

**Project Summary  
2015 Haynes Coal Fire Emergency  
Contract AM-720-15**



**Abandoned Mine Lands Division  
600 East Boulevard Avenue, Department 408  
Bismarck, ND 58505-0480**

**May 2015**

**North Dakota Public Service Commission  
2015 Haynes Emergency Coal Fire Project Summary**

Project Type:	Surface burning of coal screenings near the head gate of an abandoned underground coal mine.
Primary Location:	The NW¼ of Section 15, T129N, R94W, about 2.75 miles northeast of Haynes. Coordinates 46.00453, -102.424988
Project Dates:	April 22 to May 1, 2015
Contractor:	Earthworm Excavating of Tolna, ND
Project Cost:	\$18,020

The Public Service Commission administers the Abandoned Mine Lands (AML) Program on behalf of the State of North Dakota. The AML program is charged with eliminating existing and potential public hazards resulting from abandoned surface and underground coal mines. It is funded by a production tax on lignite coal mined in the state.

The 2015 Haynes Emergency Coal Fire Project was conducted to extinguish a dangerous coal refuse fire burning on an area of about 2.3 acres near the junction of North Dakota Highways 8 and 12, about 2¾ miles northeast of Haynes, ND. Standard requirements for work under this contract were as follows:

1. Remove and stockpile all available topsoil from around the affected area.
2. Excavate a trench or trenches to a depth several feet below the coal fines and into native soil materials. Save wet clay materials from the excavation.
3. Excavate and place the burning materials and coal fines in the trench(es), mixing them thoroughly with wet clay and quenching with water as needed. Ensure that all buried materials are isolated from other combustible materials.
4. Grade the areas to re-establish drainage and blend into adjacent topography.
5. Respread topsoil over the disturbed areas
6. Till and reseed all disturbed areas.

The required seed mixture for native grassland areas consisted of the following varieties and rates.

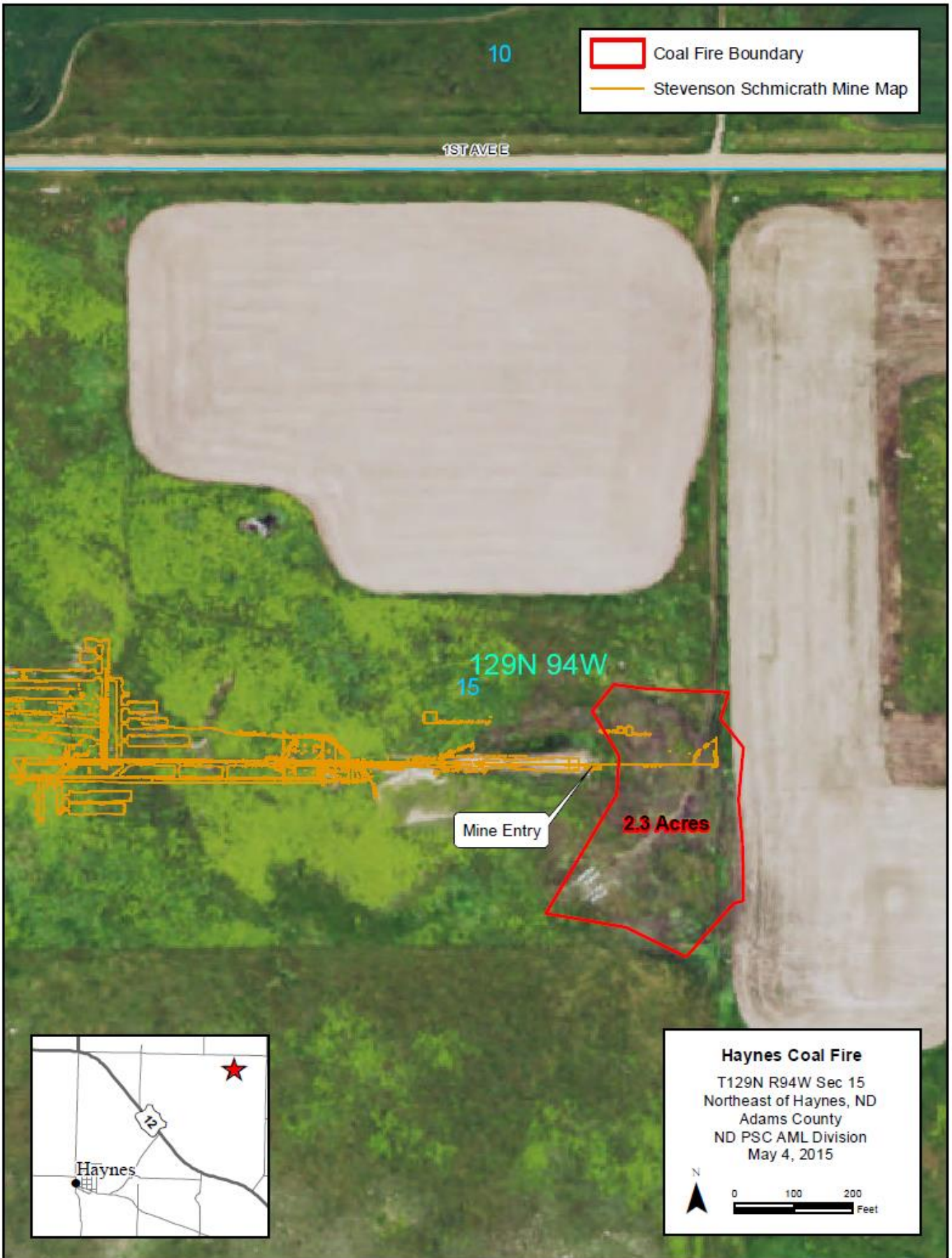
<u>Species</u>	<u>Rate/Acre – Lbs. (PLS)</u>
Thickspike Wheatgrass	4
Streambank Wheatgrass	4
Western Wheatgrass	4
Slender Wheatgrass	2
Green Needle Grass	2
Sideoats Grama	2
Switchgrass	4

