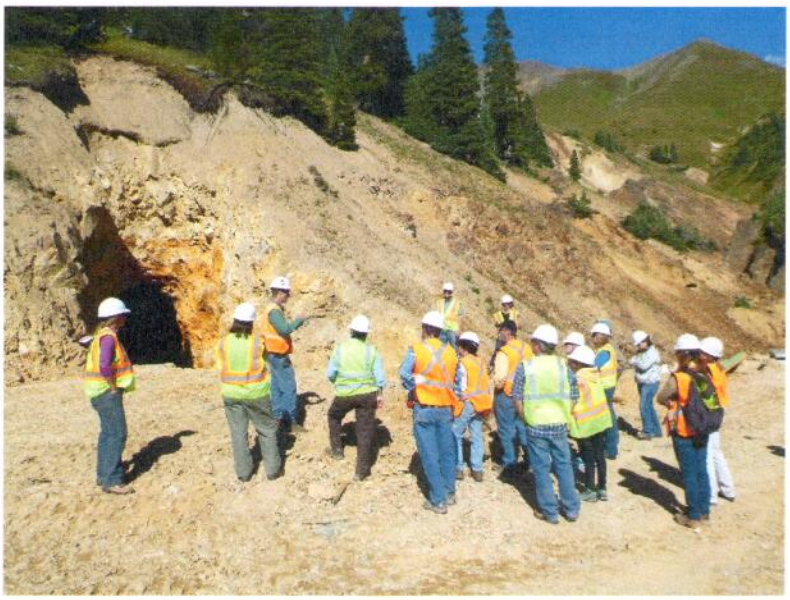
Based on the comparison of pre-event data with data collected over the past two weeks, the pre-event sampling data show that concentrations for all 24 metals in surface water have trended to pre-event conditions, well below Recreational Screening Levels (RSL). The metal concentrations of the samples were also below soil / sediment recreational screening levels. Based upon the sediment sampling results, sediment sample concentrations are trending toward pre-event conditions as well.

- Open or download the data file: r09_sediment_summary_table_08282015(1 pg, 38 K)
- Open or download the data file: r09_surfacewater_summary_table_08282015(1 pg, 62 K)

ATTACHMENT 2
REGIONAL SITUATION REPORTS

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
2015 Gold King Mine Release Incident
Unified Command Colorado SITREP

EPA	Gw
D-EPA	RB
CDPS DHSM	



Stakeholders visit the Gold King Mine adit portal

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 8

Subject:	Situation Report #21 Gold King Mine Release Incident San Juan County, CO Latitude: 37.8945 Longitude: -107.6384
From:	Unified Command Colorado (Situation Unit)
Date:	08/30/2015
Reporting Period:	08/29/2015
Website:	http://www2.epa.gov/goldkingmine

New information included in the SITREP is in bold text.

Executive Summary

On 8/5/2015, a blowout at the Gold King Mine adit released up to three million gallons of contaminated water containing sediment and dissolved metals. This water discharged into Cement Creek which feeds into the Animas River, and eventually flows into the San Juan River.

A Unified Command (UC) was established in Durango, Colorado, which continues to assess and mitigate contamination resulting from the release. The UC includes EPA Region 8, State of Colorado Office of Emergency Management (OEM), Southern Ute Indian Tribe, and La Plata County. San Juan Basin Health Department, San Juan County and the Ute Mountain Ute Tribe are making available Administrators to the UC. The City of Durango and the Colorado Department of Public Health and the Environment (CDPHE) are coordinating agencies.

The EPA continues daily sampling of Animas River and Cement Creek surface water at seven total locations. Additionally EPA continues to schedule sampling of private wells within a buffer area surrounding the Animas River and impacted ditches.

An EPA Area Command (AC) is also located in Durango, Colorado and coordinates EPA's response among EPA Regions 6, 8, and 9.

Active disaster declarations remain in effect for State of Colorado, San Juan County, Town of Silverton, La Plata County, City of Durango, and Southern Ute Tribe. The public health advisory issued 8/14/2015 by CDPHE for the Animas River remains active.

