

U.S. Department of Labor

Office of Administrative Law Judges
90 Seventh Street, Suite 4-800
San Francisco, CA 94103-1516

(415) 625-2200
(415) 625-2201 (FAX)



Issue Date: 11 October 2012

OALJ CASE NO.: 2012-MSA-00001

In the Matter of:

RESOLUTION COPPER MINING,
Petitioner,

v.

**DEPARTMENT OF LABOR,
MINE SAFETY AND HEALTH ADMINISTRATION,**
Respondent.

Before: Richard M. Clark
Administrative Law Judge

DECISION AND ORDER REGARDING PETITION FOR MODIFICATION

This claim arises under the Mine Safety and Health Administration's ("MSHA") Safety and Health Standards for Underground Metal and Non-Metal Mines, 30 C.F.R. Part 57, and the modification procedures for these standards set forth in Section 101 of the Federal Mine Safety and Health Act of 1977 ("the Act"), codified at 30 U.S.C. § 811(c) and 30 C.F.R. Part 44. A formal hearing was held in Denver, Colorado, from May 23 through 24, 2012. Laura Beverage and Page Jackson, Attorneys at Law, represented Resolution Copper Mining ("Petitioner"). Jason Grover, Attorney at Law, represented the Department of Labor, MSHA ("Respondent"). The case was referred to the Office of Administrative Law Judges ("OALJ") for hearing on December 15, 2011.

At the hearing, the following exhibits were admitted into evidence: Administrative Law Judge exhibits ("ALJX") 1 through 3; Petitioner's exhibits ("PX") 1 through 22; and Respondent's exhibits ("RX") 1 through 4. Hearing Transcript ("TR") at 8-12, 20, 251. On August 3, 2011, Petitioner and Respondent submitted simultaneous post-hearing briefs, which were marked respectively as ALJX 4 and 5, thereby closing the record.

For the reasons stated below, this Decision finds that Petitioner's personnel conveyance is not a "bucket," and that therefore 30 C.F.R. § 57.19076 and its 500 feet per minute speed limit do not apply. Because Petitioner's conveyance is not a bucket and the regulation does not apply, this Decision does not reach the issue of whether Petitioner's proposed modification should be granted.

I. POSITION OF THE PARTIES

On April 12, 2011, Petitioner submitted a Petition for Modification to the MSHA requesting a modification from the safety regulation codified at 30 C.F.R. § 57.19076, which sets the maximum speed for hoisting people in buckets at 500 feet per minute. PX 5. Petitioner argued that its “personnel conveyance” was not a bucket under the regulation, but rather an “enclosed capsule designed for the transport of personnel.” PX 5 at 1. However, because the MSHA told Petitioner that the regulation was applied, in the alternative, Petitioner requested that the MSHA grant a modification allowing the personnel conveyance to proceed at a speed of 1,200 feet per minute in the “unobstructed” portions of the Number 10 mine shaft below the “never sweat” level. *Id.* Petitioner argued that this modification would “provide at all times the equivalent protections contemplated by the [regulation] and would reduce the time the shaft miners are exposed to the restricting ergonomic impact of shaft travel.” *Id.* at 2.

On June 14 through 15, 2011, the MSHA conducted a field investigation of Petitioner’s mining facility, and issued a report on July 26, 2011. PX 13. The MSHA gave Petitioner a list of seven recommended safety enhancements, and it further recommended that the “emergency stopping deceleration rates experienced by personnel riding in the enclosed bucket conveyance should be calculated and/or determined experimentally with field testing,” with the calculations and test chart data to be submitted to MSHA for evaluation. *Id.* at 6. The MSHA felt that this analysis “would allow a more informed decision regarding the potential hazards created when the hoisting speed exceeds 500 [feet per minute],” and directed that the MSHA postpone a decision regarding the Petition for Modification until this data was submitted for review. The report concluded that granting of the Petition was “not recommended at this time” due to insufficient information to make a determination that a superior or equivalent level of safety is provided with the 1,200 feet per minute modification. *Id.* Further deceleration tests were not conducted by Petitioner until December 2011, with a subsequent report in February 2012.

The MSHA did not, however, wait for further deceleration testing, and on November 4, 2011, it issued a Proposed Decision and Order (“Order”) denying Petitioner’s Petition for Modification. PX 14.¹ Significantly, the MSHA wrote that the personnel conveyance at issue was “not a ‘bucket,’” “but rather [was] an enclosed capsule designed for the transport of personnel.” *Id.* at 1. Notwithstanding that MSHA said the personnel conveyance was not a bucket, the MSHA still applied 30 C.F.R. § 57.19076 and the 500 feet per minute speed limit to Petitioner’s “personnel conveyance.” *Id.* Throughout its three page order, MSHA referred to the conveyance at issue as a “personnel conveyance,” a “conveyance,” a “bucket,” a “personnel bucket,” and an “enclosed bucket.” *Id.* at 1-3. It then held that the proposed speed modification would “not at all times provide a safe work environment for miners and guarantee no less than the same measure of protection afforded under 30 C.F.R. § 57.19076.” *Id.* at 2. It relied primarily upon the findings of the field investigation to reach this conclusion. *Id.* The MSHA

¹ As requested by the MSHA in its field investigation, G.L. Tiley, a specialist mine hoist engineering company, conducted a series of new deceleration tests at the level of the personnel conveyance in December 2011, and issued a report with the results of the testing in February 2012. PX 11; TR at 206-07. The report revealed that at a speed of 1,200 feet per minute, the emergency brake deceleration rates were most commonly between 12 and 16 feet per second squared, which is within the limits set forth by 30 C.F.R. § 19.062. PX 11 at 3-4. The report concluded that man-travel could be safely conducted at 1,200 feet per minute in the conveyance, using the brake settings developed during the testing. *Id.* at 4; *see also* PX 6.

opined that Petitioner had not made sufficient efforts to mitigate against the two primary hazards raised by the MSHA investigation team, namely the deceleration rates of the conveyance and the increased potential kinetic energy release, and consequently denied the Petition for Modification. *Id.* at 3.

Petitioner disagreed with the MSHA's Proposed Decision and Order, and on December 5, 2011, requested a hearing on the matter.

II. ISSUES IN DISPUTE

The matter presents the following disputed issues:

1. Whether Petitioner's personnel conveyance is a "bucket" under 30 C.F.R. § 57.19076.²
2. If Petitioner's conveyance is a "bucket" and 30 C.F.R. § 57,19076 applies, whether Petitioner's proposed modification satisfies the standard set forth in 30 U.S.C. § 811(c) and 30 C.F.R. § 44.4(a).³

III. FACTUAL FINDINGS

The Resolution Copper Mining Project

1. The Resolution Copper Mining Project ("Resolution Mine") is located three miles east of the town of Superior, Arizona. TR at 41; ALJX 1 at 1. It is a massive, \$6 to \$8 billion undertaking, with the expectation that the mine will become one of the most productive copper mines in North America, and the deepest mine of its type in the world. TR at 19, 33; PX 13 at 1; ALJX 1 at 3. At the time of its anticipated completion in 2023, Resolution Mine plans to have six active, nearly 7,000 foot deep mine shafts, and to mine at a rate of 110,000 to 120,000 tons a day for the 40-year life of the known ore body. TR at 33; ALJX 1 at 2. The mine is currently in the "pre-feasibility phase," which involves sinking the new "Number 10 shaft" and rehabilitating the old "Number 9 shaft" of the Magma Copper Company's old Magma Mine. ALJX 1 at 1-2. The Number 10 shaft is the shaft at issue in this matter. TR at 33. The shaft construction and rehabilitation are currently being performed by Cementation USA ("Cementation"), a shaft-sinking contractor. ALJX 1 at 2. Rio Tinto, the third largest mining company in the world, is the managing partner of this project, and all of the Resolution mine employees are employed by Rio Tinto. TR at 34.

² When persons are hoisted in buckets, speeds shall not exceed 500 feet per minute and shall not exceed 200 feet per minute when within 100 feet of the intended station.

³ Generally, a petition for modification may be granted if the Secretary determines that an alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard, or that the application of such standard to such mine will result in a diminution of safety to the miners of that mine.

2. Thomas Goodell is the General Manager of Underground Development for Rio Tinto, where he is in charge of safety, budget, and schedule compliance for the Number 10 shaft project. TR at 32. He has worked for Rio Tinto since 2006, when he started as the Project Manager for the Number 10 mine shaft for the Resolution Copper project. TR at 30-32. Mr. Goodell received his bachelor's degree in geology from Colorado State University in 1973. TR at 22. He has worked in the mining industry for 39 years and has extensive experience with mine shaft sinking and slope development. TR at 22-32. Mr. Goodell qualified as an expert in the development and sinking of mine shafts and testified as such at the hearing. TR at 61-62.

