

## MINING SCHOOLS ENHANCEMENT ACT

—————  
JULY 5, 2016.—Committed to the Committee of the Whole House on the State of  
the Union and ordered to be printed  
—————

Mr. BISHOP of Utah, from the Committee on Natural Resources,  
submitted the following

### R E P O R T

together with

### ADDITIONAL VIEWS

[To accompany H.R. 3734]

[Including cost estimate of the Congressional Budget Office]

The Committee on Natural Resources, to whom was referred the bill (H.R. 3734) to amend the Surface Mining Control and Reclamation Act of 1977 to provide support to mining schools, and for other purposes, having considered the same, report favorably thereon without amendment and recommend that the bill do pass.

### PURPOSE OF THE BILL

The purpose of H.R. 3734 is to amend the Surface Mining Control and Reclamation Act of 1977 to provide support to mining schools.

### BACKGROUND AND NEED FOR LEGISLATION

Within the next 10 to 15 years, approximately 70 percent of the United States' mining industry's technical leaders will reach retirement age. The National Research Council (NRC) identified this aging demographic within the mining sector as the "most critical issue" facing the workforce, and highlighted the "paucity of candidates to replace" the retiring workforce in the "mining-related faculty at institutions of higher knowledge." Evidencing this is the decrease in the number of accredited mining and mineral engineering programs, which has fallen from 25 in 1982 to 14 in 2007, and

a corresponding decline in faculty, which fell from 120 in 1984 to 70 in 2007.

The issues of a retiring workforce and a resultant lack of mining expertise are not limited solely to industry, but also affects the federal regulatory agencies. Indeed, 47 percent of the Mine Safety and Health Administration's coal sector workforce will be eligible for retirement by 2016, while the U.S. Environmental Protection Agency does not employ a single mining engineer in its over 15,000 employee workforce. Without sufficient numbers of mining experts, more disasters like the Gold King Mine waste water spill are more likely to occur; therefore, it is crucial to encourage the training and development of mining and mineral engineers.

One factor identified by the NRC as contributing to the decrease in mining and mineral engineering programs and faculty is the "relative absence of consistent federal research funding to support graduate programs at mining schools." In 1994, \$52 million had been directed through the U.S. Bureau of Mines to fund research—a majority of which was received by mining schools. This program, however, was eliminated, and has been credited to be one of the root causes of weakening mining programs. Thus, one way to reinvigorate mining and mineral engineering programs would be an assurance of federal research directed to mining schools.

When Congress passed the Surface Mining Control and Reclamation Act of 1977 (SMCRA), it identified a principal purpose of the Act as "provid[ing] for . . . the conduct of research investigations, experiments, and demonstrations, in the exploration, extraction, processing, development, and production of minerals and *the training of mineral engineers and scientists in the field of mining, minerals resources, and technology.*" [emphasis added] Currently, the Office of Surface Mining (OSM) offers a research grant program for schools, but a minor fraction of the grants are directed to mining schools. For instance, only one of 18 current or completed projects in 2014 was conducted at a mining school, while only seven of the entire 64 projects awarded over the past ten years were awarded to faculty members at mining engineering programs. To ensure the continued development of mining engineers and the statutory objectives of SMCRA are upheld, OSM should direct more of its grants towards mining and mineral engineering programs.

This bill attempts to address the aforementioned issues by requiring OSM to direct at least 70 percent of its research funding to mining schools to "enhance and support mining and mineral engineering programs." Such funds must provide a "significant opportunity for participation by undergraduate and graduate students at mining schools" and must be used to promote: 1) studies of mining, mineral extraction efficiency, and related processing technology; 2) mineral economics, reclamation technology, and practices for active mining operations; 3) the development of re-mining systems and technologies that facilitate reclamation that fosters the recovery of resources at abandoned mine sites; 4) investigations of mineral resources extraction methods that reduce environmental and human impacts; 5) reducing dependence on foreign energy supplies; and 6) enhancing the competitiveness of United States energy technology exports.

H.R. 3734 is part of the Committee's three-pronged response to the Gold King Mine and the Standard Mine spills that occurred in

Colorado in August and September of 2015, which reports indicated were caused by the Environmental Protection Agency. These reports also highlighted the lack of technical expertise, in particular mining engineers, needed for mine reclamation work.

The Gold King Mine spill, which turned the Animas River an ochre color, helped shine a national spotlight on the range of complex technical, legal, educational and funding related challenges that must be addressed to move forward with success in addressing abandoned mine lands not just in the Western U.S., but across the country. Members of the Natural Resources Committee have developed a package of reforms to address these challenges, including H.R. 3734. The other legislative measures are: H.R. 3843, the Locatable Minerals Claim Location and Maintenance Fees Act, introduced by Energy and Mineral Resources Subcommittee Chairman Doug Lamborn (R-CO); and H.R. 3844, the Energy and Minerals Reclamation Foundation Establishment Act, introduced by Congressman Jody Hice (R-GA).