Introduction

1.0 Background

Site Number:	A8K9RV	Response Type:	Emergency
Response Authority:	CERCLA	Start Date:	08/05/15
Response Lead:	EPA	State Notification:	08/05/15
Mobilization Date:	08/05/2015	Demob Date:	TBD
NPL Status:	not listed		

2.0 Site Description

The Gold King Mine near Silverton, Colorado is a historic gold mine at approximately 11,300' elevation. The mine discharges acidic mine drainage that is a contributor of heavy metals into the Cement Creek drainage of the Animas River watershed. The workings have been inaccessible since 1995 when the mine portal collapsed.

3.0 Description of Threat

Mine waste water was released into Cement Creek and the Animas River as a result of the blowout on 8/5/2015. The volume of the release based on US Geological Survey (USGS) Cement Creek gauging station was estimated at three million gallons. The initial environmental concern was the pulse of

contaminated water containing sediment and dissolved metals discharged in Cement Creek which flows into the Animas River through Durango, Colorado, and into New Mexico where it joins the San Juan River before flowing into Utah.

4.0 Critical Resource Needs

Resources for the response continue to be ordered as needed to fill critical resource needs.

5.0 Incident Objectives

- Ensure health and safety of the public and response management personnel
- Continue implementation of private well sampling and river monitoring plans
- Facilitate transition and approach to medium term sediment and river monitoring plans
- Continue coordination with State, Federal, Tribal and local Stakeholders and Neighboring jurisdictions
- Continue management of adit discharge
- Ensure continued access to mine site and continue mine dump stabilization
- Continue data sharing with local stakeholders
- Continue assessment of land owner complaints regarding sediment impacts
- Assess applicable criteria for incident end points
- **Facilitate development of real time monitoring and notification plan (separate path from long term monitoring plan)***

  ***Notification plan for high turbidity events**

Operations

6.0 Environmental Branch

6.1 Assessment and Mitigation Group

- EPA continues to deliver water and assess the needs regarding the water systems of residences with MCL exceedances.
- Potable water delivery on 8/29/2015 was the same as the previous day: bottled water to one residence, and 46,000 gallons to one subdivision servicing approximately 60 residents.

6.2 A summary of surface/potable water and sediment samples collected as of 8/29/2015 is provided in the following table:

Matrix	Number of Samples *	Total Samples Collected
Potable Water	3	347
Sediment	0	67
Surface Water	8	280

*Quality Assurance samples are included in these numbers.

6.3 Private Well Sampling

The EPA has transitioned to the Alluvial Groundwater Sample Approach, which focuses on wells in proximity to the alluvial zone, a buffer area from 200 to 300 feet from the banks of the Animas River (and various canals) from Bakers Bridge south to the Colorado - New Mexico State line. **To date, 43 wells have been tested within the buffer area.**

EPA is sending flyers to the owners of the wells that have not been tested in the buffer area to offer sampling of their wells. **To date, 68 flyers have been distributed.** EPA has stopped attempting to contact residences outside the buffer area for sampling, but will continue to address any requests on a case by case basis.

To date, 14 private wells had detections of one or more metals above the EPA MCL, 11 outside the buffer, and three inside the buffer. A second sampling event showed one or more metals elevated above the EPA MCL at one residence within the buffer and eight outside the buffer.

7.0 Mine Site Division

The EPA continues to operate and work on optimizing treatment and sedimentation ponds at the mine site that are treating water by adjusting pH and removing dissolved metals.

7.1 Water Treatment

- **Automated lime hopper is installed and operational. Currently adjusting the automated hopper timing system.**
- **Installed baffle system to dissipate the energy flow of water into the R&B ponds.**

7.2 Water Quality Sampling

- **Flow Rate of 567 GPM with pH 3.24 was recorded at 0815 from the Gold King Mine adit portal.**
- **Flow Rate of 566 GPM with pH 3.68 was recorded at 1500 from the Gold King Mine adit portal.**

7.3 Sediment Recovery

- **Continue conducting water/sludge separation operations. Once separated the waste is being transferred to a repository.**

7.4 Gold King Mine

No change.