The Number 10 Mine Shaft

3. Ryan Gough is the Manager of Project Services for Cementation, and is currently overseeing the technical support operations group at the Resolution Mine. PX 21. He has a bachelor's of science in mechanical engineering from the University of Toronto. TR at 171; PX 21 at 2. Mr. Gough is a licensed professional engineer (PEng) in the province of Ontario, Canada, which requires a degree in engineering, four years of practical experience, and a law and ethics exam, and authorizes him to "stamp" engineering documents as authentic and accurate.⁴ TR at 179-80. He has over 20 years of experience in mine construction and engineering. PX 21. Since 2001, Mr. Gough has worked for Cementation, where, as Manager of Project Services, he runs a technical support group of specialist engineers who provide support to Cementation's projects in North America. TR at 173. The majority of his projects with Cementation involve shaft sinking jobs, including his work at Resolution Mine. *Id.* Mr. Gough and his engineering team have an ongoing role operating, providing maintenance, support, and troubleshooting for the Resolution Mine hoist system. TR at 193. Mr. Gough testified at the hearing as an expert in shaft sinking, plant design and operation. TR at 179.

4. When completed, the Number 10 shaft at Resolution Mine will be 6,943 feet deep, with a diameter of 28 feet. TR at 36; PX 5 at 1; PX 13 at 1-2. According to Mr. Gough, that depth classifies Resolution Mine as being on the "extreme end" of a deep shaft project. TR at 176. At the time of the May 23, 2012, hearing, the shaft was 5,520 feet deep. *Id.* In the actual mine shaft, there are three compartments, the Number 1, 2, and 3 compartments. TR at 56, 77-78. The Number 1 and 2 compartments are for the main conveyances and hoists, which contain the two main conveyances of transport, one on each side, hooked onto a common hoist. TR at 56, 78. As the hoist moves, it will bring one conveyance up, and bring the other down in a mechanical balance. TR at 56, 81. There are three main types of conveyances which can be attached and used in the Number 1 and 2 compartments: the personnel conveyance, which is used primarily to transport people and small tools and only runs in the number 1 compartment of the shaft; the mucking buckets, which transport up to 14 tons of rocky materials extracted from the mine;⁵ and the concrete buckets, which transport concrete and "shortcrete." TR at 78, 91, 198, 248-49; PX 13 at 2; RX 1 (image of concrete conveyance); RX 2 (image of muck bucket); RE 3; PX 1 at 23 (images of personnel conveyance). The third compartment is a fixed guide system for the auxiliary "Maryanne" cage conveyance. TR at 64-65, 78, 139. Inside the shaft,

⁴ Mr. Gough described a professional engineer license in Canada as being comparable to the title of a certified professional engineer in the States. TR at 179.

⁵ "Muck" refers to all of the loose stone, dirt, and debris collecting inside the shaft after the blasting is completed. ALJX 2.

there is also a movable, multi-platform work stage called the “galloway,” which is 60 feet high, 26 feet in diameter, and has 5 active decks, with the potential for a 6th movable deck. TR at 40, 86; ALJX 2. The galloway weighs 163 tons, and is suspended by four, 40-plus ton bearing ropes. TR at 41. At the top of the shaft, above ground, is a 470-ton, 150-foot high steel head frame. TR at 36, 64; PX 1 at 1. From the top of the head frame, seven thick, steel cable ropes hang, four of which suspend the galloway, two of which hold the main conveyances, and one of which attaches to the Maryanne. TR at 64-65; PX 1 at 1. The ropes are coiled in an adjacent building depicted to the left of the head frame in PX 1 in large, drum-like structures called hoists and winches. TR at 64; PX 1 at 2. The hoists are for the rope attaching to the conveyances, and the four winches are for the rope suspending the galloway. TR at 64; PX 1 at 2. Cementation employees, as led by Mr. Gough, operate and maintain the hoist system. TR at 193.

5. Petitioner submitted a visual animation of the Number 10 mine shaft. PX 2. At the mine’s mouth or surface is what is referred to as the shaft “collar,” which is at zero elevation. TR at 37; PX 19; ALJX 2. At the collar, there is the first set of steel doors and gates in the shaft. TR at 46. These doors can close to prevent people or equipment from falling down the shaft, or open to allow a free path for the conveyances to move down the mine. TR at 45-46. Approximately 90 feet below the surface is the “vent level,” where cold air is pumped through several pipes into the shaft to counteract the hot temperature levels below the surface. TR at 37, 105; PX 1 at 13, 22; PX 5 at 6; PX 19. The vent level contains another set of steel doors and gates. TR at 46. About 800 feet below the surface is the “dump level,” where buckets full of ore and rock unearthed at the mine are dumped.⁶ TR at 38-39, 182; PX 5 at 6. There is another set of doors at the dump level, and a vertical structure called a “backsplash” to prevent rocks falling down the shaft if the muck bucket turns upside down. TR at 50, 96. Buckets unload these materials at the dump level, where they are dumped down a 62-degree angle decline “shoot” and descend to the “never sweat level.” TR at 39, 51. A man in a structure called a “crow’s nest,” wearing fall protection gear, monitors the dumping, attaches a “lazy chain” onto the muck buckets, which prevents them from tipping, and ensures that the lazy chain is out of the way after dumping so the bucket is clear to move down the shaft. TR at 51-52, 96; PX 1 at 18(b); *see* ALJX 2.

6. Below the dump level, at about 1,100 feet below the surface, is the “never sweat” level, where the dump materials arrive via the above-mentioned “shoot,” are loaded onto rail cars, and will be taken by a 2-mile never sweat tunnel to Superior, Arizona. TR at 39, 51; PX 1 at 22; PX 5 at 6. Much like the collar, vent level, and dump level, the never sweat level contains a steel door and gate, which can close to prevent the falling of materials or people who exit the personnel conveyance at this level to work. TR at 52-53. Just below the never sweat level is a 60-inch ventilation duct, which runs from the never sweat tunnel into the mine shaft, from which cold air is pumped down the shaft. TR at 52-53, 104; PX 1 at 22. Below the never sweat level, there are no more safety doors, and no obstructions inside the shaft. TR at 52-53. There are two electrical substations, which Mr. Goodell referred to as “doughnut stations,” which contain electrical junction boxes and pressure-reducing valves, but none of these obstructions are within the 28-foot diameter of the shaft. *Id.* Next, approximately 4,600 feet below the surface, is the “pump level,” which will eventually connect with the Number 9 shaft, and contain a large pump

⁶ Mr. Gough explained that it is uncommon to have the dump level located below the collar (surface) of the mine, and that it presents a “whole new and unique set of circumstances that we have to protect against.” TR at 182.

station to pump out the old mine. TR at 39-40; PX 5 at 6. About 100 feet below the “pump level” is the “transition pump station.” TR at 40. Near the bottom of the shaft is the movable work stage called the “galloway,” which carries equipment, can be raised and lowered, and is suspended from the head frames on the surface by four, load-bearing ropes. TR at 40-41; ALJX 2. Near the current shaft bottom, around 5,500 feet is the “haulage level,” which will be used to haul ore once the mine is built. TR at 40.

The Personnel (Man-riding) Conveyance

7. The personnel conveyance was “specifically designed for worker transport” by Cementation to move up to 17 (or 4,000 pounds) of people, small tools, and supplies through the mine; it is not capable of hauling muck, water, or being tipped upside down to dump materials. PX 5 at 1; TR at 110-12, 192; PX 7 at 3; *see* PX 1 at 27-28. It is 10 feet tall, and has two main compartments – an upper and lower compartment. TR at 109. Enclosing the lower compartment is a solid, steel door, which is perforated with half-inch circles for visibility and ventilation. TR at 108, 134; PX 1 at 23. The door opens by sliding along a track inside the conveyance, and locks in place using a vertical rod to prevent it from opening while travelling down the shaft. TR at 117; PX 1 at 24. When the door closes, it provides a completely enclosed lower main compartment for moving workers into the mine, and Cementation’s Transportation of Personnel Policy dictates that the conveyance door should be closed and latched before moving persons. TR at 109, 160; PX 16 at 4 (Rule 2.2.(5)). The smaller, “top deck” compartment is accessible from the lower compartment by climbing up a ladder, through a hatchway, which remains closed when the conveyance is in motion. TR at 118; PX 1 at 25-26; PX 3 at 6. The hatchway can be closed and locked with a metal latch. TR at 118; PX 1 at 26. Inside the personnel conveyance, there is a wireless shaft signal box that emits a signal through a “leaky feeder” in the shaft to the hoist operator. TR at 115. Mr. Goodell explained that this “leaky feeder” acts as a continuous antenna in the shaft, and allows workers in the shaft to provide bell signals, and to communicate directly by voice communication to the hoist operator.⁷ TR at 116.

8. Mr. Goodell indicated that this was a state of the art conveyance designed exclusively for the movement of workers; in his 39 years of experience, he had never seen a personnel conveyance, and noted that miners typically travel down the mine in the open-top mucking buckets. TR at 109. According to him, there was a “particular danger” with people climbing in and out of muck buckets, which can be several feet deep. TR at 110. Therefore, the personnel conveyance was designed “from scratch” to minimize the falling associated with riding in muck buckets. *Id.* at 110, 115. It was not a converted muck bucket, and Cementation’s Standard Work Procedure does not allow the personnel conveyance to transport anything but people and small hand tools. *Id.*; PX 16 at 4. According to Mr. Goodell, the miners greatly enjoy riding the personnel conveyance. TR at 111.