This AML Project resulted in the extinguishment of a dangerous coal refuse fire. Coal refuse fires are a serious hazard primarily because they can burn for a long time and can also ignite wildfires that threaten people, destroy property and damage the environment.

**Report Contents**

- Summary Data
- Map
- Emergency Investigation Report
- Captioned Photos

**Cover Photo:** *The cover photo shows a bulldozer pushing burning coal screenings into a burial pit while an excavator continued to dig the pit on April 22, 2015. Temperatures of these burning materials exceeded 900° F*



## AML EMERGENCY INVESTIGATION

**Type of Problem:** Surface Burning/Coal Refuse Fire  
**Reported by:** Michele Gaylord, Adams Co. Emergency Manager  
**Address:** Hettinger, ND  
**Telephone:** 701-471-8515 (cell)  
**Date Complaint Received:** April 15, 2015, 1:30 PM  
**Person Notified of Complaint:** Jim Deutsch, NDPSC  
**Address of Complaint:** Approximately 2.75 miles northeast of Haynes, ND  
**City:** Haynes  
**County:** Adams  
**State:** North Dakota

### SITE INVESTIGATION

**Date:** April 15, 2015  
**Time:** 4:00 to 5:00 PM Central Time.  
**Name of State Investigators:** Bill Dodd and Joan Breiner, AML Division  
**OSM Representative(s) Present:** None  
**Others Present:** Michele Gaylord, Adams Co. Emergency Manager, Theo Schalefsky, Adams County Highway Superintendent., and Mark Faller, Hettinger District Fire Chief

**Name of others contacted (Local, State, Federal, Insurance Agencies, Utilities, etc.):**  
John Sieving, OSM, was contacted on April 16.

### LOCATION OF SITES

**Directions of locations (Describe Route):**

Approximately 2.75 miles northeast of Haynes, ND, in the NW¼ of Section 15, T129N, R94W, Adams County.

**USGS Quadrangle Name:** Haynes N. Dakota  
**Coordinates:** 46.000141, -102.424988

### MINE INFORMATION

**Mined by:** Stevenson Coal Mine (aka Stevenson & Schmickrath Co.)  
**Duration of Mining:** 1911-1936 (approximate)  
**Type of Mining:** Underground  
**Seam Name:** Unknown      **Thickness of Seam:** 10-14 feet



### CONTINUING RECLAMATION RESPONSIBILITY

**Permitted Operation:** No **Permit Number(s):** N/A  
**Bond Status:** Returned, Forfeited, Available: N/A  
**Amount:** N/A  
**Date:** N/A

### PRESENT OWNER(S)

**Surface Owner's Name:** Don Evans and John Mohlmann  
**Address:**  
**City:** Hettinger  
**State:** North Dakota  
**Zip Code:** 58639  
**Telephone:** unknown

**Were the Property Owners Involved in the Mining:** No  
**If yes, explain:**

**Date Property Acquired by Owner:** Unknown  
**If Potential Subsidence, Do Owners Have Insurance:** No

**If yes,**  
**Agency:**

**Agent:**  
**Address:**

**Phone Number:**

**Mineral Owner's Name:** Unknown

### AFFECTED PARTIES

This fire is located 2.75 miles northeast of Haynes, ND, in the NW¼ of Section 15, T129N, R94W, Adams County. It is about 1000 feet from a county road, 1½ miles from ND Highway 12, and less than a mile away from the nearest occupied farmstead. If this coal fire ignited another wild fire, it could affect the safety of residents of nearby farms and public traffic along the county road and state highway.

