

## Site Activities Update

Homestake Mining Company and Grants Mining District

New Mexico

August 2015

### This Fact Sheet will tell you about:

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#### Future Actions

The U.S. Environmental Protection Agency (EPA) will hold a Community Meeting Thursday, August 13, 2015 at the Cibola County Building from 6:30 — 9 p.m. The agenda for the meeting includes updates on remediation activities at the Homestake Superfund Site and preview of the second five-year plan for the Grants Mining District (GMD). The Project Managers will be available to answer questions.

#### *Open House/Community Meeting*

*Date: Tuesday, August 13, 2015*

*Time: 6:30—9 p.m.*

*Location: Cibola County Building  
515 West High Street, Grants NM 87020*

#### Current Actions

Homestake has made significant progress since the beginning of the year in the construction of additional groundwater treatment systems to increase treatment capacity. Remediation activities include a zeolite-based uranium water treatment system and reverse osmosis water treatment system.

Early this year Homestake began construction of a 200 gallon per minute (gpm) capacity zeolite-based uranium water treatment system on top of the Large Tailings Pile. The proposed 1,200 gpm

system is designed to supplement the existing 300 gpm pilot treatment system currently being operated at the site.

Together, the total treatment capacity of the system is expected to be able to treat contaminated groundwater at a rate of up to 1,500 gpm. Homestake expects to complete the current system to utilize the full capacity construction and commission by end of this summer. Homestake currently operates a 600 gpm capacity Reverse Osmosis (RO) groundwater treatment system. Due to operational issues the system is not running at full capacity. Homestake is upgrading and build an additional 600 gpm system. This will allow Homestake to treat 1,200 gpm of groundwater by the RO system.

Construction of the new building to house the additional 600 gpm is complete. System electrical and plumbing work is currently in progress. Homestake expects to have the new 600 gpm RO system in operation next year.

#### Past Actions

In April 2015, the Blue Valley Downstream Alliance (BVDA) submitted to EPA a technical report entitled “Conceptual Flow Transport Model”, prepared by Dr. Thomas Myers. BVDA has requested EPA conduct an independent review of the report to validate the conclusions in the report that relate to groundwater contamination upgradient of the Homestake Site. EPA has engaged United States Geological Survey (USGS) hydrologist to review this report and document his findings. On May 28, 2015, the EPA, USGS, and Dr. Myers conducted a site visit and area reconnaissance and met staff at the Homestake Site. Once the USGS completes the report review, the EPA will meet with

BVDA to discuss the findings later this summer.

EPA is continuing to review historic information related to the cleanup being conducted at the Homestake Site under the Nuclear Regulatory Commission's (NRC's) authority for license termination. EPA is conducting this review to determine if the NRC-directed clean up would meet EPA's requirements for protectiveness under the Superfund law and allow EPA to delist the site from the National Priorities List (NPL) of Superfund sites once the cleanup is complete. In order to assess if the Superfund requirements are met, EPA plans to determine if the investigation, analysis, and cleanup is functionally equivalent to the Superfund remedial investigation and feasibility study (RI/FS) process that is performed to support EPA decision-making on site remedies. Performing this process will, among other things, allow EPA to determine if the remedy is protective of human health and the environment and identify all requirements that would have to be met to satisfy the Superfund law and regulations.

If the work performed to date achieves RI/FS equivalency, EPA will issue a Record of Decision (ROD) under its Superfund authority for the existing remedy at the site. If the work does not achieve RI/FS equivalency, EPA intends to have additional RI/FS work performed to achieve equivalency before issuing the ROD on the existing remedy or any other cleanup deemed necessary to meet Superfund requirements. EPA will keep the community informed about the progress of this RI/FS equivalency assessment process and request public comments once the evaluation is complete and before a ROD is issued.

### **Site Background**

The Homestake Mining Company (HMC) Superfund site is the most active project in the Grants Mining District with more than \$50 million invested in cleanup actions to

date. The Grants Mining District (GMD) covers approximately 2500 square miles in northwest New Mexico. It contains 97 legacy uranium mines, most of which have not undergone final closure. Five former uranium mill and tailing disposal sites, some already closed and some conducting closure under Nuclear Regulatory Commission or Department of Energy authority, are also located in the GMD. More than 52 million tons of uranium ore were extracted from these mines from the 1950s through 1980s, constituting approximately 68 percent of the total uranium ore mined in the United States. The legacy of prospecting, mining and milling operations left radionuclide waste widely scattered across private, federal, tribal, pueblo, and state lands — where it is a continuing source of contamination. Much of the uranium waste poses a risk to human health and the environment.

In addition to contamination at legacy mines and mills, waste rock and other materials from the mines were repurposed for use in residential construction and landscaping, and as foundation and roadbed material in some places. EPA Region 6 initiated removal site investigations at residential structures potentially contaminated with radiological materials in the GMD in 2009. As of June 2015, more than 900 structures and properties have been investigated. Of those, 128 structures and properties required soil and debris removal, and required radon abatement systems. Additionally, EPA Region 6 sampled nearly 200 groundwater wells (mostly private with some municipal wells) since 2005 to assess water quality.

Once the data is finalized, the EPA staff share the sampling results with individual property owners who granted access for ground water well sampling on their

property. Sampling results in one area led to connecting the residences to the municipal water supply of Milan, New Mexico for domestic water use, rather than continued use of contaminated domestic water wells. The EPA is currently continuing to assess the groundwater condition in the San Mateo Creek Basin.

All these efforts to identify potential risks to the residents of the GMD from legacy uranium mining and milling will continue as EPA Region 6 furthers its understanding of the impacts and to educate the affected communities and residents. Specifically, the EPA Region 6 will be conducting outreach to residents with groundwater that does not meet state and federal drinking water standards in the summer and fall of 2015 and develop educational tools to assist in increasing awareness of radiological exposure. EPA Region 6 will also continue to hold meetings to update the communities on assessment, investigation and cleanup progress in the GMD.

**For More Information...**

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**Site Repository**

New Mexico State University at Grants  
Campus Library  
1500 Third Street  
Grants, NM 87020  
505.287.6639

For press inquiries, please call the EPA Press Office at 214.665.2200.

You can find more information about the Region 6 Superfund program on EPA's Region 6 website:

<http://www.epa.gov/region6/6sf/6sf.htm>

Para recibir una traducción en español de esta hoja de datos, comunicarse con la Agencia de Protección del Medio Ambiente de los EEUU (la EPA) al número de teléfono 1.800.533.3508 (llamada gratis).

**On the web:**

[http://www.epa.gov/region6/6sf/newmexico/homestake\\_mining/index.html](http://www.epa.gov/region6/6sf/newmexico/homestake_mining/index.html)

[http://www.epa.gov/region6/6sf/newmexico/grants/nm\\_grants\\_index.html](http://www.epa.gov/region6/6sf/newmexico/grants/nm_grants_index.html)



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