7.5 Mine Logistics

- **Initiated waste rock removal from North Fork Cement Creek staging at Gladstone.**

7.6 Site Visits
None.

7.7 Mine Division Anticipated Activities

- SUIT members are scheduled to visit the mine site on Wednesday, 9/2/2015.
- Implement installation of discharge drain pipe from mine to Gladstone.
- Use Goff Co. survey to assess necessary stabilization work of Gold King waste dump.
- Prepare for North Fork Cement Creek clean out of impacted material.
- Secure mine entrance to prevent collapse and maintain drainage.
- Proceeding with preparations to treat mine discharge at Gladstone with lime neutralization and settling of solids**.**
- **Removal of Gold King Mine treatment ponds 1-3. Drain, dry, muck, and remove to repository.**

Command and General Staff

8.0 Logistics Section
No Report.

9.0 Finance Section
The EPA Region 8 total cost as of 8/29/2015 is **$3,122,297.00**. The estimated burn rate ($/day) is **$79,705.00.**

10.0 Safety Officer
With seasons changing the wildlife are foraging and there is more of a chance of interaction with them. Be aware of your surroundings, there have been many reports of people having interactions with wildlife along the walking/biking paths. Be aware of bears, raccoons, skunks, deer, elk, and mountain lions.

Continue to stay hydrated. Bottled water is available at the ICP.

No Injuries/Accidents (beyond first aid) were reported on 8/29/2015. Two total to date.

The Emergency Response Peer Support team offers trained peer staff with whom you can talk to on a private basis, either in person or over the phone, when you feel stressed. Come and relax at the CISM Room. You can rest, have snacks, meditate or just chat.

You can contact your CISM team members at any time (24/7):
Tony Honnellio: 617 947-4414, Carter Williamson: 404-229-9507

CISM had 11 visitors on 8/29/2015.

11.0 Liaison Officer
No report.

12.0 Information Officer
No Report.

13.0 Other Durango Area Activities
No report.

14.0 Visits
No Report.

15.0 Total Personnel in the Field as of 8/29/2015.

Group	Number
EPA @ REOC	(12 on call)
Contractors @ REOC	0
EPA in Field	2
EPA Contractors in Field	38
Contractors Laboratory	0
USCG	6
ERT	0
Subtotal EPA Region 8 Resources	46 (+12 on call)

16.0 Personnel working at the Colorado Unified Command Post as of 08/29/15.
(Does not include Area Command Personnel):

Position / Section	Number of Personnel
Unified Command	6*
PIO	5
Safety	2
Operations	1
Planning (incl SITL, ENVL & RESL)	5
Logistics	1
Finance	2
Liaisons	0
Agency Representatives/Administrators	2*
Total	24

*Includes 4 non-federal personnel from state, local, and tribal agencies

17.0 Organizations with personnel assigned to the response under the UC include:

- Colorado OEM
- Southern Ute Tribe
- La Plata County
- San Juan County
- Colorado Department of Public Health and Environment
- State of Colorado resources: Southwest IMT, Northwest IMT, Boulder IMT, Jeffco IMT
- City of Durango
- San Juan Basin Health Dept.
- US Bureau of Reclamation
- US Bureau of Indian Affairs
- US Coast Guard
- US Bureau of Reclamation (USBR) Technical Service Center

18.0 Weather Forecast:

18.1 DURANGO AREA

- **Tonight 8/30/2015**
  - Scattered showers and thunderstorms, mainly before midnight. Mostly cloudy, with a low around 57. West southwest wind 5 to 10 mph becoming east northeast after midnight. Chance of precipitation is 30%.

- **Monday 8/31/2015**
  - A 30 percent chance of showers and thunderstorms, mainly after noon. Partly sunny, with a high near 81. Light and variable wind becoming west 5 to 10 mph in the afternoon.

- **Monday Night 8/31/2015**
  - A 20 percent chance of showers and thunderstorms before midnight. Mostly cloudy, with a low around 52. West wind around 5 mph becoming northeast after midnight.

18.2 SILVERTON AREA

- **Tonight 8/30/2015**
  - Scattered showers and thunderstorms, mainly before 3am. Mostly cloudy, with a low around 42. South southwest wind 5 to 10 mph. Chance of precipitation is 40%.

- **Monday 8/31/2015**
  - A 40 percent chance of showers and thunderstorms, mainly after noon. Mostly cloudy, with a high near 67. Calm wind becoming west around 5 mph in the afternoon.

- **Monday Night 8/31/2015**
  A 20 percent chance of showers and thunderstorms. Mostly cloudy, with a low around 39. West wind around 5 mph becoming calm in the evening.