9. The personnel conveyance is guided down the mine shaft by a crosshead that attaches directly above it. The crosshead is a framework that travels on rope guides fixed at the head frame, with four “shoes” or “bushings” that attach to the same two winch ropes that are

⁷ Mr. Goodell explained that bell signals or “bells” are a required form of mine communication where a series of bell sounds indicate where the workers wish to move the conveyance, and whether or not the conveyance has people on it. TR at 116-17.

used to hold the galloway. TR at 44, 189, 195; PX 1 at 10; PX 5 at 2; PX 8 at 1; ALJX 2. Below the crosshead, a rope attachment structure with a dolly ball, socket, chase block, swivel, and hook with a safety latch attaches to a 6-foot, triangular, three-chain structure and to the hoist rope that hoists the personnel conveyance. TR at 44, 78, 180, 195; PX 1 at 10; PX 5 4; PX 8 at 1. This rope conveyance and guidance system prevents the personnel conveyance from wondering out of its zone of travel. TR at 44; PX 5 at 1. It is powered by a 15-foot diameter, 5,000 horsepower double drum Nordberg hoist that winds the rope at the mine's surface. TR at 65, 81-82; PX 1 at 12; PX 5 at 1; PX 7 at 3; ALJX 2. The crosshead is "chaired," or released at the galloway entrance, so the personnel conveyance may move through the galloway.⁸ TR at 191.

10. The personnel conveyance only rides on the hoist on the Number 1 compartment of the mine shaft. TR at 78, 91, 198. The hoist of the Number 1 compartment of the shaft can also be used for mucking in "mucking mode" with traditional mucking buckets. TR at 111, 198; ALJX 2. Mr. Goodell noted that the mucking buckets and the personnel conveyance attach to the crosshead on the same hook, with the ability to switch out the mucking bucket for the personnel conveyance on the number 1 compartment hoist within three minutes. *Id.* The personnel conveyance is not operated when mucking is in progress. TR at 93, 197-98.

11. The speed of the personnel conveyance varies depending on the level of the mine through which it is moving. TR at 46. At the vent level, the personnel conveyance is moving at a rate of 200 feet per minute. TR at 47; PX 2. It is still in acceleration mode, and the speed is reduced to account for the vent door system. *Id.* After descending past the vent level, the personnel conveyance accelerates up to 500 feet per minute. TR at 48; PX 2. This speed of 500 feet per minute is maintained through the dump level, and continues to the never sweat level. TR at 48, 54. Petitioner does not request that the personnel conveyance travel in excess of 500 feet per minute above the never sweat level, because it described the area above the never sweat level as a "busy" part of the shaft, with several sets of doors. TR at 54, 96. After descending to the never sweat level, Petitioner would like to run the personnel conveyance at a speed of 1,200 feet per minute. TR at 55; PX 13 at 2. It requests that the modification be granted between the never sweat level and the required "slow down zone" before the galloway, throughout which there is a minimum clearance of 18 inches from all obstructions. TR at 145. The 1,200 feet per minute requested speed would only apply when workers were riding in the lower, fully enclosed compartment of the personnel conveyance; if any person was riding in the upper compartment observation deck, the speed would be reduced to 500 feet per minute. PX 5 at 2. The personnel conveyance would slow down as it approaches the galloway based on the applicable deceleration parameters. TR at 58. The slow down zone is calculated by a Programmable Logic Control ("PLC") that controls the rope hoist and determines how many feet of slow down are necessary to decelerate in anticipation of arrival at the galloway. TR at 59. When the conveyance arrives at the galloway, it stops before a worker signals it down using a bell notification system. TR at 60. The personnel conveyance is guided through the galloway at the slow rate of 60 feet per minute. *Id.* All of these speeds are controlled by computer, depending on the location of the personnel conveyance in the shaft. TR at 70.

⁸ According to the Trial Glossary, when a crosshead is "chaired," that means that supports called "chairs" at the top of the galloway are attached to the crosshead when the bucket or conveyance arrives, in order to provide further support. ALJX 2.

12. Mr. Gough explained that the request to modify the speed of the personnel conveyance to 1,200 feet per minute was derived from the general rule of thumb that personnel conveyances can be operated at half of full speed. TR at 194, 234-35. In a February 24, 2011, report, G.L. Tiley and Associates, an engineering consultant hired to test the hoist at Resolution Mine, determined that the maximum speed the hoist could maintain and still comply with all emergency deceleration speeds was 2,300 feet per minute. PX 6. From that number, and the designed speed of the hoist of 2,400 feet per minute, it was determined that the modification should seek a personnel conveyance speed of 1,200 feet per minute. TR at 194, 234-35. In other words, Petitioner's arrival at the proposed speed of 1,200 feet per minute for the personnel conveyance was based on a general industry guideline, but there was no precise, scientific reason for arriving at this exact speed. TR at 235.

13. According to Mr. Goodell, the personnel conveyance was not a "bucket" as defined by the Second Edition of the *Dictionary of Mining, Mineral, and Related Terms* (the "Dictionary"). TR at 123. Mr. Goodell keeps a copy of this Dictionary in his office to provide a "common definition" of mining terms. TR at 122. The Dictionary defines a "bucket" as

(a) *Bailer; calyx.* (b) Tubular container equipped with an auger or other-type cutting edges used to make borings in an earthy or soft formation by rotary methods. (Long, 1960) (c) An open-top can, equipped with a bail, used to hoist broken rock or water and to lower supplies and equipment to workers in a mine shaft or other underground opening. (Long, 1960) (d) One of the conveying units of a bucket conveyor that lifts the material from a boot or bin when passing over the lower sprocket and is dumped on passing over the upper sprocket. The bucket is often made of perforated metal so that water entrapped will pass through the perforations and back to the boot (Zern, 1928) (e) A part of an excavator that digs, lifts, and carries dirt. (Nichols, 1976) (f) The dipper or scoop at the end of the arm of a buck dredge. (Webster 3rd, 1966)

PX 4 at 2 (emphasis in original).

14. According to Mr. Goodell, part (c) of the above definition was most applicable to mining. TR at 123. However, he opined that the personnel conveyance did not comport with this definition for several reasons. First, the personnel conveyance does not have an open top. *Id.*; PX 3 at 4; *see* TR at 232. Second, Mr. Goodell noted that the conveyance was not capable of "acting as a bucket, as we define it" because it could not hoist broken rock, haul muck, heavy equipment, or water. TR at 112, 123. Instead, it was designed specifically to transport people and small tools. TR at 123-24. Third, Mr. Goodell noted that the personnel conveyance could not be tipped over like traditional mucking buckets. TR at 112, 125. Mr. Goodell compared the design of Petitioner's personnel conveyance to pictures of muck buckets from an MSHA training video. TR at 124; PX 9. He contrasted the open top design of traditional muck buckets, and their ability to hoist rock and be tipped over to be dumped, to the design of the personnel conveyance. *Id.* at 124-25; PX 9. From the image in the record, Petitioner's muck and concrete buckets also have foot and handholds on their exterior for climbing into and entering the muck bucket, which the personnel conveyance does not have. PX 3 at 1-3. The three conveyances at Resolution Mine – the concrete conveyance, the muck bucket, and the personnel conveyance – were suspended and guided from a crosshead with the same three-chain, triangular formation

hooking onto a master link. TR at 137, 237. In other words, the guidance system for the personnel conveyance was the same as it was for the other conveyances.

15. In spite of his opinion, Mr. Goodell referred to the personnel conveyance as a “bucket” on a couple isolated occasions at the hearing. *See, e.g.*, TR at 131, 133. Petitioner’s PowerPoint presentation included an image with an arrow depicting the conveyance speed of 501 feet per second under a computerized image title for the “No. 1 Bucket,” although the mucking buckets also moves through the number 1 compartment of the Resolution Mine shaft. PX 1 at 6. The “Obstruction Control Operating Description,” a document prepared by Cementation in November 2009, did not refer to personnel conveyances, but to buckets. PX 17; TR at 234. Furthermore, a diagram prepared by Cementation depicted the personnel conveyance in April 2007 called it a “transportation bucket,” although the very same diagram was later modified by Cementation and submitted with the Petition for Modification referring to the structure as a “man riding conveyance.” *Compare* RX 4 (referring to structure at issue as a “transportation bucket”) with PX 5 at 3-6 (referring to structure as a “man riding conveyance”); TR at 236.⁹ Mr. Gough conceded that all three conveyances – the personnel conveyance, the mucking buckets, and the concrete buckets – could theoretically be used to carry men. TR at 237.

16. Hector Denogean is the head shaft superintendant for the Number 10 shaft at Resolution Mine and has worked for Cementation on the Resolution Mine project since 2006. TR at 150. He is responsible for day-to-day operations in the Number 10 shaft, communicating with front line supervision the work, working with engineers for upcoming projects in the shaft, and for overall safety and compliance with state and federal mine regulations. TR at 153. He has 27 years of underground mining experience and he has travelled into the shafts in hoist or fixed conveyances including sinking buckets, small cages, and manned conveyances. TR at 150-53, 161.

