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**Memorandum from the Chairman  
to the Members of the Committee on Education and Labor**

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**Regarding the August 2007 Disaster at the  
Crandall Canyon Mine**

**May 8, 2008  
Congressman George Miller, Chairman**

This memorandum summarizes the status of the Committee's investigation of the deaths of six miners and three rescuers in 2007 at the Crandall Canyon Mine ("CCM" or the "Mine"), an underground coal mine near Huntington, Utah.

## **Background**

On August 6, 2007, a major structural failure – a pillar burst or series of pillar bursts, known as a “bump”<sup>1</sup> – within the CCM blocked all exits out of what had been the South Barrier of the Main West section of the Mine.<sup>2</sup> Miners were excavating the South Barrier at the time of the bump, which registered a 3.9 on the Richter scale. Debris created by the bump led to the entombment and deaths of six miners: Kerry Allred; Don Erickson; Alonso Hernandez; Carlos Payan; Brandon Phillips; and Manuel Sanchez. On August 16, 2007, a second bump killed three individuals<sup>3</sup> – Dale Black, Gary Jensen, and Brandon Kimber – who were part of the effort to rescue the six trapped miners.

Genwal Resources, Inc. (“Genwal”) had operated the Mine since 1995.<sup>4</sup> The Mine closed last year in the wake of the tragedy.<sup>5</sup> UtahAmerican Energy, Inc. (“UtahAmerican”) a wholly-owned subsidiary of Ohio-based Murray Energy Corporation (“Murray Energy”), purchased Genwal's parent corporation, Andalex Resources, Inc., in August 2006.

## **Committee's Investigation to Date**

In late August, Committee staff members arrived on site at the Mine, where they attended family meetings and public briefings and met with Mine Safety and Health Administration (“MSHA”) officials and other relevant officials.

On August 23 and 27, 2007, I made two document requests of the Department of Labor (the “Department”). The first was for the Emergency Response Plan for the CCM. The second was for communications between various entities and the Department.<sup>6</sup> Additionally, following the completion of the rescue effort, the Committee issued a more comprehensive request to the Secretary of Labor on September 4, 2007.<sup>7</sup>

After the Committee staff was unable to secure assurances that the Department would voluntarily comply in full with the document requests, I subpoenaed the most important subset of the requested documents on September 24, 2007.<sup>8</sup> I excluded from this subset those documents in the possession of the MSHA accident investigation team<sup>9</sup> so as to not burden that team or hamper its efforts.

Committee staff has reviewed more than 100,000 pages of responsive documents produced by Murray Energy. Committee staff has also reviewed more than 300,000 pages of documents produced by the Department, though many of these files were duplicates or of little value, and some were erroneously produced and entirely unrelated to the Committee's investigation.

In early September, Committee staff again traveled to Utah to conduct informal interviews of relevant individuals, including family members of the victims. Staff also met with faculty from the University of Utah who monitor the seismology station which records seismic activity in the region, including seismic activity that may result from mining activities. Committee staff also

traveled to the MSHA District 9 headquarters in Denver, Colorado to meet with the MSHA officials charged with oversight of the Crandall Canyon Mine. Upon returning to Washington, staff spoke with the chief of a nearby mine's rescue team, a team which attempted to reach the trapped miners in the hours immediately following the bump.

By November 2007, it became clear that the Committee's endeavor to conduct a full and fair investigation would benefit if the Committee had authority to compel and take formal depositions in addition to its then extant authority to collect documentary evidence and pursue the informal interview process. Accordingly, I introduced H. Res. 836 on December 4, 2007, to grant the Committee authority to conduct depositions in furtherance of the investigation. The morning of December 5, 2007, the Committee met to amend its rules to establish the procedure for taking investigative depositions.<sup>10</sup> Later the same day, the Committee on Rules held a hearing and mark-up on H. Res. 836 at which the Rules Committee recommended that the House approve the resolution.<sup>11</sup> That evening, the full House approved H. Res. 836.<sup>12</sup>

In early January 2008, the Committee invoked its new authority and requested that three employees of Genwal/UtahAmerican sit for depositions. In response, the three employees each provided an affidavit stating that he would invoke his Fifth Amendment right against self-incrimination at any such deposition.<sup>13</sup> In light of their respective assertions, Committee counsel excused the individuals from appearing for a deposition subject to the Committee overruling the individuals' claims of privilege.