#### COMMITTEE ACTION

H.R. 3734 was introduced on October 9, 2015, by Congressman Cresent Hardy (R-NV). The bill was referred to the Committee on Natural Resources, and within the Committee, to the Subcommittee on Energy and Mineral Resources. On December 14, 2015, the Subcommittee held a hearing on the bill. On June 14, 2016, the Natural Resources Committee met to consider the bill. The Subcommittee was discharged by unanimous consent. No amendments were offered and the bill was adopted and ordered favorably reported to the House of Representatives by unanimous consent on June 15, 2016.

#### COMMITTEE OVERSIGHT FINDINGS AND RECOMMENDATIONS

Regarding clause 2(b)(1) of rule X and clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, the Committee on Natural Resources' oversight findings and recommendations are reflected in the body of this report.

#### COMPLIANCE WITH HOUSE RULE XIII

1. Cost of Legislation. Clause 3(d)(1) of rule XIII of the Rules of the House of Representatives requires an estimate and a comparison by the Committee of the costs which would be incurred in carrying out this bill. However, clause 3(d)(2)(B) of that Rule provides that this requirement does not apply when the Committee has included in its report a timely submitted cost estimate of the bill prepared by the Director of the Congressional Budget Office under section 402 of the Congressional Budget Act of 1974. Under clause 3(c)(3) of rule XIII of the Rules of the House of Representatives and section 403 of the Congressional Budget Act of 1974, the Committee has received the following cost estimate for this bill from the Director of the Congressional Budget Office:

U.S. CONGRESS,  
CONGRESSIONAL BUDGET OFFICE,  
*Washington, DC, June 29, 2016.*

Hon. ROB BISHOP,  
*Chairman, Committee on Natural Resources,  
House of Representatives, Washington, DC.*

DEAR MR. CHAIRMAN: The Congressional Budget Office has prepared the enclosed cost estimate for H.R. 3734, the Mining Schools Enhancement Act.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Jeff LaFave.

Sincerely,

MARK P. HADLEY  
(For Keith Hall, Director)

Enclosure.

*H.R. 3734—Mining Schools Enhancement Act*

H.R. 3734 would amend current law to require the Office of Surface Mining Reclamation and Enforcement (OSMRE) to allocate 70 percent of any funds used to support outside research to institutions of higher education with accredited mining or mineral engineering programs. In 2015, the agency spent \$1 million on outside research.

OSMRE already has the authority to spend appropriated funds on outside research and H.R. 3734 would affect only the allocation of such funds; therefore, CBO estimates that implementing the legislation would have no effect on the federal budget. Enacting H.R. 3734 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply. CBO estimates that enacting the bill would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2027.

H.R. 3734 contains no intergovernmental or private-sector mandates as defined in the Unfunded Mandates Reform Act and would benefit institutions of higher education that specialize in mining engineering by dedicating a greater share of federal mining research funds to support activities at such institutions. Any costs those entities might incur would result from participation in a voluntary federal program.

The CBO staff contact for this estimate is Jeff LaFave. The estimate was approved by H. Samuel Papenfuss, Deputy Assistant Director for Budget Analysis.

2. Section 308(a) of Congressional Budget Act. As required by clause 3(c)(2) of rule XIII of the Rules of the House of Representatives and section 308(a) of the Congressional Budget Act of 1974, this bill does not contain any new budget authority, spending authority, credit authority, or an increase or decrease in revenues or tax expenditures.

3. General Performance Goals and Objectives. As required by clause 3(c)(4) of rule XIII, the general performance goal or objective of this bill is to amend the Surface Mining Control and Reclamation Act of 1977 to provide support to mining schools.

## EARMARK STATEMENT

This bill does not contain any Congressional earmarks, limited tax benefits, or limited tariff benefits as defined under clause 9(e), 9(f), and 9(g) of rule XXI of the Rules of the House of Representatives.

## COMPLIANCE WITH PUBLIC LAW 104-4

This bill contains no unfunded mandates.

## COMPLIANCE WITH H. RES. 5

**Directed Rule Making.** The Chairman believes that this bill does not direct an executive branch official to conduct any specific rule-making proceedings.

**Duplication of Existing Programs.** This bill does not establish or reauthorize a program of the federal government known to be duplicative of another program. Such program was not included in any report from the Government Accountability Office to Congress pursuant to section 21 of Public Law 111-139 or identified in the most recent Catalog of Federal Domestic Assistance published pursuant to the Federal Program Information Act (Public Law 95-220, as amended by Public Law 98-169) as relating to other programs.