U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT
Gold King Mine Spill - Region 6

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #21
Gold King Mine Spill - Region 6

Various New Mexico locations, NM
Latitude: 36.8374600 Longitude: -107.9916800

From: Ronnie Crossland, Region 6 Regional Incident Commander (RIC)

Date: 8/30/2015

Reporting Period: 8/29/2015 0700 – 8/29/2015 1900

1. Introduction

1.1 Description of Threat

Region 8 reported approximately three million gallons of mine waste water was released into Cement Creek and the Animas River. The primary environmental concern is the pulse of contaminated water containing sediment and metals flowing as an orange-colored discharge downstream through Durango, Colorado, and into New Mexico and Utah.

1.2 Preliminary Removal Assessment/Removal Site Inspection Results

Water monitoring and sampling is ongoing at public water supply intakes and private wells and field pH levels and other water quality parameters are being monitored.

2. Current Activities

2.1 Operations Section

EPA delivered 112 letters regarding the private well results to well owners. The remaining letters will be delivered on August 30, 2015.

EPA has sent NMED validated data for the following:

- Surface Water Sampling Analytical Data from August 6-12, 2015
- Surface Water Monitoring Data from August 6-14, 2015
- Intake Sediment Sampling Analytical Data from August 10-12, & 24 2015
- Irrigation Ditch Sediment Sampling Analytical Data from August 13-14, 2015
- Private Well Data from August 10-14, 2015 and August 19-21 and August 24, 2015

<u>Data Posted to the Web</u>

The following data has been posted:

- Drinking Water Intake Surface Water Data from August 6-22
- Sediment Data from Intakes from August 10-22, 24

<u>Community Meeting/VIP</u>

Senator Udall will be visiting Shiprock, New Mexico on Wednesday September 2. Region 6 Regional Administrator and the Incident Commander will be attending the meeting.

An Animas River Recovery Open House is scheduled for Farmington, NM on Tuesday, September 1, 2015 from 3 pm to 8 pm MDT. Areas of interest to be covered include, “Anticipated Long Term Environmental Monitoring of the River and Sediments”, “Water Quality” and “Economic Impacts:Claims” The EPA Region 6 Incident Commander is scheduled to attend along with a member of the EPA Region 6 Environmental Unit.

Toll-Free Number Activity

The EPA number is now immediately connecting to the Headquarters number.

	08/29/2015	Total to Date
Total Calls Received	0	190
Calls Concerning R6	0	64
Calls Returned by R6	0	64

TOPIC OF CALL	08/29/2015	OVERALL TOTALS
Well Water Test Scheduling	0	20
Water Concerns	0	8
Health Concerns	0	4
Livestock/Irrigation	0	4
Tourism/Media	0	1
Volunteer Offers	0	3
General Concerns	0	18
Contractor/Vendor Support	0	6

Private Drinking Water Well Sampling

Matrix	US EPA Region	Qty. (8/29/2015)	Qty. (Cumulative)
Private Drinking Water Wells Resampled	6	0	100
Private Drinking Water Wells Initial Sample Effort	6	0	114

Surface Water and Sediment Sampling

Matrix	US EPA Region	Qty. (8/29/2015)	Qty. (Cumulative)
Surface Water Samples	6	9	202
Sediment Samples	6	9	181

2.2 Finance Section

Daily Cost Estimates Report						
Reg	**U.S. EPA Cumulative Expended Payroll**	**U.S. EPA Cumulative Expended Travel**	**U.S. EPA Cumulative Other Charges**	**Cumulative U.S. EPA Contractors Cost**	**Total Cumulative Costs**	**Estimated Daily Burn Rate**
6	$406,140.00	$107,650.00	$12,989.44	$2,123,100.00	$2,649,879.44	$48,580.00

3. Participating Entities in Region 6

US EPA
USFWS
NMED
NM Department of Health
NM Office of the State Engineer NM
Department of Game and Fish
County of San Juan – New Mexico

4. Personnel

Group	Number
Region 6 EPA @ REOC	8
Region 6 Contractors @ REOC	1
Region 6 Staff in JIC – Durango, CO	3
Region 6 Staff in Area Command – Durango, CO	4
Region 6 EPA OSC	1
Region 6/7 Water Technicians	1
Region 6 EPA Contractors in Field	8