17. According to Mr. Denogean, based on his experience a “bucket” is a metal vessel or container, with an open-top design meant to haul materials like broken rock and muck, and to be tilted over and dumped for extraction. TR at 161-62. He noted that he had ridden in both the personnel conveyance and mucking buckets at Resolution Mine. TR at 162. Mr. Denogean also stated that he and several men in his crew preferred riding in the personnel conveyance, because it offered a more level platform for standing, an easier means of entry and exit, better ventilation, and less exposure to the vapors of rocky materials than a mucking bucket. TR at 162-64. He explained that in a traditional mucking bucket, one has to climb up a nine foot can of steel to enter and exit, which increases the risk of slip and fall accidents. TR at 163. Mr. Gough also called the personnel conveyance a “much better conveyance to travel men in,” than a traditional, open-top bucket, as it was fully-enclosed and ventilated. TR at 232.

18. Thomas Barkand testified at the hearing on Respondent’s behalf. He is currently employed by the Department of Labor’s MSHA in Pittsburgh, Pennsylvania, where he has worked for 36 years as an electrical engineer in the technical support group. TR at 244-45. Mr. Barkand was present during the investigation of Resolution Mine in July 2011, and rode down in the personnel conveyance up and down the shaft one time. TR at 255; PX 13 at 10. Mr.

⁹ In its 2012 report with new deceleration testing, G.L. Tiley referred to the personnel conveyance as a “cage,” PX 11, but Mr. Gough clarified at the hearing that the report was referring to the personnel conveyance. TR at 218.

Barkand graduated with a degree in electrical engineering from the University of Pittsburgh, and has a master's degree in industrial engineering from the University of Pittsburgh. TR at 245. At the MSHA, he has worked extensively on hoisting systems, including work in the field investigating hoisting accidents, and training MSHA inspectors on hoisting system inspection at the National Mine Health and Safety Academy in West Virginia. TR at 246. Mr. Barkand has authored several publications on proper mine hoist design and elevator control safety in peer-reviewed Institute of Electrical and Electronic Engineers ("I-EEE") and American Society of Mechanical Engineers ("ASME") journals. TR at 247. However, he has never designed a shaft sinking plant or programmed a program logic controller for a working hoist. TR at 254. Mr. Barkand was accepted as an expert in hoisting systems. TR at 248.

19. Mr. Barkand noted that, to his knowledge, the term "bucket" was not defined in the MSHA's safety regulations, and there were no specific design criteria for buckets. TR at 258, 265. However, he thought there was an "implied definition," and said buckets are described "by their use and attachment," and stated that a bucket is a device that's chiefly used in shaft sinking. TR at 248, 258. According to Mr. Barkand, there were "a lot of similarities" between Petitioner's personnel conveyance, mucking bucket, and the concrete bucket, including similarities in appearance, construction, shape, and dimension. TR at 249-50. He also noted that the personnel conveyance had chain attachments underneath it, which, like the chains of a mucking bucket, could make it act as "a bail" if attached to a stationary and tilted, although Mr. Barkand acknowledged that the personnel conveyance was not intended to function as a bail and that no persons were allowed in the conveyance if it was attached to anything by these chain links. TR at 250-51, 260-61; *see* PX 1 at 27; TR at 113-14.¹⁰ However, for Mr. Barkand, "the real quantifying issue" that made the personnel conveyance constitute a "bucket" under the regulation was "its suspension method" of being hung from a crosshead in the same manner as the mucking and concrete buckets. *Id.* For these reasons, Mr. Barkand referred to Petitioner's personnel conveyance as a "personnel bucket." TR at 249-250. He did acknowledge some differences between the personnel conveyance and the other buckets, including the fact that the personnel conveyance had an enclosed top and a door, rather than the open top seen in the concrete and mucking buckets. *Id.* However, Mr. Barkand believed that these differences did not mean that the personnel conveyance no longer qualified as a "bucket." *Id.* Later, Mr. Barkand also referred to an image in Petitioner's Exhibit 9 as a "shorter bucket," in spite of the fact that this bucket did not appear to be suspended by a crosshead system. PX 9; TR at 264, *see* TR at 124-25.

20. Mr. Barkand agreed that the *Dictionary of Mining, Mineral, and Related Terms* cited by Petitioner was one industry source for defining terms. TR at 259. He thought there were a "number of sources," but could not name another source or offer another dictionary definition for the term "bucket," and he did not offer an alternative definition on Respondent's behalf. *Id.* Mr. Barkand also agreed that the specific definition of "bucket" in that Dictionary did not necessarily address the personnel conveyance at issue. *Id.* at 259-60. He explained that the Dictionary discussed a bucket that was intended to be dumped and to hoist muck from the

¹⁰ At the hearing, Mr. Goodell noted that, as a matter of policy, there are no chains under the personnel conveyance when people are inside. TR at 113-14. This was confirmed by Mr. Denogean and Cementation's Transportation of Personnel Policy, rule 2.2(4): "Check the slings from underneath the conveyance. Slings are to be removed before transporting personnel." PX 16 at 4.

shaft, whereas the personnel conveyance was not intended to be dumped or to carry these materials. TR at 261.

General Mine Shaft Safety Measures

At hearing, both parties presented extensive information regarding mine safety features to address the second issue in the event that the personnel conveyance were determined to be a bucket. The information consisted of testimony and exhibits regarding the clearance levels in the mine shaft, the hoist operator's console and programmable logic controls to monitor mine operations, mine maintenance, conveyance and bucket oscillation, emergency stopping, the bungee cord effect, and the possibility of collision and the associated kinetic energy release. Because I determine later in this Decision that the personnel conveyance is not a bucket, I do not reach the second issue regarding the requested modification and will not make factual findings related to the safety measures at the mine.

IV. ANALYSIS

Under 30 C.F.R. § 44.22(a), the administrative law judge (“ALJ”) presiding over a hearing “shall have all powers necessary or appropriate to conduct a fair, full, and impartial hearing,” and to make decisions in accordance with the Federal Mine Safety and Health Act. The ALJ’s authority extends to “findings of fact and conclusions of law, with reasons therefore, upon each material issue of fact, law, or discretion presented on the record.” *Id.* § 44.32(a)(1). As set forth below, the following conclusions of law are based upon analysis of the entire record; arguments of the parties; and applicable statutes, regulations, and cases. *Id.* § 44.32(b).

A. Petitioner’s Personnel Conveyance is Not a Bucket under 30 C.F.R. § 57.19076

30 C.F.R. § 57.19076 dictates that “[w]hen persons are hoisted *in buckets*, speeds shall not exceed 500 feet per minute and shall not exceed 200 feet per minute within 100 feet of the intended station.” (emphasis added).

Petitioner argues that the personnel conveyance in use at Resolution Mine is not a “bucket” as that term is used under 30 C.F.R. § 57.19076. ALJX 4 at 13. It relies primarily on the testimony of Mr. Goodell and the definition of “bucket” written in the *Dictionary of Mining, Material, and Related Terms* to establish this point. *Id.* at 13-14. Respondent, on the other hand, argues that the personnel conveyance is a “bucket” under 30 C.F.R. § 57.19076 because (1) it looks and acts like a bucket, (2) some of Petitioner’s documents refer to it as a bucket, and (3) their expert Mr. Barkand opined that it was a bucket under the regulation. ALJX 5 at 2. If the term “bucket” is ambiguous, Respondent MSHA argues that its interpretation should be given deference by the ALJ. *Id.* at 4.

1. Background of Act, Regulation

Prior to the passage of the Federal Mine Safety and Health Act of 1977, there were two separate acts governing mine safety: The Federal Metal and Nonmetallic Mine Safety Act of

1966 (“the Metal Act”)¹¹ and the Federal Coal Mine Health and Safety Act of 1969 (“the Coal Act”).¹² The Metal Act was the first federal statute directly regulating non-coal mines, and was to be implemented by the Department of the Interior.¹³ The Coal Act was a more comprehensive act regulating the coal mining industry.¹⁴

New proposed safety standards for underground mines developed pursuant to the Metal Act¹⁵ were set forth in the Federal Register on July 31, 1969.¹⁶ The original 1969 iteration of the regulation currently at issue stated that “[w]hen men are hoisted, bucket speeds should not exceed 500 feet a minute, and should not exceed 200 feet a minute when within 100 feet of a landing,”¹⁷ the regulation was advisory, but *not* mandatory.¹⁸

In 1977, the Federal Mine Safety and Health Act consolidated the Metal Act and the Coal Act and the underlying regulations into one single statutory scheme to be regulated by the Department of Labor. All existing mandatory standards under the Metal Act were to be retained under the Act, but the Secretary of Labor was given the authority to develop, promulgate, and revise mandatory health or safety standards for the protection of miners.¹⁹ With respect to the Metal Act, all advisory standards were to be reviewed by a new advisory committee, who would recommend which of the then-advisory standards should be promulgated as new mandatory standards.²⁰

Revised health and safety standards passed under the rulemaking authority of the 1977 Act were released in the Federal Register, to be effective July 8, 1977.²¹ The once-advisory standard codified at 30 C.F.R. 57.19-76 was “made mandatory and revised to read as follows: 57.19-76 *Mandatory*. When men are hoisted in buckets, speeds shall not exceed 500 feet per minute and shall not exceed 200 feet per minute when within 100 feet of the intended station.”²² The regulation at issue was re-codified in 1985, with the minor revision that the gender-neutral word “persons” was substituted for the word “men.”²³ The regulation pertaining to buckets remains unaltered to the present day, and has essentially remained unaltered for over 40 years,

¹¹ Pub. L. No. 89-577, 80 Stat. 772 (1966).

