



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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Ref: 8EPR-ER

NOV 28 2017

**ACTION MEMORANDUM**

SUBJECT: Approval and Funding for a Removal Action at the Crow Agency Vandalism Site in Crow Agency, Montana pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104

FROM: Martin McComb *mdm 11-28-17*  
Federal On-Scene Coordinator

THRU: Laura Williams, Response Unit Leader  
Emergency Response *Laura Williams*

TO: David A. Ostrander, Director *David A. Ostrander*  
Emergency Response & Preparedness Program

Site ID# A8U2

**I. PURPOSE**

The purpose of this memorandum is to document the decision to initiate the emergency response actions described herein for the Crow Agency Vandalism Site located in Crow Agency, Big Horn County, Montana pursuant to the On-Scene Coordinator's delegated authority under CERCLA Section 104. This emergency response action involves addressing impacts to a water treatment plant and water distribution system which occurred as a result of a vandalism incident at the Crow Water Authority's Water Treatment Plant (WTP). Conditions existing at the Site presented a threat to public health and the environment and met the criteria for initiating a removal action under 40 CFR 300.415(b)(2) of the National Contingency Plan (NCP).

This removal action involves no nationally-significant or precedent-setting issues. This time-critical removal action will not establish any precedent for how future response actions will be taken, and will not commit the US Environmental Protection Agency (EPA) to a course of action that could have a significant impact on future responses or resources.

## II. SITE CONDITIONS AND BACKGROUND

Site Name:	Crow Agency Vandalism
Superfund Site ID (SSID):	A8U2
NRC Case Number:	Not Applicable
CERCLIS Number:	MTN000803110
Site Location:	Big Horn County, Montana
Lat/Long:	45.5936970/ -107.4649430
Potentially Responsible Party (PRP):	Unknown
NPL Status:	Non NPL
Removal Start Date:	10/4/2017

### A. Site Description

#### 1. Removal Site Evaluation

On October 4, 2017, the Crow Nation reported vandalism to their water treatment plant in Crow Agency, Montana. Three chemical storage tanks containing polymer, filter agent (poly acrylamide) and alum (aluminum sulfate) were damaged during the incident. In addition, the facility's clarifier tank, clear well, plumbing, control system, chlorine distribution system and backwash lagoon were all impacted.

#### 2. Physical Location

The Site is located on the Crow Nation in Crow Agency, Big Horn County, Montana.

#### 3. Site Characteristics

Crow Agency is home to approximately 1800 people, roughly 95% of which are Native American. A community college, elderly care center, elementary school and hospital are found in Crow Agency. The vandalized treatment plant shares infrastructure with a second co-located treatment facility operated by the Bureau of Indian Affairs (BIA). The BIA plant has the capacity to serve the entire community for a limited amount of time.

#### 4. Release or Threatened Release into the Environment of a Hazardous Substance, Pollutant, or Contaminant

An unknown amount of dry filter agent containing poly acrylamide was dumped directly into the clear well and the contaminated water may have entered the public water supply before operators were able to take the treatment plant off-line. Acrylamide is listed as a hazardous substance in 40 CFR §302.4.

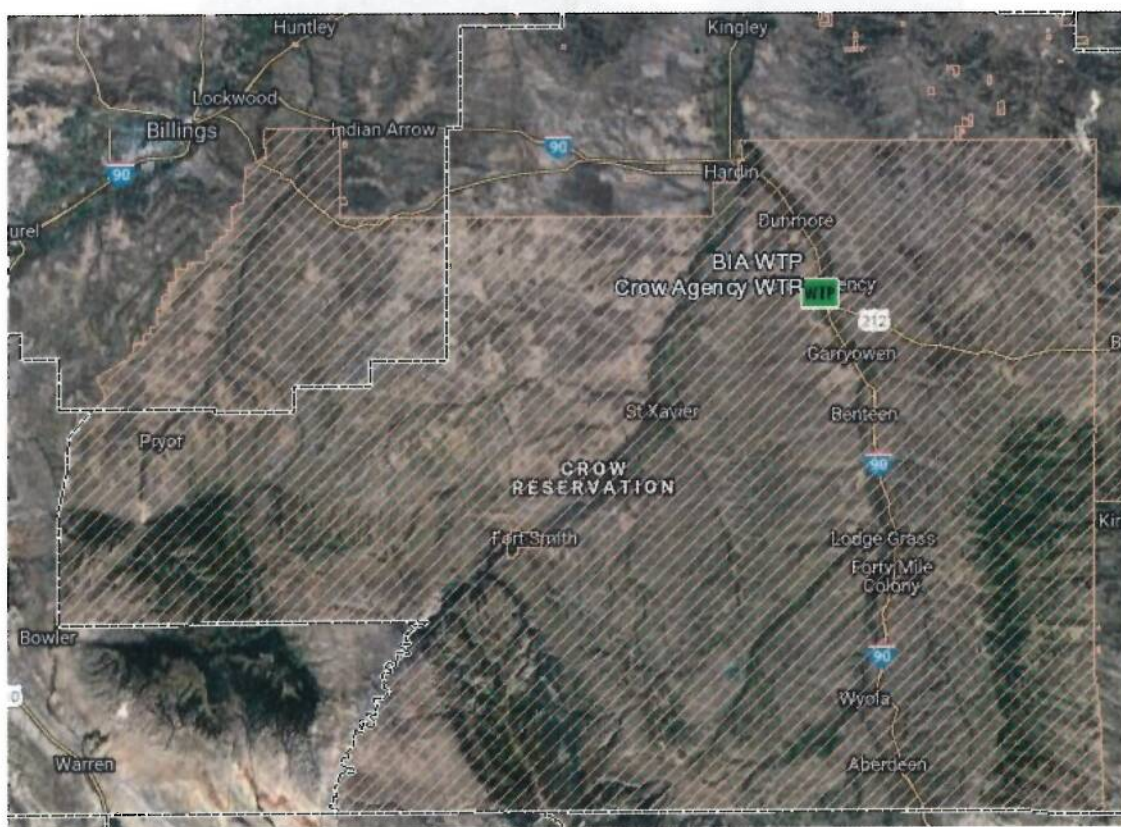
Major health effects of acrylamide are skin irritation such as redness and peeling of the skin of palms and neuropathy regarding the central nervous system and the peripheral nervous system. Acute and subacute intoxication with a large dose by ingestion water drink contaminated with acrylamide can cause severe symptoms of the central nervous system and polyneuropathy may appear later<sup>1</sup>.