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
San Juan River Response - Removal Polrep

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IX

Subject:	**POLREP #17** **San Juan River Response** **Shiprock, NM** **Latitude: 36.8704828 Longitude: -108.7892506**
To:	Calanog Steve, EPA
From:	Bill McKinstry, Incident Commander
Date:	8/30/2015
Reporting Period:	

1. Introduction

1.1 Background

Site Number:	**Contract Number:**
D.O. Number:	**Action Memo Date:**
Response Authority:	**Response Type:**
Response Lead:	**Incident Category:**
NPL Status:	**Operable Unit:**
Mobilization Date:	**Start Date:**
Demob Date:	**Completion Date:**
CERCLIS ID:	**RCRIS ID:**
ERNS No.:	**State Notification:**
FPN#:	**Reimbursable Account #:**

1.1.1 Incident Category

1.1.2 Site Description

The Gold King Mine near Silverton, Colorado is a historic gold mine at approximately 11,300' elevation. The mine has a continuous discharge of acidic mine drainage that is a significant contributor of manganese, zinc, copper, and cadmium into the Cement Creek drainage of the Animas River watershed. The Gold King Mine has not had maintenance of the mine workings since 1991, and the workings have been inaccessible since 1995 when the mine portal collapsed.

EPA Region 9 is focused on a stretch of the San Juan River extending from Farmington, NM to Mexican Hat, UT.

1.1.2.1 Location

San Juan County, NM and Navajo Reservation. The Animas River flows into the San Juan River at Farmington, NM. After the Animas River meets the San Juan River, the San Juan River continues to flow west through parts of New Mexico, Colorado, and Utah.

1.1.2.2 Description of Threat

Mine waste water was released into Cement Creek and the Animas River. The volume of the release based on US Geological Survey (USGS) Cement Creek guaging station is estimated at three million gallons. The initial environmental concern was the pulse of contaminated water containing sediment and metals discharged in Cement Creek which flows into the Animas River through Durango, Colorado, and into New Mexico where it joins the San Juan River before flowing into Utah. The river is also used for recreational purposes,

including fishing and rafting, and is an important cultural resource for the Navajo Nation.

The leading edge of the release reached the New Mexico border on August 8, 2015 where it eventually discharged into the San Juan River.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Aerial and ground reconnaissance indicates that the plume associated with the Gold King Mine release has dissipated downstream. There is no leading edge of contamination visible in downstream sections of the San Juan River or Lake Powell.

EPA Region 9 is collecting and assessing water quality from the San Juan River from La Plata Highway in New Mexico to Mexican Hat in Utah. Water sampling is occurring, and pH levels and dissolved concentrations of metals are being monitored.

1.2 Incident Objectives

1.Safety
-Provide safe working environment for all response personnel
-Identify safety issues and monitor adherence to Health and Safety Plan
-Maximize protection of public health and welfare
2.Sampling
-Conduct water and sediment sampling from 11 designated locations along the San Juan River
-Conduct sampling from Lake Powell at 11 identified sites
-Synchronize sampling data and information with Area Command
3.Water and Agricultural Needs
-Procure water trucks and establish watering points
-Establish needs and delivery of water and feed for livestock

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Farmington ICP is now on a 96-hour operational period. The next Incident Action Plan will be delivered on Sunday evening.

Sampling along the San Juan River has stopped for the weekend. Starting next week sampling will be moving to a twice-weekly schedule where samples will be taken at 5-6 sampling locations on Mondays and Thursdays. Alfalfa deliveries are ongoing. One START contractor is on scene at Lake Powell gathering samples. The Lake Powell operation is expected to conclude on Sunday and the START contractor will be demobilized at this time.

The Community Outreach branch has demobilized and ERRS contractors currently staffing the Logistics Section are demobilizing today. Coordination of alfalfa orders will be handled remotely.

2.1.2 Response Actions to Date

Sampling Branch

EPA Region 9 initiated water and sediment sampling efforts on August 9, 2015, to assess the impacts of the release at the Gold King Mine on the San Juan River. Starting on August 9, samples were gathered from the shoreline of the following designated locations along the San Juan River. Samples will not be collected again until Monday due to lack of availability of law enforcement escorts.