By the end of January, the Committee had requested that three current or former MSHA employees sit for depositions: Allyn Davis, William Reitze and Billy Owens. Owens, who retired from MSHA in January,<sup>14</sup> agreed to appear on February 20, 2008, for the requested deposition.<sup>15</sup>

Because Allyn Davis and William Reitze were still employed by MSHA, Committee counsel worked through the Department's Office of Congressional and Intergovernmental Affairs and its Solicitor's Office to secure the attendance of Davis and Reitze. After the Solicitor's Office failed to confirm that Reitze and Davis would appear for their depositions,<sup>16</sup> I subpoenaed both men on February 1, 2008.<sup>17</sup> The Department then confirmed that the two would appear as requested. Ultimately, Reitze and Davis were each deposed on February 15, 2008.<sup>18</sup>

Meanwhile, on February 8, 2008, the Committee requested that Steven Falk, an employee of the Bureau of Land Management, appear for a deposition.<sup>19</sup> Mr. Falk is responsible for overseeing mines that operate on federally leased land in the area, including Crandall Canyon.<sup>20</sup> On March 7, 2008, he appeared as requested and offered his testimony.<sup>21</sup>

On February 21, 2008, I subpoenaed Bruce Hill, president of UtahAmerican,<sup>22</sup> and Robert Murray, president of Murray Energy,<sup>23</sup> to appear for depositions. Like their subordinates, both Hill and Murray submitted affidavits invoking their Fifth Amendment right against self-incrimination. In both instances, Committee staff confirmed with the respective counsel that the men need not appear for a deposition in light of their assertion of their Fifth Amendment right, subject to the Committee ruling on the privilege claims.

Throughout the investigation, the Committee has been respectful of the Department's requests for Committee staff to delay interviewing certain individuals until the MSHA accident investigation team completed its interviewing. On February 25, 2008, MSHA alerted the Committee that it had completed its interviews with Agapito Associates, an engineering consultancy advising UtahAmerican and its subsidiaries. I then issued subpoenas to the president of Agapito, Michael Hardy,<sup>24</sup> and a former principal of the company, Leo Gilbride.<sup>25</sup> Both individuals subsequently submitted affidavits invoking the Fifth Amendment, and were excused by Committee counsel from attending, subject to the Committee overruling their assertions.<sup>26</sup>

As the investigation progressed, it became clear that the investigation would benefit from an expert consultant to assist with the various technical issues that the investigation was uncovering. On February 28, 2008, the Committee engaged the services of the Norwest Corporation, an engineering firm. Norwest was hired to re-evaluate the conclusions that Agapito came to when creating recommendations regarding a dangerous mining plan at the CCM. Norwest's findings are discussed in detail in the next section of this memorandum.

On April 14, 2008, the Committee subpoenaed Agapito for documents related to its work on the CCM.<sup>27</sup> Agapito complied, producing PDFs of documents and working files in native file format.

The Department and Murray Energy continue to produce documents, though we understand that the productions are in their final phases. As the Department and Murray Energy finish their productions, Committee staff will continue to review the documents as received.

### **Committee's Engineering Consultants**

As noted above, in February 2008 the Committee engaged Norwest Corporation ("Norwest") to offer its independent, expert opinion as to whether or not MSHA, based on the information that Genwal provided to the agency, should have approved an amendment, submitted by Genwal to MSHA in May 2007, to the CCM's roof control plan. A roof control plan is a plan for ensuring the stability of the roof and walls of a mine while mining activity takes place.<sup>28</sup> The amendment that Genwal submitted in May 2007 covered the mining done in the South Barrier, the section of the Mine in which the August 2007 deaths occurred.