¹² Pub. L. No. 91-153, 89 Stat. 403 (1969)

¹³ Pub. L. No. 89-577, § 2(b); 80 Stat. at 772.

¹⁴ S. Rep. No. 95-181, at 5.

¹⁵ Health and Safety Standards: Metal and Nonmetallic Underground Mines, 34 Fed. Reg. 677 (Jan. 16, 1969) (proposing standards to be codified at 30 C.F.R. pt. 57).

¹⁶ Part 57 – Health and Safety Standards – Metal and Non-metallic Underground Mines, 34 Fed. Reg. 12,517 (July 31, 1969) (to be codified at 30 C.F.R. pt. 57).

¹⁷ 34 Fed. Reg. at 12,525 (to be codified as 30 C.F.R. § 57.19-76).

¹⁸ See 34 Fed. Reg. at 677, 690; 34 Fed. Reg. at 12,525.

¹⁹ 30 U.S.C. § 811(a); Senate Report for the Committee on Human Resources relating to the Act, S. Rep. No. 95-181, at 12, 23, and the House of Representatives Report for the Committee on Education and Labor, H.R. Rep. No. 95-312 (1977).

²⁰ S. Rep. No. 95-181, at 23.

²¹ Metal and Nonmetal Mining Other than Coal and Lignite Mining: Health and Safety Standards, 42 Fed. Reg. 29,418 (June 8, 1977).

²² 42 Fed. Reg. at 29,423 (emphasis in original).

²³ Recodification of Safety and Health Standards for Metal and Nonmetal Mines, 50 Fed. Reg. 4,048, 4,082 (Jan. 29, 1985) (“When *persons* are hoisted in buckets, speeds shall not exceed 500 feet per minute and shall not exceed 200 feet per minute when within 100 feet of the intended station.”) (emphasis added).

since 1969. There is no regulatory or legislative history found that explains the term “bucket,” nor is there any definition of the term “bucket” in the Act or regulations.

As currently codified, Title 30, Part 57 of the Code of Federal Regulations “sets forth mandatory safety and health standards for each underground metal or nonmetal mine, including related surface operations, subject to the Federal Mine Safety and Health Act of 1977.”²⁴ The purpose of these standards is “the protection of life, the promotion of health and safety, and the prevention of accidents.”²⁵

2. Standard of Review and Deference

With respect to whether Petitioner’s personnel conveyance constitutes a “bucket” under 30 C.F.R. § 57.19076, the language of a regulation is the starting point for its interpretation.²⁶ If the regulation is unambiguous, the plain meaning is honored, unless there is a clearly expressed legislative intent to the contrary, or unless the plain meaning would lead to absurd results.²⁷ If the plain meaning of the regulation, however, is in doubt or ambiguous, “a court must necessarily look to the administrative construction of the regulation.”²⁸

Since the inquiry involves the interpretation of an administrative regulation, the agency’s construction of that ambiguous regulation is given deference,²⁹ and is controlling unless “plainly erroneous or inconsistent with the regulation.”³⁰ If the agency’s interpretation is not “unreasonable,” it will be honored by the courts.³¹ Broad deference is particularly warranted when the regulation “concerns a complex and highly technical regulatory program, in which the identification and classification of relevant criteria necessarily require significant expertise and entail the exercise of judgment grounded in policy concerns.”³² This form of deference to an

²⁴ 30 C.F.R. § 57.1.

²⁵ *Id.*

²⁶ *Dyer v. United States*, 832 F.2d 1062, 1066 (9th Cir. 1987); *Sec’y of Labor v. Nolichuckey Sand Co.*, 22 FMSHRC 1057 (2000).

²⁷ *Dyer*, 832 F.2d at 1066; *Climax Molybdenum Co. v. Sec’y of Labor*, No. 05-00790, 2008 WL 4190444, at *8 (FMSHRC Aug. 27, 2008).

²⁸ *Udall v. Tallman*, 380 U.S. 1, 16 (1965) (citing *Bowles v. Seminole Rock & Sand Co.*, 325 U.S. 410, 413-14 (1945)); *Climax Molybdenum Co.*, 2008 WL 4190444, at *8.

²⁹ In two Mine Act cases before the OALJ, the level of deference given to the MSHA was considered, although on the facts of both cases, deference was not accorded because the MSHA’s interpretation was contrary to the plain language of the regulation at issue. See *RAG Emerald Res. LP v. MSHA*, No. 2001-MSA-00001 (ALJ Apr. 10, 2001); *RAG Cumberland Resources LP v. MSHA*, No. 2001-MSA-00002 (ALJ Mar. 29, 2001). ALJs in this Office have also deferred to the Director of the Office of Workers’ Compensation Programs in Longshore cases. See, e.g., *Kinjan v. Johnson Controls World Servs.*, 32 BRBS 536 (ALJ 1998). Therefore, it is appropriate for an ALJ to give a level of deference to branches within the Department depending upon the circumstances of the case.

³⁰ *Christopher v. Smithkline Beecham Corp.*, ___ U.S. ___, 132 S. Ct. 2156, 2166 (2012); *Auer v. Robbins*, 519 U.S. 452, 461 (1997); *Thomas Jefferson Univ. v. Shalala*, 512 U.S. 504, 512 (1994); *Udall*, 380 U.S. at 16-17; *Seminole Rock*, 325 U.S. at 414; *Price v. Stevedoring Servs. of Am.*, ___ F.3d ___, No. 08-71719, 2012 WL 3799775, at *6 (9th Cir. Sep. 4, 2012); *Climax Molybdenum Co.*, 2008 WL 4190444, at *9.

³¹ *Udall*, 380 U.S. at 5, 16, 18; *accord Chase Bank U.S.A. v. McCoy*, ___ U.S. ___, 131 S. Ct. 871, 880-81 (2011); *Shalala*, 512 U.S. at 512, 515.

³² *Shalala*, 512 U.S. at 512 (internal quotations and citations omitted) (dealing with Medicare reimbursement scheme).

administrative agency's interpretation of its formal regulations is commonly known as *Auer* or *Seminole Rock* deference.³³

If an administrative agency's interpretation emerges in the form of a legal argument or brief that does not make it unworthy of deference.³⁴ However, there are limits to the deference afforded to administrative agencies in interpreting their own regulations, and it is not appropriate in all cases.³⁵ In a 2012 opinion, the Supreme Court cautioned that the "practice of deferring to an agency's interpretation of its own ambiguous regulations undoubtedly has important advantages, but this practice also creates a risk that agencies will promulgate vague and open-ended regulations that they can later interpret as they see fit, thereby frustrating the notice and predictability purposes of rulemaking."³⁶ Deference is "undoubtedly inappropriate" where the agency's position is plainly erroneous or inconsistent with the regulation in question.³⁷ The agency's interpretation also must reflect its "fair and considered judgment on the matter in question."³⁸ Instances where this may not be true include where an agency's interpretation conflicts with a prior interpretation,³⁹ would impose liability for prohibited conduct without "fair warning,"⁴⁰ or is a "post hoc rationalization" advanced by itself as nothing more than "convenient litigation position" to defend agency action.⁴¹ Finally, "deference is warranted only when the language of the regulation is ambiguous;" where an agency's interpretation seeks to overcome the regulation's "obvious meaning," *Auer* deference is unwarranted because to defer to the agency's position would, in effect, permit the agency, "under the guise of interpreting a regulation, to create *de facto* a new regulation."⁴²

³³ In its closing brief, Respondent addressed deference in a very cursory manner. It noted that "[w]ere this Court to find Section 57.19076 ambiguous, it should give deference to the agency's interpretation." ALJX 5 at 4. It cited to two Federal Mine Safety and Health Review Commission ("FMSHRC") cases for this proposition: *Sec'y of Labor v. Nolichuckey Sand Co.*, 22 FMSHRC 1057 (2000) and *Sec'y of Labor v. Western Fuels-Utah, Inc.*, 19 FMSHRC 994, 998 (1998) (citing *Chevron U.S.A. Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837, 842 (1984)). The FMSHRC is an independent adjudicating body that reviews legal disputes under the Mine Act. In both *Nolichuckey Sand* and *Western Fuels* the FMSHRC contemplated the appropriate level of deference that should be given to the MSHA. Although *Western Fuels* concerned the language of 30 C.F.R. § 75.1102, because the language at issue restated the language of the Mine Act itself, the FMSHRC employed *Chevron* deference to the agency's interpretation of the statute. *Chevron* deference is not appropriate here, because this matter centers on the MSHA's interpretation of its regulation, not of a statute. Instead, *Auer* deference is appropriate.

³⁴ *Christopher*, 132 S. Ct. at 2166; *Chase Bank*, 131 S. Ct. at 880; *Auer*, 519 U.S. at 462.