## PREEMPTION OF STATE, LOCAL OR TRIBAL LAW

This bill is not intended to preempt any State, local or tribal law.

## CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

In compliance with clause 3(e) of rule XIII of the Rules of the House of Representatives, changes in existing law made by the bill, as reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italics, and existing law in which no change is proposed is shown in roman):

**SURFACE MINING CONTROL AND RECLAMATION ACT  
OF 1977**

\* \* \* \* \*

**TITLE VII—ADMINISTRATIVE AND MISCELLANEOUS  
PROVISIONS**

\* \* \* \* \*

**SEC. 721. RESEARCH.**

**【The Office of Surface Mining Reclamation and Enforcement】** (a) *IN GENERAL.*—*Subject to subsection (b), the Office of Surface Mining Reclamation and Enforcement is authorized to conduct studies, research and demonstration projects relating to the implementation of, and compliance with, title V of this Act, and provide technical assistance to states for that purpose. Prior to approving any such studies, research or demonstration projects the Director, Office of Surface Mining Reclamation and Enforcement, shall first consult with the Director, Bureau of Mines, and obtain a determination from such Director that the Bureau of Mines is not already conducting like or similar studies, research or demonstration projects.*

Studies, research and demonstration projects for the purposes of title IV of this Act shall only be conducted in accordance with section 401(c)(6).

(b) *MINING PROGRAM SUPPORT.*—

(1) *Of the amounts made available under this Act for activities authorized under this section, the Director of the Office of Surface Mining Reclamation and Enforcement shall ensure that at least 70 percent is expended to enhance and support mining and mineral engineering programs in the United States by funding activities at mining schools.*

(2) *In expending funds under this section, the Director shall consult with relevant stakeholders and ensure a significant opportunity for participation by undergraduate and graduate students at mining schools.*

(3) *The Director shall ensure that the activities conducted under this section relate to conventional fuel resource development and production, and include—*

(A) *studies of mining, mineral extraction efficiency, and related processing technology;*

(B) *mineral economics, reclamation technology, and practices for active mining operations;*

(C) *the development of remining systems and technologies that facilitate reclamation that fosters the recovery of resources at abandoned mine sites;*

(D) *investigations of mineral resource extraction methods that reduce environmental and human impacts;*

(E) *reducing dependence on foreign energy supplies; and*

(F) *enhancing the competitiveness of United States energy technology exports.*

(c) *MINING SCHOOL DEFINED.*—*In this section the term “mining school” means a mining or mineral engineering program or department accredited by the Accreditation Board for Engineering and Technology, Inc., that is located at an institution of higher education (as that term is defined in section 631(a) of the Higher Education Act of 1965 (20 U.S.C. 1132(a))) in the United States.*

\* \* \* \* \*

## ADDITIONAL VIEWS

We have serious concerns regarding H.R. 3734 because it would significantly restrict the limited amount of money provided through the Office of Surface Mining Reclamation and Enforcement's (OSMRE's) Applied Science grant program to any school without an accredited mining or mineral engineering program.

Already, funding for the Applied Science grant program is sporadic and insufficient, with no money appropriated for the program since 2012, and only \$8.1 million provided from 2005 through 2012. Allowing no more than 30 percent of any future appropriated money to go towards projects at otherwise world-class universities that don't possess mining or mineral engineering programs arbitrarily limits the amount of money that can be awarded for ecosystem restoration studies and other worthwhile work that helps to mitigate or reverse the impact of surface mining.

Schools such as Case Western Reserve University, the University of Oklahoma, the University of New Mexico, the University of Tennessee, and Stephen F. Austin State University, which received Applied Science grant money the last time it was available, would be unfairly disadvantaged in any future round of grant making. Furthermore, a good portion of the Applied Science grant money has gone to support important work at other federal and state agencies, such as the U.S. Department of Agriculture's Agricultural Research Service, the Virginia Department of Environmental Quality, and the Ohio Department of Natural Resources. These agencies would be forced to compete with the other non-mining schools for the limited pool of available money.

We support mining engineering programs and would readily back a program that provided additional funding to those programs to accomplish the purposes of this bill. However, limiting the paltry amount of money currently made available under the Applied Science program to just 14 universities with mining engineering programs makes a small pie even smaller for agencies and schools that don't have those programs.

We are prepared to work with the Majority on ideas to support education and workforce development in the mining industry, but we must avoid arbitrarily disadvantaging other worthwhile research efforts in order to do that.

RAÚL GRIJALVA,  
*Ranking Member, Committee  
on Natural Resources.*

GRACE NAPOLITANO,  
*Member of Congress.*

ALAN LOWENTHAL,  
*Ranking Member, Sub-  
committee on Energy and  
Mineral Resources.*

JARED POLIS,  
*Member of Congress.*

○