Norwest provided its final report this week. I have attached a copy of the report to this memorandum as Exhibit A. Norwest concluded that significant red flags call into question the plan's sufficiency.

To better understand Norwest's analysis, it is helpful to be familiar with the layout of the area of the mine where the August bump occurred. During the mining of the western area of the CCM, access to that area could be gained through Main West, which was, in effect, a large corridor of pillars of coal. This Main West corridor received structural support from the North and South Barriers on either side of it. Miners traveling along Main West from east to west would thus have the North Barrier on their right and the South Barrier on their left. To give you a sense of

the scale, both the North and South Barriers are somewhat wider than the length of a football field. A map of the CCM, including its western area, is attached as Exhibit B.

Main West was sealed shut in 2004 after the vast majority of the coal in the western area of the CCM had already been mined.<sup>29</sup> To the extent that there was any significant coal remaining in the western area of the CCM, it was in the North and South Barriers. The roof control plan covering the North Barrier, as well as the May 2007 amendment to the plan covering the South Barrier, surmised that the areas surrounding these barrier pillars could support the load over the North and South Barriers while retreat mining was conducted in those sections of the mine. In other words, where before the North and South Barriers were counted on to provide structural support for Main West, under the roof control plan and amendment these roles would be reversed in a sense, with the pillars in Main West expected to provide structural support for the North and South Barriers while retreat mining was conducted in those sections.

In formulating the roof control plan, Genwal must have made assumptions about the condition of the pillars in Main West because that area of the Mine was sealed in 2004. (The seal was broken during the early phase rescue attempt after the first August 2007 tragedy.) Norwest concluded that the roof control plan probably would have been sufficient and would not have led to the fatal August 6, 2007, bounce had the pillars in Main West been in good condition. Norwest concluded that the likely explanation for the August 6 failure is that the pillars in Main West had been degraded since the time that they were created and were not sufficiently strong to safely support the load created when the barrier pillars were mined.

The significant bump in March in the North Barrier was a red flag indicating that Main West was unable to support the loads it was asked to support. Had Main West been in acceptable shape, there would not have been significant bumping in the North Barrier. That is, the likely explanation for a significant March bump is that the pillars in Main West were degraded and the roof control plan was faulty.

Even without the March bump, however, Genwal and MSHA should have been skeptical about the condition of the pillars in Main West. An *ex ante* analysis would have led Genwal and MSHA to believe that pillars in Main West could have been degraded. And the U.S. Bureau of Land Management had noted some deterioration in the pillars before Main West was sealed in 2004. If Mine operators and MSHA officials had assumed that the Main West pillars were degraded, the plan (aggressive even with perfect pillars) would have been unacceptable.

### **Criminal Referral to the Department of Justice**

Last month, I sent a criminal referral to the Department of Justice, recommending that it investigate whether the mine's general manager, Laine W. Adair, individually or in conspiracy with others, willfully concealed or covered a material fact or made materially false representations in a matter under the jurisdiction of the executive branch, specifically MSHA, in violation of 18 U.S.C. § 1001. I have attached a copy of the referral to this memorandum as Exhibit C.

As part of the Committee's investigation, Committee staff uncovered evidence that prior to the August disaster Adair and others in the CCM management team – as well as in its corporate parent Murray Energy's management team – were aware of a significant bump that occurred within the Mine on or about March 10, 2007.<sup>30</sup> The evidence indicates that this bump, despite causing significant damage within the Mine and stopping production, was not reported as required per 30 CFR § 50.10.<sup>31</sup> In addition, evidence indicates that the operator not only failed to report the bump properly, but that Adair may have significantly downplayed the extent of the March bump in conversations with MSHA staff.