## 5. NPL Status

This Site is neither on nor currently being considered for inclusion on the NPL.

## 6. Maps, Pictures, Other Geographic Representations

Map 1: Impacted Water Treatment Plant on the Crow Reservation in Montana



<sup>1</sup> Source: <http://enhs.umn.edu/current/5103/acryl/harmful.html>.

Map 2: Aerial Image of the Impacted Facility



**B. Other Actions to Date**

**1. Previous Actions**

There have been no previous response or removal actions at the Site.

**2. Current Actions**

There are no current or ongoing response or removal actions at the Site.

**C. State and Local Authorities' Role**

**1. State and Local Actions to date**

The Bureau of Indian Affairs and Crow Water Authority monitored residual chlorine levels in the system, flushed all the main lines in the community and provided assistance to EPA's response activities at the impacted facility. Tribal Emergency Management officials provided bottled water to the community and helped coordinate the flushing of residential taps.

**2. Potential for Continued State/Local Response**

The Bureau of Indian Affairs will continue to provide water to the community until the impacted facility is brought back on-line. The Crow Water Authority will be working with EPA's Drinking Water Program to perform the necessary repairs and inspection / sampling activities to bring the plant back on-line.



### **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES**

Conditions at the Site present a threat to public health and the environment, and meet the criteria for initiating a removal action under 40 CFR 300.415(b)(2) of the NCP.

EPA has considered all the factors described in 40 CFR 300.415(b)(2) of the NCP and determined that the following factors apply at the Site.

*“(ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems:”*

An unknown amount of dry filter agent containing poly acrylamide was dumped directly into the clear well and an unknown amount of contaminated water may have entered the public water supply before operators were able to take the treatment plant off-line. Poly acrylamide is used at low concentrations early in the treatment process to separate particulates as raw water is filtered. At high concentrations, poly acrylamide can have adverse impacts on human health and local emergency management officials instructed the public to not drink nor come into contact with the water in their taps.

*“(viii) The availability of other appropriate federal or state mechanisms to respond to the release:”*

Local and state governments do not have the capability to conduct the critical response activities described herein in a timely manner.

### **IV. ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action described in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

### **V. SELECTED REMOVAL ACTION AND ESTIMATED COSTS**

#### **A. Planned Actions**

##### **1. Planned Action Description**

EPA's Response Team completed the following tasks 1-6 and will complete the following task 7:

1. Facilitate flushing of the water distribution system.
2. Conduct an initial assessment of what will be required to bring the plant back on-line.

3. Remove and dispose of the damaged chemical storage tanks and other debris.
4. Drain and remove debris and contaminants from the clear well and clarifier tank.
5. Drain and dredge the impacted backwash lagoon.
6. Secure the facility by installing temporary locks on all the damaged doors.
7. Procure the critical components, materials and resources necessary to bring the facility back on-line. EPA's Drinking Water Program will conduct the necessary inspection and sampling activities necessary to officially bring the treatment plant back on-line.

## **2. Contribution to Remedial Performance**

This effort will, to the extent practical, contribute to any future remedial effort at the Site.

## **3. Engineering Evaluation/Cost Analysis (EE/CA)**

An EE/CA is not required for an emergency response action.

## **4. Applicable or Relevant and Appropriate Requirements (ARARs)**

No ARARs were identified for this emergency response action. EPA's Drinking Water Program directly implements the Safe Drinking Water Act on the Crow Reservation and is responsible for ensuring that all applicable requirements are addressed.

## **5. Project Schedule**

This removal action began on October 4, 2017. All proposed activities are estimated to be completed by December 31, 2017.

### **B. Estimated Costs\***

Contractor costs (ERRS)	\$ 40,000
Contractor costs (START)	\$ 20,000
SUBTOTAL	\$ 60,000
Contingency costs (20% of subtotal)	\$ 12,000
<b>Total Removal Project Ceiling</b>	<b>\$ 72,000</b>

\*EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Liable parties may be held financially responsible for costs incurred by the EPA as set forth in Section 107 of CERCLA

**VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

A delay in action or no action at this Site would increase the actual or potential threats to the public health and/or the environment.

**VII. OUTSTANDING POLICY ISSUES**

None

**VIII. ENFORCEMENT**

An investigation to evaluate potential enforcement options will be undertaken. A separate Enforcement Addendum will be prepared if appropriate providing a confidential summary of potential enforcement activities.

**IX. APPROVALS**

This decision document represents the selected removal action for the Crow Agency Vandalism Site in Crow Agency, Big Horn County, Montana, developed in accordance with CERCLA as amended, and is not inconsistent with the NCP. This decision is based on the administrative record for the Site.

Conditions at the Site met the NCP section 300.415(b) criteria for a removal action and through this document, I am approving the proposed removal actions. The total project ceiling is \$72,000; this amount is funded from the Regional removal allowance.



Martin McComb, On Scene Coordinator  
Emergency Response and Preparedness Program

11-28-17

Date