### SITE INFORMATION

**Date that problem began or was first noticed:** April 1, 2015

**Is there any active mining or related activities in or around the area:** No

**Name of Operator(s):** N/A

**Nature of problem:**

Surface Burning

**Source of problem:**

Underground Mine Coal Screenings

**POTENTIALLY AFFECTING:**

**Persons:** Estimated Number: 10+

**Housing:** Yes

**Building:** Yes

**Estimated acres affected:** The present extent of this coal refuse fire is about 1.5 acres.

**PROBLEM DESCRIPTION**

**Describe the problem (Detail: size, shape; is problem spreading, expanding; first noticed, etc.)**

On April 15, while Joan Breiner and I were conducting a contractor meeting near Reeder, Jim Deutsch called. He received a call from Michele Gaylord, Adams County Emergency Manager, about a coal fire near Haynes. I called Michele back and scheduled a meeting to inspect the fire later that afternoon.

Joan and I met with Michele Gaylord, Theo Schalefsky, Adams County Highway Superintendent, and Mark Faller, Hettinger District Fire Chief, from about 4:00-5:00 and inspected the site.

This coal refuse fire was ignited by a wildfire that burned over 100 acres on April 1, 2015. The coal refuse (screenings) are lying on an area of approximately 1.5 acres near the entry to the abandoned Stevenson Mine. The fire is burning in small pockets and along a ridge of wind-deposited coal fines on a fence line. According to the fire chief, this coal fire is burning at temperatures over 500°F and heat from the fires could be felt from several feet away. The fire department has responded several times to extinguish flare-ups from this coal fire but has not been able to extinguish it with water. It has the potential to ignite wildfires especially in the windy and dry weather we are currently experiencing in North Dakota. The fire is a hazard to public safety and property and the Adams County Emergency Manager requested assistance to extinguish it as soon as possible.

**OTHER INFORMATION**

**Describe any other information available and its location (i.e., maps, inspections, reports, etc.)**

Mine maps and information for the Stevenson Mine are available at the AML Division Office.

**ELIGIBILITY**

**Declaration of eligibility from State:** ND Public Service Commission

**Name:** Bill Dodd, AML Assistant Director

**Address:** 600 E Blvd Ave., Dept. 408

**City:** Bismarck

**State:** North Dakota  
**Zip Code:** 58505-0480  
**Telephone:** (701)328-2251  
Oral Date Written X Date April 17, 2015  
**Eligible:** YES X (an eligible site must be mine related, abandoned with inadequate reclamation prior to August 3, 1977, and no continuing reclamation responsibility.)

### ADDED VALUE

It is doubtful that reclamation of this site will add significant value to the property. However, remedial action to eliminate the hazard will help protect the property owner and the public.