As this memorandum has described, after the March bump forced Genwal to cease production in the North Barrier,<sup>32</sup> Genwal sought approval for and pushed forward with its plans to mine the South Barrier – the section where the bump occurred on August 6, 2007. During the course of the investigation, the Committee learned that Genwal management invited a representative from the Bureau of Land Management (“BLM”) into the Mine just days after the March bump (though after the mine was at least partially cleaned up)<sup>33</sup> specifically to examine the damage caused by the bump.<sup>34</sup> Genwal did not relay the same urgency to its MSHA contacts.<sup>35</sup> This is curious: While MSHA is the federal agency responsible for the health and safety of mine workers, BLM is the federal agency responsible for collecting lease payments from mining companies that operate on federal lands. The mine operator called BLM.

Additionally, during the Committee's deposition of Allyn Davis, the MSHA District 9 supervisor, Davis was asked about photos of the affected areas of the Mine after the March bump. Referring to his conversations with Adair about the March bump and the photos of the damage it caused in the Mine, Davis noted: “The photos that I saw and the description I got from Laine Adair don't match.”<sup>36</sup>

It is quite possible that, had MSHA known the full severity of the March bump, MSHA would not have approved the subsequent development and retreat mining of the South Barrier. As discussed above, the analysis conducted by Norwest indicates that this event should have been a significant red flag. Adair and others at Genwal may have purposely misled MSHA about the severity of the March bump fearing MSHA would close the Mine and continued to adhere to the mischaracterization after the August incidents in an effort to downplay the foreseeability of the August incident.

As I noted above, Committee staff requested that Adair appear at a deposition to be taken by Committee counsel per H. Res. 836 and Adair invoked his Fifth Amendment right against self-incrimination. In addition, Adair's counsel asserted to the Committee in a letter that “Mr. Adair has earned an impeccable reputation in the mining industry as a hard-working, straightforward person devoted above all to the safety of miners and fairness in his treatment of others.”<sup>37</sup>

### **Next Phase of Investigation**

Kevin Stricklin, MSHA's Administrator for Coal Mine Safety and Health, has indicated publicly that MSHA's accident investigation team headed by Robert Gates expects to release its final report sometime in June.<sup>38</sup> Additionally, a Department representative has said publicly that the review of MSHA's actions commissioned by the Secretary of Labor that is being conducted by

two retired MSHA employees expects to finish its work around the same time.<sup>39</sup> The Committee expects to review these reports, compare them to the evidence that the Committee has gathered, and recommend what, if any, additional action is warranted by the Committee.

Finally, the Committee will make available to appropriate authorities, including the MSHA accident investigation team and the team reviewing MSHA's actions, any evidence that the Committee has gathered that may be of use.

### **Supplementary Mine Improvement and New Emergency Response Act**

The Committee's investigation of the tragedies at the Crandall Canyon Mine inform several aspects of H.R. 2768, the Supplementary Mine Improvement and New Emergency Response Act (S-MINER), which passed the House in January and is awaiting action in the Senate. Most notably, S-MINER would require MSHA to undertake a more rigorous review of every retreat mining plan.

It appears that Genwal, Agapito, and MSHA made, allowed for, or failed to challenge assumptions regarding the condition of the pillars in the Main West at Crandall Canyon Mine. Tragically, we know now that those apparent assumptions were wrong. To prevent similar tragedies in the future, S-MINER adds some new requirements to those put into place by the Congress almost 40 years ago.

First, the Committee's investigation demonstrates the critical role in using appropriate computer simulations in designing roof control plans. Section 4(i)(1)(C) of S-MINER would require that MSHA conduct robust computer simulations of roof control plans similar to those our Committee consultants ran as part of our investigation, and seek technical expertise in evaluating such plans from the National Institute of Occupational Safety and Health among others. Moreover, the changes require MSHA to establish an additional internal review process for operator plans for retreat mining at depths of more than 1500 feet and in other mines with a history of mountain bumps. Miners should not have to wait until a disaster has occurred for the latest computer modeling and mine engineering expertise to tell us that a roof control plan was flawed.