³⁵ *Christopher*, 132 S. Ct. at 2166; *RAG Emerald Res.*, No. 2001-MSA-00001, at 9.

³⁶ *Christopher*, 132 S. Ct. at 2168 (internal quotations and citations omitted).

³⁷ *Id.* at 2166.

³⁸ *Chase Bank*, 131 S. Ct. at 881; *Auer*, 519 U.S. at 462.

³⁹ *Christopher*, 132 S. Ct. at 2166; *Shalala*, 512 U.S. at 515 ("an agency's interpretation of a statute or regulation that conflicts with a prior interpretation is entitled to considerably less deference than a consistently held agency view") (internal quotations omitted).

⁴⁰ *Christopher*, 132 S. Ct. at 2167

⁴¹ *Id.*; *Chase Bank*, 131 S. Ct. at 881; *Auer*, 519 U.S. at 462; *Bowen v. Georgetown Univ. Hosp.*, 488 U.S. 204, 212-13 (1988). In *Christopher*, the Supreme Court suggested that deference was unwarranted in these instances; however, later in the opinion, it found that *Auer* deference was unwarranted in the matter, but instead afforded the Department of Labor's regulations *Mead/Skidmore* deference, which it characterized as "a measure of deference proportional to the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade." *Christopher*, 132 S. Ct. at 2168-69 (citing *United States v. Mead Corp.*, 533 U.S. 218 (2001); *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944)).

⁴² *Christensen v. Harris County*, 529 U.S. 576, 588 (2000) (emphasis in original); see also *Chase Bank*, 131 S. Ct. at 882 ("our statement in *Christensen* that deference is warranted only when the language of the regulation is

3. Application

(a) Plain Meaning of 30 C.F.R. § 57.19076

The first issue is to determine whether the term “bucket” is clear and unambiguous on its face. The term “bucket” is not defined in the Federal Mine Safety and Health Act of 1977 or in Part 57 of the Code of Federal Regulations. Further, there is no indication in the legislative or regulatory history what the MSHA meant by the term “bucket,” and no definitive guidance in the case law into the defining characteristics of a bucket. Where there is no regulatory definition of a term, the technical usage of a term can be “quite relevant in determining its meaning.”⁴³ The *Dictionary of Mining, Mineral, and Related Terms* is a recognized authority for such usage and has been cited numerous times by the federal courts⁴⁴ and the Federal Mine Safety and Health Review Commission (“FMSHRC”) in defining mining terms and how those terms are commonly understood in the mining community.⁴⁵ In fact, the MSHA itself has cited to this Dictionary in supporting its arguments in other cases.⁴⁶ Mr. Goodell established that his company always kept a copy of the Dictionary in its office to provide a “common definition” of mining terms, and Mr. Barkand agreed it was an industry source for defining mining terms. F.F. ¶¶ 13, 20. Because the Dictionary is a “recognized authority” for establishing the “technical usage of a term,” it will be considered here, particularly where there is no other legislative or regulatory guidance on the technical usage of the term “bucket” in the mining industry.

The *Dictionary of Mining, Mineral, and Related Terms*’ includes six separate definitions of a “bucket.” The most relevant definition to the mining industry was definition (c) in the Dictionary, which defines a “bucket” as an “open-top can, equipped with a bail, used to hoist broken rock or water and to lower supplies and equipment to workers in a mine shaft or other underground opening.”⁴⁷ F.F. ¶ 13. Although Mr. Barkand stated that there were a number of

ambiguous, is perfectly consonant with *Auer* itself; if the text of a regulation is unambiguous, a conflicting agency interpretation advanced . . . will necessarily be plainly erroneous or inconsistent with the regulation in question.”) (internal citations and quotations omitted); *RAG Emerald Res.*, No. 2001-MSA-00001, at 9.

⁴³ *Sec’y of Labor v. Wolf Run Mining Co.*, 32 FMSHRC 1669, 1685, n.19 (2010).

⁴⁴ The Tenth Circuit has referred to this source as a “dictionary specifically focused on the mining industry,” and relied in part on the Dictionary’s definition of “maintenance” in affirming an FMSHRC ruling. *Walker Stone Co v. Sec’y of Labor*, 156 F.3d 1076, 1082 (10th Cir. 1998) (“in defining maintenance, the [FMSHRC] actually relied on a dictionary specifically focused on the mining industry . . . [w]e further conclude that the interpretation of repair and maintenance by the [FMSHRC] . . . is reasonable . . . [t]hat interpretation is consistent with the dictionary meanings of ‘repair’ and ‘maintenance.’”)

⁴⁵ *Wolf Run Mining Co.*, 32 FMSHRC at 1685, n.19; has been cited numerous times by the federal courts and the Federal Mine Safety and Health Review Commission (“FMSHRC”) in defining mining terms. *Sec’y of Labor v. Stillhouse Mining, LLC*, 33 FMSHRC 778, 833 (2011); accord *Sec’y of Labor v. Mach Mining, LLC*, 32 FMSHRC 328, 339 (2010) (when word was not defined in the Act or by the MSHA, citing Dictionary definition to show how term was “used in the mining industry”); *Sec’y of Labor v. So. Nev. Paving*, 30 FMSHRC 567, 574 (2008) (same).

⁴⁶ See, e.g., *In re Kaiser Aluminum & Chem. Co.*, 214 F.3d 586, 592 n.15 (5th Cir. 2000) (citing Dictionary for definition of “mill”); *Pinnacle Mining Co. v. Sec’y of Labor*, 33 FMSHRC 2207 (2011) (MSHA citing definition of “fire” from Dictionary).

⁴⁷ In the *Dictionary of Mining, Mineral, and Related Terms*, this definition of bucket is followed by the words “(Long, 1960).” Neither party explained the origin of this definition, or what “Long” refers to, but the parenthetical notation in the Dictionary suggests that the definition of bucket originated from a source in 1960, which is contemporaneous in time to the date the original version of this regulation was passed in 1969.

sources for mining terms, Respondent failed to offer any other source, or any alternative definitions of “bucket” at the hearing or in its closing brief. F.F. ¶ 20. Instead, Respondent relied on Mr. Barkand’s testimony, industry experience, and his purported “implied definition” of what constitutes a bucket. F.F. ¶ 19.

Petitioner made a persuasive case that the personnel conveyance at issue did not comport with the technical meaning of bucket set forth in the Dictionary. There are three major differences between a traditional bucket, as defined in the Dictionary, and Petitioner’s personnel conveyance. First, the personnel conveyance is not an “open-top can,” as described in the Dictionary. F.F. ¶¶ 13-14. Instead, when the perforated steel door is latched closed, the personnel conveyance provides a fully-enclosed compartment for moving persons down the mine. F.F. ¶ 7. Mr. Denogean established that, based on his 27 years of mining experience, he understood the technical usage of buckets in the industry to refer to open-topped containers. F.F. ¶ 17.⁴⁸ Second, from a functional standpoint, the personnel conveyance was not designed to act as a bucket as the Dictionary defines the term. Under the Dictionary, a bucket is “used to hoist broken rock or water and to lower supplies and equipment to workers.” F.F. ¶ 13. Mr. Denogean established that a bucket was designed to move broken rock and muck, but Mr. Goodell established that the personnel conveyance at issue could not hoist broken rock, muck, heavy equipment, or water; instead it was designed specifically “from scratch” as a state of the art conveyance to transport people. F.F. ¶¶ 7-8, 17. Water and loose muck would seep out of the personnel conveyance’s perforated steel door. *See* F.F. ¶¶ 7, 13. Further, broken rock could not be easily loaded into the personnel conveyance because it does not have a large, open-top design. Even Mr. Barkand conceded that the conveyance at issue was not intended to haul muck from the bottom of the shaft. F.F. ¶ 20. In fact, there is no mucking permitted at the Resolution Mine when the personnel conveyance is in use. F.F. ¶ 10**Error! Reference source not found.**

The only functional component of the personnel conveyance similar to a bucket, as defined in the Dictionary, is that the personnel conveyance could be used to transport the small supplies and equipment of workers. F.F. ¶ 7. This, however, is a marked contrast from traditional mucking buckets, which are used primarily to transport several tons of mining material. F.F. ¶ 4 (muck buckets at Resolution Mine transport up to 14 tons per load). Third, unlike the definition of “bucket” in the Dictionary, the personnel conveyance was not meant to act as a “bail” and to be tipped over and unloaded like traditional mucking buckets. F.F. ¶¶ 7, 13. Although Mr. Barkand and Mr. Goodell noted that the personnel conveyance could theoretically act as a bail if attached to a stationary and tilted because of three chain link inserts on the bottom of the conveyance, Mr. Barkand conceded that it was not designed or meant to function in this manner. F.F. ¶ 19**Error! Reference source not found.** Furthermore, as a matter of Cementation policy, no people are allowed in the conveyance when it is attached to anything by these chain links. F.F. ¶ 19, FN 10.