### PROPOSED REMEDIAL ACTION:

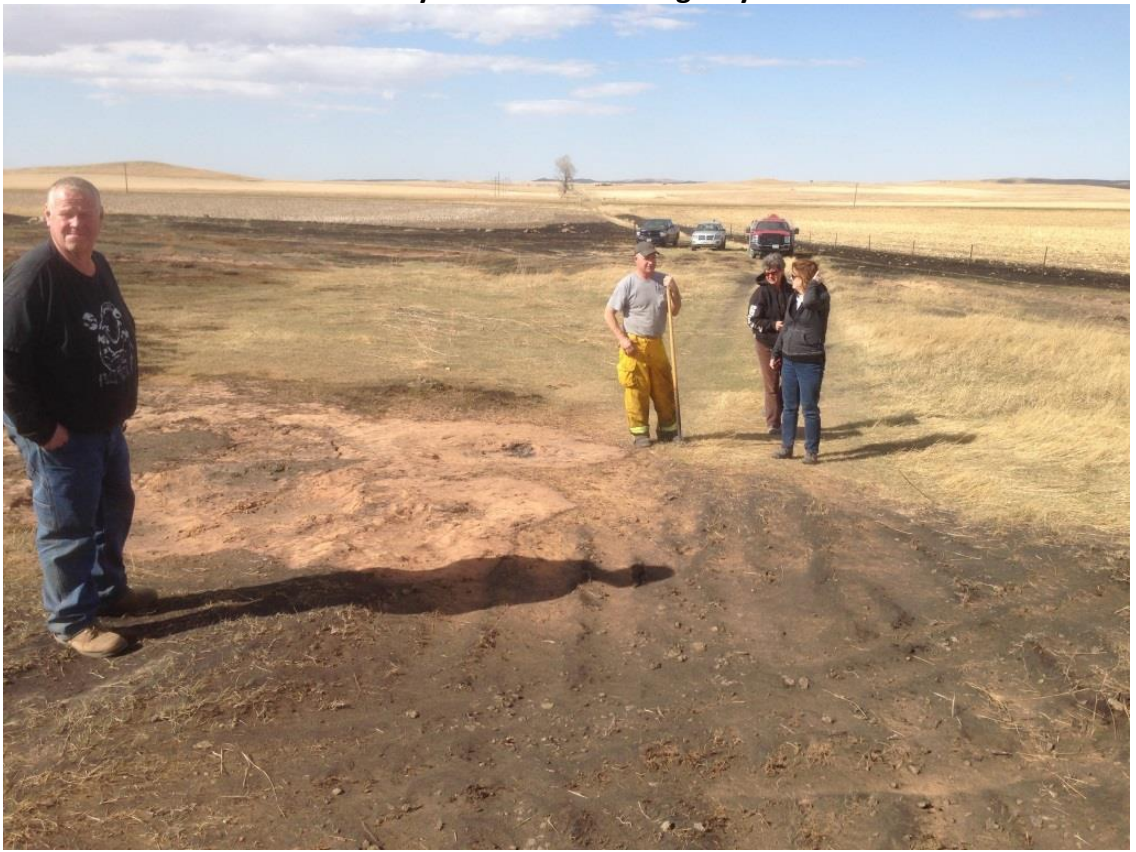
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- Excavate and place the burning materials and coal fines in the trench(es), mixing them thoroughly with wet clay and quenching with water as needed. Ensure that all buried materials are isolated from other combustible materials.
- Grade the areas to re-establish drainage and blend into adjacent topography.
- Respread topsoil over the disturbed areas
- Till and reseed all disturbed areas.

**ESTIMATED COST:** \$10,000 to \$15,000

**Investigator:** William E. Dodd **Signature:** \_\_\_\_\_  
**Address:** 600 E Blvd Ave., Dept. 408  
**City:** Bismarck  
**State:** North Dakota  
**Zip code:** 58505-0480  
**Telephone:** (701) 328-4101

**Project Title:** 2015 Haynes Coal Fire Emergency  
**Number:**

## 2015 Haynes Coal Fire Emergency



On April 15, 2015, Michele Gaylord, Adams County Emergency Manager, called to report a dangerous coal refuse fire burning near Haynes, ND. On the same day, Joan Briener and Bill Dodd (PSC) met with Michele Gaylord, County Highway Superintendent, Theo Schalefsky, and Hettinger District Fire Chief, Mark Faller, at the site.



This coal refuse fire was ignited by a wildfire that burned over 100 acres on April 1, 2015. The coal refuse (screenings) were lying on an area of approximately 2.3 acres near the entry to the abandoned Stevenson Mine which operated from about 1911-1936. The headgate and mine entry are in the background. Fire Chief Mark Faller is looking at a "hot spot" overlain with ash.



## 2015 Haynes Coal Fire Emergency



Work began on April 22, 2015. This shows a Cat D6K Bulldozer pushing burning coal screenings into a burial pit. The burning materials were mixed with wet clay and buried. When these materials were exposed to air, they began to burn at temperatures over 900°F and the smoke could be seen from miles away.



This is a close-up showing the bulldozer engulfed in smoke. You can see the coal screenings and ash in the foreground.

## 2015 Haynes Coal Fire Emergency



Personnel from the Hettinger Fire Protection District were on hand during the entire time the fire was being extinguished. This shows two firemen spraying the edges of the coal fire to keep it from spreading.



This is the area on May 1 after the fire was extinguished and the area was regraded, tilled and seeded. This was a successful project due to the cooperative efforts of the AML Division, the contractor, Earthworm Excavating, Adams County, Hettinger Fire Protection District, and the property owner Don Evans. The contract cost for this work was \$18,020.