The Committee's investigation highlights the important role that baseline assumptions play in the analysis of roof control plans. Accordingly, Section 4(i)(2) of S-MINER requires the National Academy of Sciences, in consultation with the National Institute on Occupational Safety and Health, to conduct a comprehensive study of the science underlying proper retreat mining practices, including special attention to the problems of deep mines, and to explore available technologies that could improve safety. This would expand upon a more limited study of deep mining problems funded by the Congress last year.

The Committee's investigation has uncovered the fact that, though the initial plan to mine the barrier pillars formerly protecting the Main West entry was ill-advised, a significant red flag was missed by MSHA in March. Section 4(i)(1)(C) of S-MINER recognizes that no plan can remove all doubt about safety unless it is properly implemented. Accordingly, the bill requires MSHA to ensure that every person participating in retreat mining activity has been properly trained in the plan's requirements, and requires MSHA to observe the retreat mining plan implementation and conditions underground. Whether or not Genwal misled MSHA about the March bump, had

MSHA been in the mine to observe the conditions leading to and following the March bump, it is inconceivable to think that MSHA would have failed to question the assumptions used in the roof control plan to mine the North Barrier pillars – the same assumptions used to mine the South Barrier pillars, with fatal results.

## Endnotes

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<sup>1</sup> “A coal mine bump, also known as a bounce or burst, is the sudden outbursts of coal and rock that occur when stresses in a coal pillar, left for support in underground workings, cause the pillar to rupture without warning, sending coal and rock flying with explosive force. On the average, two coal miners are seriously injured each year and a miner is killed every other year due to coal bumps.” National Institute for Occupational Health, NIOSH Mining Safety and Health Topic: Historic Coal Bump Data, available online at <<http://www.cdc.gov/niosh/mining/topics/groundcontrol/bumps/bumps.htm>> (visited May 5, 2008).

<sup>2</sup> Mine Safety and Health Administration, *Fatalgrams for the Coal Mine Accident on August 16, 2007* [sic]- *Fatality #19-24*, available online at <<http://www.msha.gov/FATALS/2007/FAB07c1924.asp>> (visited May 5, 2008).

<sup>3</sup> Mine Safety and Health Administration, *Fatalgrams for the Coal Mine Accident on August 16, 2007- Fatality #15-17*, available online at <<http://www.msha.gov/FATALS/2007/FAB07c1517.asp>> (visited May 5, 2008).

<sup>4</sup> A subsidiary of Murray Energy Corp. (“Murray Energy”) owned a fifty percent interest in the output of the Mine, though the Mine was operated entirely by Genwal. See Utah Division of Oil, Gas and Mining, *CO15032*, available online at <<http://ogm.utah.gov/coal/mines/C015032.htm>> (visited May 5, 2008). Intermountain Power Agency owned the other fifty percent interest in the Mine’s output. *Id.*

<sup>5</sup> Paul Foy, *Collapsed Utah mine where 6 workers' bodies remain has been sealed*, AP Worldstream (Nov. 21, 2007).

<sup>6</sup> See Ltr. from Chair. Miller to Sec. Chao (Aug. 23, 2007); Ltr. from Chair. Miller to Sec. Chao (Aug. 27, 2007).

<sup>7</sup> See Ltr. from Chair. Miller to Sec. Chao (Sep. 4, 2007).

<sup>8</sup> See Subpoena Issued by Chair. Miller to Sec. Chao (Sep. 24, 2007).

<sup>9</sup> *Id.*

<sup>10</sup> See <http://edlabor.house.gov/markups/fc20071205.shtml>; Rule 24, Rules of the Committee on Education and Labor (as amended), 110<sup>th</sup> Congress (Dec. 5, 2007); Committee on Rules Report to Accompany H. Res. 836, Report 110-473, 8-9 (Dec. 5, 2007).



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<sup>11</sup> See Committee on Rules, *Report to Accompany H. Res. 836*, No.110-473, 8-9 (Dec. 5, 2007).

<sup>12</sup> See Congr. R. at H14226-27 (Dec. 5, 2007).

<sup>13</sup> See Aff. of Laine Adair at 1 (Jan. 23, 2008); Aff. of Gary Peacock (Jan. 31, 2008); Aff. of Jim Poulson (Jan. 28, 2008).