However, there are some similarities between Petitioner’s personnel conveyance and traditional buckets as defined in the Dictionary. First, the personnel conveyance at issue can be used to carry small “supplies and equipment” to workers. As discussed above, it could

⁴⁸ Case law from the FMSHRC also suggests buckets in the mining industry are traditionally open-top containers. *See, e.g., Sec’y of Labor v. Drummond Co.*, 27 FMSHRC 23, 34 (2005) (discussing risks of falling out of open bucket).

theoretically be used to transport broken rocks, or be tipped over, although it was not designed for this purpose. In addition, the personnel conveyance, like the term “bucket” in the Dictionary, is used to transport items in a “mine shaft.” On the whole, though, the differences between the personnel conveyance and a “bucket,” as defined in the Dictionary, are substantial. Petitioner’s position that its personnel conveyance is not a “bucket” is consistent with the technical usage of the term established by the Dictionary and by its expert witnesses.⁴⁹ Mr. Goodell and Mr. Denogean were both knowledgeable, credible witnesses with over 60 years of total experience in the mining industry, and both were intimately familiar with the muck buckets and personnel conveyances at Resolution Mine because they worked with them on a daily basis. F.F. ¶¶ 2, 16, 17. They were certainly capable of comparing Petitioner’s personnel conveyance with an industry-specific Dictionary definition they were given the opportunity to review at the May 2012 hearing, and their expert opinions are given significant weight in establishing the technical meaning of the term “bucket.”⁵⁰ Although Mr. Barkand, testifying for Respondent, felt that these differences did not preclude the personnel conveyance from being a bucket, they substantially alter the function of the personnel conveyance from a deep, open-top “bucket” designed to haul mining materials and be tipped over to unload this “muck” to a travel vessel designed specifically to transport people and small tools. F.F. ¶¶ 7, 13.

Petitioner did, however, refer to the personnel conveyance as a “bucket” in the past. F.F. ¶ 15. A 2009 Cementation document referred to buckets, not conveyances, although it did not specifically refer to the personnel conveyance, but to all of the objects moving through the shaft, which would include the traditional mucking bucket and cement bucket. *See id.* A 2007 diagram by Cementation called the conveyance a “transportation bucket,” but the diagram was later revised to call them “transport conveyances.” *Id.* While it is true that Petitioner referred to the conveyance as a transportation bucket, and even as a “cage” in its most recent deceleration and bungee effect testing, *see* FN 9, these were planning or testing documents prepared by a variety of different people, and not in anticipation of litigation. Since submitting the Petition for Modification in April 2011, Petitioner has consistently maintained that its conveyance is not a bucket under 30 C.F.R. § 57.19076; it only submitted this Petition after being informed by the MSHA that the regulation and 500 feet per minute speed were applicable to this conveyance. As discussed below, the MSHA’s formal litigating position on the bucket issue, as expressed through its Proposed Decision and Order and closing briefing, has been inconsistent and confusing during the course of this litigation. *See* PX 13 at 2, 5, 6 (in the July 2011 field report, calling the conveyance at issue many names ranging from a “personnel conveyance,” an “enclosed capsule,” a “man conveyance,” an “enclosed bucket,” a “personnel bucket,” and an “enclosed conveyance”); PX 14 at 1-3 (writing that conveyance at issue was “not a ‘bucket,’” “but rather [was] an enclosed capsule designed for the transport of personnel,” but later referring to the conveyance at issue as a “personnel conveyance,” a “conveyance,” a “bucket,” a “personnel bucket,” and an “enclosed bucket.”) Furthermore, Petitioner’s prior referral to the personnel conveyances as buckets in some of its technical drawings and documents does not detract from its convincing argument that the personnel conveyance at issue lacks several of the

⁴⁹ *See Walker Stone Co v. Sec’y of Labor*, 156 F.3d 1076, 1082 (10th Cir. 1998) (on appeal, finding FMSHRC’s reliance on Dictionary definitions to be reasonable).

⁵⁰ *See Wolf Run Mining Co.*, 32 FMSHRC at 1685 (considering expert witnesses in addition to *Dictionary of Mining, Mineral, and Related Terms* in establishing meaning of mining term).

physical and functional characteristics of a “bucket,” as defined in the only technical Dictionary presented in this matter.

Respondent’s interpretation of the term “bucket” and explanation of why the personnel conveyance at issue constituted a bucket under 30 C.F.R. § 57.19076 was less persuasive. In its closing brief, the MSHA argued that the conveyance (1) looked and acted like a bucket, (2) that some of Petitioner’s documents refer to it as a bucket, and (3) their expert Mr. Barkand opined that it was a bucket under the regulation. ALJX 5 at 2. However, according to the *Dictionary of Mining, Mineral, and Related Terms*, the personnel conveyance does not look or function like a traditional mucking bucket. Although it is made out of the same concrete material and looks somewhat similar from afar, *see* RX 1-3, the personnel conveyance’s fully-enclosed rather than open-top design, and its functional differences in transporting people rather than muck, rocks, concrete, or water, distinguish it from other buckets and the Dictionary definition of a bucket. Respondent did not offer any alternative definition to establish the plain meaning of the term “bucket” in the mining industry. It instead relied primarily on the testimony of Mr. Barkand, who had over 30 years of experience with the MSHA. While Mr. Barkand’s industry experience is substantial, his explanation as to why the conveyance at issue was not a bucket was less persuasive than Petitioner’s.

At the hearing, Respondent’s expert, Mr. Barkand, emphasized that all three conveyances at Resolution Mine – the personnel conveyance, muck buckets, and concrete buckets – looked similar, were roughly similar dimensions, and were suspended from the same crosshead with the same three-chain, triangular formation, and Petitioner agreed. F.F. ¶ 13. In Mr. Barkand’s opinion, the similar suspension and attachment from the crosshead was the “real quantifying issue” that made the personnel conveyance a bucket. However, although Mr. Barkand was accepted as an expert in hoisting systems and certainly possesses substantial experience in the mining industry, Mr. Barkand was not a lawyer or regulatory expert. F.F. ¶ 19. Therefore, while his opinion about the technical usage of the term bucket is accepted, he is not qualified to opine about what the “definitive” legal characteristic of the term “bucket” is under 30 C.F.R. § 57.19076. Where Mr. Barkand’s opinion about the technical meaning of the term “bucket” falters is that the Dictionary definition of “bucket” made no mention of a crosshead, and did not suggest that buckets have any universal or defining method of suspension. F.F. ¶ 13. In fact, with respect to his opinion that, in his industry experience, buckets were suspended by a crosshead, Mr. Barkand later referred to an image in Petitioner’s Exhibit 9 as a “shorter bucket,” although that bucket was not suspended by a crosshead system.⁵¹ F.F. ¶ 19. The images in Exhibit 9 are from an MSHA safety training video, and all differed considerably from Petitioner’s personnel conveyance, in that they were open-top buckets that were capable of being tipped over. *See* F.F. ¶ 13.

The absence of any mention of a crosshead in the Dictionary as being a defining characteristic of a bucket, Mr. Barkand’s identification of another image without a crosshead suspension as a “smaller bucket,” and Respondent’s failure to offer any other definition to

⁵¹ There are also FMSHRC cases that refer to cement or mucking buckets that were suspended by a crane, not a crosshead, and therefore undermine Mr. Barkand’s central argument. *See Speed Mining, Inc. v. Sec’y of Labor*, No. WEVA 2005-97, 2007 WL 2746692, at *13 (Aug. 27, 2007); *H.D. Enters., Ltd. V. Sec’y of Labor*, 9 FMSHRC 1923, 1924 (1987).

support its interpretation, make its position problematic. Tellingly, even Mr. Barkand agreed that definition (c) of a bucket in the Dictionary did not necessarily address or apply to the personnel conveyance at issue. F.F. ¶ 20.

I therefore find that Petitioner has the more convincing of the two arguments regarding whether the personnel conveyance is a “bucket” under 30 C.F.R. § 57.19076, and am persuaded by Petitioner’s more compelling argument that the personnel conveyance is not a bucket under the regulations. However, because the parties have a disagreement over the term, which might be interpreted as an ambiguity in the regulations, I will consider the administrative interpretation of the regulation and afford the appropriate deference to the MSHA’s interpretation of the term “bucket.”