New Mexico
San Juan River at LaPlata Highway (SJLP)
PNM Intake (SJFP)
San Juan River at Hogback (SJHB)
San Juan River at Shiprock (SJSR)
San Juan DS from Shiprock (SJDS)
San Juan River at Four Corners (SJ4C)

Utah
San Juan River at McElmo Creek (SJME)
San Juan at Montezuma Creek (SJMC)
San Juan River at Bluff Bridge (SJBB)
San Juan River at Mexican Hat (SJMH)
McElmo Creek Tributary (MECT)

Sample totals are summarized below:

	U.S. EPA Region	Qty. (8/29/2015)	Qty. (Cumulative)
Private Drinking Water Well Samples	9	0	0
Surface Water Samples	9	0	181
Sediment Samples	9	0	163

August 8 - 4 water samples (SJLP, SJFP, SJHB & SJSR)
August 9 - 13 water samples (all sites)
August 10 - 12 water samples, 11 sediment samples (all sites)
August 11 - 13 water samples, 13 sediment samples (all sites)
August 12 - 13 water samples, 13 sediment samples (all sites)
August 13 - 12 water samples, 12 sediment samples (all sites)
August 14 - 12 water samples, 12 sediment samples (all sites)
August 15 - 12 water samples, 12 sediment samples (all sites)
August 16 - 12 water samples, 12 sediment samples (all sites)
August 17 - 12 water samples, 12 sediment samples (all sites)
August 18 - 10 water samples, 10 sediment samples (did not sample at SJSR or SJDS)
August 19 - 10 water samples, 10 sediment samples (did not sample at SJSR or SJDS)
August 20 - no samples collected
August 21 - no samples collected
August 22 - no samples collected
August 23 - no samples collected
August 24 - 12 water samples, 12 sediment samples
August 25 - 12 water samples, 12 sediment samples
August 26 - 11 water samples, 11 sediment samples (did not sample at SJDS)
August 27 - 11 water samples, 11 sediment samples (did not sample at SJDS)
August 28 - 0 water samples, 0 sediment samples
August 29 - 0 water samples, 0 sediment samples

There have been no requests for well samples and no requests for samples from diversion channels.

Community Relations Branch

All community involvement duties are suspended under the current order.

Water and Feed Delivery Branch

A summary of water and livestock feed deliveries are as follow:

Activity	U.S. EPA Region	8/28/2015			Cumulative		
		Deliveries (each)	Qty. (gal)	Qty. (hay bales)	Deliveries (each)	Qty. (gal)	Qty. (hay bales)
Potable Water Deliveries	9	0	0	0	0	0	0
Livestock / Agricultural Water Deliveries	9	0	0	0	13	218,400	0
Agricultural Food Deliveries	9	1	0	374	12	0	4698

Feed delivered for livestock is as follows:

8/14 - 384 bales of alfalfa delivered to Gaadiiahi chapter
8/21 - 384 bales delivered to Gaadiiahi, 384 bales delivered to Nenahnezad, 384 bales delivered to Hogback, 384 bales delivered to Upper Fruitland
8/22 - 384 bales delivered to Beclibito
8/24 - 384 bales delivered to Shiprock, 384 bales delivered to Red Mesa, 384 bales delivered to Aneth
8/27 - 384 bales delivered to Oljeto, 384 bales delivered to Mexican Water
8/28 - no deliveries
8/29 - delivery of 374 bales to Teec Nos Pos, attempted to deliver to Navajo Mountain Chapter, but no one was there to accept delivery. Will attempt to reach out to them on Monday.

Drinking Water System Impacts

No known water systems in Region 9 have been impacted.

Glen Canyon, Arizona ICP

One START contractor is the only representative to remain on scene in the Lake Powell vicinity. He has been integrated into a USGS/NPS expedition that is expected to conclude on Sunday.Yesterday, the START contractor that had been underway with the expedition was replaced by a different START contractor. The samples collected through yesterday were dropped off for analysis.

Sampling efforts throughout this expedition are detailed below.

Matrix	U.S. EPA Region	Qty. (8/29/2015)	Qty. (Cumulative)
Private Drinking Water Well Samples	9	0	0
Water Samples (at 4 different depths)	9	0	80
Sediment Samples	9	0	20

2.2 Planning Section

2.2.1 Anticipated Activities

Because Navajo law enforcement representatives are unable to support sampling on a daily basis, sampling will be scaled back to Mondays and Thursdays after today.