<sup>14</sup> See Depo. Tr. of Billy Owens at 17 (Feb. 20, 2008) (“Owens Depo. Tr.”).

<sup>15</sup> See Owens Depo. Tr.

<sup>16</sup> I have no reason to believe that Messrs. Davis and Reitze were being at all evasive. Rather, it appears that the culprit was incompetence or misunderstanding at or between the Office of Congressional and Intergovernmental Affairs and the Solicitor’s Office that forced the issue.

<sup>17</sup> See Subpoena Issued by Chair. Miller to Allyn Davis (Feb. 1, 2008); Subpoena Issued by Chair. Miller to William Reitze (Feb. 1, 2008).

<sup>18</sup> See Depo. Tr. of Allyn Davis (Feb. 15, 2008) (“Davis Depo. Tr.”); Depo. Tr. of William Reitze (Feb. 15, 2008) (“Reitze Depo. Tr.”).

<sup>19</sup> See Official Notice of Deposition of Steven Falk (Feb. 8, 2008).

<sup>20</sup> See Depo. Tr. of Steven Falk at 41 (Mar. 7, 2008) (“Falk Depo. Tr.”).

<sup>21</sup> See Falk Depo. Tr.

<sup>22</sup> See Subpoena Issued by Chair. Miller to P. Bruce Hill (Feb. 21, 2008).

<sup>23</sup> See Subpoena Issued by Chair. Miller to R. Murray (Feb. 21, 2008).

<sup>24</sup> See Subpoena Issued by Chair. Miller to M. Hardy (Mar. 6, 2008).

<sup>25</sup> See Subpoena Issued by Chair. Miller to L. Gilbride (Mar. 6, 2008).

<sup>26</sup> See Aff. of L. Gilbride (Mar. 28, 2008); Aff. of M. Hardy (Mar. 28, 2008).

<sup>27</sup> See Subpoena Issued by Chair. Miller to Agapito Associates, Inc. (Apr. 14, 2008).

<sup>28</sup> See 30 U.S.C. § 862(a).

<sup>29</sup> See Falk Depo. Tr. at 23.

<sup>30</sup> See Aff. of Luis Payan at 1 (Mar. 7, 2008) (“Payan Aff.”); Falk Depo. Tr. at 56; Davis Depo. Tr. at 55-56; Reitze Depo. Tr. at 21; Owens Depo. Tr. at 58; See UEICONG-K000038554 (Mar. 12, 2007) (handwritten note of Murray Energy Corp. CEO Robert Murray acknowledging he was made aware of the March bump). The company also produced photos of the damaged areas of the mine. UEICONG000020829-51. Citations to documents with Bates stamps

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beginning with UEICONG were produced to the Committee on behalf of Murray Energy and its subsidiaries and are on file with Committee staff.

<sup>31</sup> See Statement of Richard Stickler before the Senate Committee on Health, Education, Labor and Pensions, at 2 (Oct 2, 2007).

<sup>32</sup> See Reitze Depo. Tr. at 25; Falk Depo. Tr. at 58-59; Davis Depo. Tr. at 56.

<sup>33</sup> Compare Payan Aff. at 2 and Falk Depo. Tr. at 70-71.

<sup>34</sup> See Falk Depo. Tr. at 70.

<sup>35</sup> See Davis Depo. Tr. at 81; Owens Depo. Tr. at 61.

<sup>36</sup> See Davis Depo. Tr. at 81; Davis Aff. at 1.

<sup>37</sup> See Ltr. from G. Poe to P. Findlay at 2 (Jan. 23, 2008).

<sup>38</sup> Mike Gorrell, *Investigation into Crandall Canyon expected to wrap up in about three months*, Salt Lake Tribune (Mar. 28, 2008).

<sup>39</sup> Thomas Burr, *U.S. Labor secretary chided for silence about Crandall Canyon mine disaster*, Salt Lake Tribune (Apr. 3, 2008).