(b) Level of Deference Afforded to MSHA

Where the plain meaning of a regulation is in doubt, the agency’s construction of that regulation is normally given deference, and is controlling unless “plainly erroneous or inconsistent with the regulation.”⁵² The fact that the MSHA’s position on what constitutes a “bucket” comes in the form of a legal argument for purposes of this litigation does not make it unworthy of deference, although it may erode some of its persuasive force if the MSHA’s opinion appears to be nothing more than a convenient litigating position.⁵³ Under *Auer*, the agency’s position would be afforded substantial weight. However, deference is not appropriate in all cases, particularly where the agency’s position is plainly erroneous or incompatible with the regulation at issue, unreasonable or does not reflect fair and considered judgment, or is inconsistent with its prior positions.⁵⁴

At issue here is a very narrow question: whether Petitioner’s personnel conveyance constitutes a “bucket” under 30 C.F.R. § 57.19076, which states that “when persons are hoisted *in buckets*, speeds shall not exceed 500 feet per minute.” (emphasis added). The MSHA’s position on this issue at the May 2012 hearing and in its closing brief is inconsistent with the opinion expressed in its November 2011 Proposed Decision and Order. In its November 4, 2011, Order, the MSHA wrote, “[t]he personnel conveyance that this petition [for modification] is submitted upon *is not a ‘bucket,’ but rather is an enclosed capsule designed for the transport of personnel.*” PX 14 at 1 (emphasis added). Notwithstanding the fact the MSHA stated the conveyance at issue was “not a bucket,” it asserted that 30 C.F.R. § 57.19076 and the 500 feet per minute speed limit was still “applicable” to Petitioner’s personnel conveyance. *Id.* In that same order, it later inconsistently referred to the conveyance at issue as an “enclosed bucket.” *Id.* at 2-3. Now, for purposes of this litigation, the MSHA’s position is that Petitioner’s personnel conveyance *is* a bucket under the regulation. F.F. ¶ 19; ALJX 5 at 2. It relies on new

⁵² *Christopher*, ___ U.S. ___, 132 S. Ct. at 2166; *Auer*, 519 U.S. at 461; *Udall*, 380 U.S. at 16-17; *Seminole Rock*, 325 U.S. at 414.

⁵³ *Christopher*, 132 S. Ct. at 2166; *Chase Bank*, 131 S. Ct. at 880; *Auer*, 519 U.S. at 462.

⁵⁴ *Christopher*, 132 S. Ct. at 2166-68 (withholding *Auer* deference to Department of Labor’s interpretation of FLSA regulation where its interpretation would impose massive liability without fair warning, and was inconsistent with its failure to enforce this position in the past and would therefore lead to unfair surprise); *Bowen*, 488 U.S. 204 (refusing to defer to Secretary of Health and Human Services’ litigating position where agency attempted to retroactively promulgate cost limits that were not supported the statute and contrary to agency’s past implementation of the provision).

reasoning supplied by Mr. Barkand that the personnel conveyance looks like other buckets, and is suspended by the same crosshead suspension that defines buckets.

The MSHA's prior formal position, as stated in its November 2011 Order, is problematic for three reasons. First, it suggests that its subsequent litigation position that the personnel conveyance was indeed a bucket was not a "fair and considered judgment on the matter in question."⁵⁵ Instead, the change in position is more akin to a "convenient litigation position" or a "post hoc rationalization" advanced to prevail in this matter.⁵⁶ Second, the MSHA's revised position is inconsistent with its previous litigating position expressed just months earlier. PX 14 at 1. Under *Shalala*, "an agency's interpretation of a statute or regulation that conflicts with a prior interpretation is entitled to considerably less deference than a consistently held agency view."⁵⁷ Here, by stating in its Order that the conveyance was "not a bucket," the MSHA set forth an interpretation of the regulation that was in conflict to the agency's current litigating position that the conveyance is a bucket under 30 C.F.R. § 57.19076. Under *Shalala*, this entitles the agency's current interpretation to "considerably less deference."⁵⁸ Third, it is unreasonable on the part of the MSHA to write that the personnel conveyance is not a "bucket," and to then later argue that the same conveyance is a bucket just months later. Adopting the agency's original November 2011 interpretation that the conveyance was not a bucket, but the regulation still applied, would be unreasonable because it would "permit the agency, under the guise of interpreting a regulation, to create *de facto* a new regulation" extending not just to buckets, but other "capsules designed for the transport of personnel."⁵⁹ In its Proposed Order, the MSHA wholly failed to explain why, "notwithstanding" the fact that Petitioner's conveyance was not a bucket, the regulation applied. This position was unreasonable.

In summary, the MSHA's position on whether the personnel conveyance at issue is a bucket was inconsistent, unreasonable, and did not reflect a fair and thoroughly considered judgment on the matter. For these reasons, deference to the MSHA's position in this matter should be limited and afforded "a measure of deference proportional to the thoroughness evident in its consideration, the validity of its reasoning, its consistency with earlier and later pronouncements, and all those factors which give it power to persuade."⁶⁰ This type of deference is commonly referred to as *Mead* or *Skidmore* deference, and is given when the agency's position lacks the power to control, but may carry some persuasive force, and therefore given some measure of "respect."⁶¹

Applying *Skidmore-Mead* deference in lieu of *Auer* deference here is generally consistent with the principle stated in *Mead* and recently restated by the Ninth Circuit in *Price* that "[a]n

⁵⁵ *Chase Bank*, 131 S. Ct. at 881; *Auer*, 519 U.S. at 462.

⁵⁶ *Id.*; *Chase Bank*, 131 S. Ct. at 881; *Auer*, 519 U.S. at 462; *Bowen*, 488 U.S. at 212-13.

⁵⁷ In *Shalala*, petitioner argued that the Secretary of Health and Human Services' was inconsistent in her interpretation of a regulatory provision based on a prior internal memorandum the agency issued. *Shalala*, 512 U.S. at 515-16. The Court acknowledged that such inconsistency would entitle the agency's position to considerably less deference, but found that it was not inconsistent based on the facts of that case. *Id.* at 516.

⁵⁸ *Id.* at 515.

⁵⁹ *Christensen*, 529 U.S. at 588; *Chase Bank*, 131 S. Ct. at 882; see PX 14 at 1.

⁶⁰ *Christopher*, 132 S. Ct. at 2168-69 (citing *United States v. Mead Corp.*, 533 U.S. 218 (2001); *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944)).

⁶¹ *Skidmore*, 323 U.S. at 140; *Price*, No. 08-71719, 2012 WL 3799775, at *8.

agency's interpretation may merit some deference whatever its form, given the 'specialized experience and broader investigations and information' available to the agency, and given the value of uniformity in its administrative and judicial understandings of what a national law requires."⁶² Where, as here, *Auer* deference is unwarranted, the MSHA's interpretation of its regulations will be afforded *Skidmore-Mead* "respect."

(c) Application of *Skidmore-Mead* Deference

Under this standard, I find the MSHA's interpretation of its regulations unpersuasive. First, Petitioner has submitted a definition of the term "bucket" from the *Dictionary of Mining, Mineral, and Related Terms*, a widely accepted source for the technical meaning of mining terms, that supports its argument that the personnel conveyance lacks the typical characteristics of a "bucket." The MSHA has failed to offer any alternative definitions or regulatory history to suggest why its interpretation is more persuasive, to question the validity of relying on this Dictionary, or to persuasively explain why the personnel conveyance comports with the definition of bucket set forth in the Dictionary. Second, the MSHA has offered an inconsistent and unsatisfactory position that the conveyance was "not a bucket," but somehow (without any further explanation) still subject to 30 C.F.R. § 57.19076, which only applies to buckets, before revising its position for this litigation. Its statement that the conveyance was "not a bucket" in its Proposed Order addressing this very issue is detrimental to any argument that its subsequent position that the conveyance is a bucket should be given deference, and erodes much of the MSHA's "power to persuade" under *Mead/Skidmore*.⁶³ Here, where the MSHA's interpretation is lacking persuasive force, is inconsistent, and not thoroughly reasoned, it is not entitled to *Skidmore* "respect."⁶⁴

In light of my determination that the MSHA's interpretation is neither entitled to *Auer* deference nor persuasive in its own right under *Mead-Skidmore*, and because Petitioner submitted the most persuasive evidence that its personnel conveyance is not a "bucket" under 30 C.F.R. § 57.19076, the regulation does not apply. The result is, however, limited to the particular facts of this case; it does not dictate that every personnel conveyance designed specifically for the transport of workers is not a "bucket" under the regulation.

I find that Petitioner's personnel conveyance is not a bucket, and, therefore, 30 C.F.R. § 57.19076 and the 500 feet per minute speed limit does not apply to the personnel conveyance when travelling through the Number 10 shaft at Resolution Mine.⁶⁵ Where 30 C.F.R. § 57.19076 does not apply, the more general 30 C.F.R. § 57.19061 applies, which dictates that "[t]he safe speed for hoisting persons shall be determined for each shaft, and this speed shall not be exceeded. *Persons shall not be hoisted at a speed faster than 2,500 feet per minute, except in an emergency.*" (emphasis added).

⁶² *Price*, No. 08-71719, 2012 WL 3799775, at *8 (quoting *Mead*, 533 U.S. at 234-35).

⁶³ *Skidmore*, 323 U.S. at 140.

⁶⁴ *Christopher*, 132 S. Ct. at 2168-69 (citing *United States v. Mead Corp.*, 533 U.S. 218 (2001); *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944)); *Price*, No. 08-71719, 2012 WL 3799775, at *8 (finding where Director's position on simple or compound interest was unpersuasive, it was not entitled to *Skidmore* respect).

⁶⁵ If men are travelling in the traditional mucking buckets at the Resolution Mine, 30 C.F.R. § 57.19076 and the 500 feet per minute speed limit still applies.

Because I have determined that Petitioner's personnel conveyance is not a bucket and the 500 feet per minute speed does not apply, I do not reach the second issue of whether Petitioner's proposed modification satisfies the standard set forth in 30 U.S.C. § 811(c) and 29 C.F.R. § 44.4(a).

SO ORDERED.

RICHARD M. CLARK
Administrative Law Judge