One START contractor is the only member that remains working out of the Lake Powell area. He is working with a USGS/NPS crew on scene and has embarked on a 14 day trip. The trip will conclude this weekend.

Feed is continuing to be delivered to various Navajo chapters. **Delivery was made to Teec Nos Pas, but no one was there to accept shipment at Navajo Mountain.**

2.2.1.2 Next Steps

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2.2.2 Issues

On 17AUG15, at approximately 1130, seven members of the Farmington ICP response team were approached in the farmland area of Shiprock by a member of the Navajo Nation. The individual is in opposition to the response operations of Farmington ICP in regards to water and feed deliveries in the Shiprock Chapter. During the confrontation, the response personnel were threatened by being told their vehicles “would be stoned”. They were also intimidated by a second vehicle that showed up in support of the individual. The response personnel listened to what the individual had to say and eventually left.

At approximately 1215, another incident occurred with the same individual at the bridge in Shiprock. There, the individual argued with 2 EPA employees and threatened to break their equipment. The individual left after a few minutes. In both cases the response personnel returned to the Farmington ICP and were unharmed.

An investigation is being conducted by the Navajo Department of Criminal Investigation.

On 19AUG15, a video was posted on social media that showed Navajo Nation President and Attorney General alleging contamination in one of the water tanks delivered by the EPA.

2.3 Logistics Section

NAPI requires a 3-day advance notice prior to alfalfa deliveries in order to make appropriate accomodations.

2.4 Finance Section

2.4.1 Narrative

	U.S. EPA Cumulative	U.S. EPA Cumulative	U.S. EPA Cumulative	Cumulative U.S. EPA		

Region	Expended Payroll	Expended Travel	Other Charges	Contractors Cost	Total Cumulative Costs	Estimated Daily Burn Rate
9				$1,017,000 (estimated)	$1,079,000(estimated)	$22,000(estimated)

2.5 Other Command Staff

2.5.1 Safety Officer

With weather being forecasted into the 90s, hydration is of paramount importance. Additionally, much of the terrain surrounding the river is uneven and rocky. Responders should transit these areas with care.

While transiting throughout the region, responders should be mindful of the potential for contact with wildlife. Scorpions, snakes, and other similar animals raise a potential for injury.

2.5.2 Liaison Officer

Liaison officers are continuing outreach with Navajo community members and representatives of the Navajo Tribe.

2.5.3. Weather Forecast

Weather forecast for Saturday, August 29

FARMINGTON AREA

Today
A mix of sun and clouds with a high of 90, low of 57 and 20% chance of precipitation. Wind coming out of the east at 8 miles per hour.

Tonight
Chance of precipitation tonight. Partly cloudy, with a low around 57.

Tomorrow
Sunny with a high of 88, low of 59. 20% chance of precipitation.

3. Participating Entities

3.1 Area Command

EPA Region 9 is coordinating with EPA Regions 6 and 8, Navajo Nation, and the states of Colorado, New Mexico, Utah, and Arizona. The EPA Region 9 is working with the Navajo Nation to evaluate possible impacts to the Tribe. Potentially impacted water systems have been notified, and precautions are in place to ensure drinking water is protected. The EPA and New Mexico Environmental Department are providing assistance to community water systems and closely monitoring the situation. EPA Region 9 has contacted the Bureau of Indian Affairs regarding potential impacts to the Navajo Nation and is currently working with Navajo liaisons.

3.2 Incident Command and Cooperating Agencies

The Farmington Incident Command includes EPA Region 9 and United States Coast Guard. Donn Zuroski has relieved Bret Moxley as Incident Commander. **Deputy Incident Commander has demobilized and Incident Commander (Donn Zuroski) will be demobilizing Saturday.**

4. Personnel On Site

Region	Agency / Entity	Number of Personnel (8/29/2015)
	U.S. EPA Personnel	0
	U.S. EPA Contractors	1
	USCG	1
	Other Federal, State, Local and Tribal Entities - 2	

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

www.epa.gov/goldkingmine

7. Situational Reference Materials

No information available at this time.