Billing Code: 4510.43-P

DEPARTMENT OF LABOR

Mine Safety and Health Administration

Petitions for Modification of Application of Existing Mandatory Safety Standards

AGENCY: Mine Safety and Health Administration, Labor.

ACTION: Notice.

SUMMARY: Section 101(c) of the Federal Mine Safety and Health Act of 1977 and 30 CFR part 44 govern the application, processing, and disposition of petitions for modification. This notice is a summary of petitions for modification submitted to the Mine Safety and Health Administration (MSHA) by the parties listed below to modify the application of existing mandatory safety standards codified in Title 30 of the Code of Federal Regulations.

DATES: All comments on the petitions must be received by the Office of Standards, Regulations and Variances on or before [Insert date 30 days from the date of publication in the FEDERAL REGISTER].

ADDRESSES: You may submit your comments, identified by "docket number" on the subject line, by any of the following methods:

1. Electronic Mail: zzMSHA-comments@dol.gov. Include the docket number of the petition in the subject line of the message.

2. Facsimile: 202-693-9441.

3. Regular Mail or Hand Delivery: MSHA, Office of Standards, Regulations and Variances, 1100 Wilson Boulevard, Room 2350, Arlington, Virginia 22209-3939, Attention: George F. Triebsch, Director, Office of Standards, Regulations and Variances. Persons delivering documents are required to check in at the receptionist's desk on the 21st floor. Individuals may inspect copies of the petitions and comments during normal business hours at the address listed above.

MSHA will consider only comments postmarked by the U.S. Postal Service or proof of delivery from another delivery service such as UPS or Federal Express on or before the deadline for comments.

FOR FURTHER INFORMATION CONTACT: Barbara Barron, Office of Standards, Regulations and Variances at 202-693-9447 (Voice), barron.barbara@dol.gov (E-mail), or 202-693-9441 (Facsimile). [These are not toll-free numbers.]

SUPPLEMENTARY INFORMATION:

I. Background

Section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act) allows the mine operator or representative of miners to file a petition to modify the application of any mandatory safety standard to a coal or other mine if the Secretary of Labor determines that:

(1) 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

(2) That the application of such standard to such mine will result in a diminution of safety to the miners in such mine.

In addition, the regulations at 30 CFR 44.10 and 44.11 establish the requirements and procedures for filing petitions for modification.

II. Petitions for Modification

Docket No: M-2013-008-M.

Petitioner: U.S. Silver Idaho, Inc., 1801 California Street, Suite 4900, Denver, Colorado 80202.

Mine: Galena Mine, MSHA I.D. No. 10-00082, located in Shoshone County, Idaho.

Regulation Affected: 30 CFR 57.14106(a) (Falling object protection).

Modification Request: The petitioner requests a modification of the existing standard to permit the use of Load, Haul, Dump (LHD) utility vehicles underground without falling object protection structures (FOPS) because it would result in a diminution of safety to the miners affected.

a. Both the mining method and the ground control at the Galena mine are such that there is no increased hazard from falling objects.

(1) The Galena mine complex hosts a wide range of rock conditions. To ensure a safe work environment, the company has employed a combination of good mining practices, rock bolting fixtures, surface support, backfill, and timber in its ground support plan. Hence, the LHDs are never operated under unsupported ground.

(2) The minimum ground support standards in the areas where the subject LHDs are used in the Galena mine are as follows: in areas where overhand cut and fill is used,

the back and ribs are supported with a minimum of 4-foot bolts and holey boards or monster mats. Support used on the ribs include a combination of bolts, holey boards, mats, stulls, and screen. Additional rib support of 6-foot rebar on 6-foot spacing is also used in certain areas. Additional surface support such as wire mesh, poly mesh, mats, and shotcrete is also installed when conditions warrant.

(3) In areas where underhand cut and fill is used, the back must have mesh across the cement fill/rock contacts, which is attached by plates over the exposed 6-foot rebar bolts. A minimum of 4-foot split sets on 3-foot centers with wire mesh is used for rib support. Wire mesh is installed with adequate overlap and to within 5 feet of the sill. Where warranted, additional surface support such as wire mesh, poly mesh, mats, and shotcrete can be installed.

(4) In areas of vertical development, the back is supported with a minimum of 4-foot bolts and holey boards or monster mats. The hanging and footwall is supported with a minimum of 4-foot bolts and one row of mats per timber set. Raise timber is installed with a minimum of 12 inches of heading between the cap and wall.

(5) The mine's current practice is to not exceed 11 feet in cut height to facilitate hand-held jack leg drilling and bolt installation safely and productively.

b. There have been no documented falling object incidents at the Galena mine.

(1) Mine policies at the Galena mine prohibit miners from working under unsupported ground.

(2) No miner working in an LHD without FOPS has been injured by falling material.

c. Rock burst potential at the Galena mine does not mean there is an increased hazard of falling objects.

(1) While geological conditions at the Galena mine may make the mine susceptible to rock bursts, rock bursts are not falling object events. They more typically involve the sudden expulsion of material from the ribs. Because of the more or less horizontal nature of that expulsion, FOPS would provide little or no protection. Moreover, rock bursts typically occur at blasting time, after all personnel have exited active headings. Seismic activities at the Galena mine are actively monitored and a rock burst control plan is in place as required by 30 CFR 57.3461.

(2) This plan is specifically designed to reduce the occurrence of rock bursts, monitor procedures where detection methods are used, and provide additional measures to minimize exposure of persons to rock bursts, such as stress shadowing and other mining techniques.

d. Complying with 30 CFR 57.14106(a) would subject miners to greater hazards than they are subjected to under current conditions.

e. Significant changes to the ground control plan at the Galena mine would need to be made to accommodate clearance for the FOPS.

f. Enlarging the heading height at the Galena mine exposes more rib height, which reduces the stope ribs' structural stability.

(1) Sound geotechnical principles dictate that ground support requirements are directly linked to the span of the excavation; this applies to both lateral and vertical spans. Greater spans require longer fixtures more closely spaced to overcome the forces

and loads that the spans are subjected to. Successful narrow vein mining methods are dependent upon minimizing spans and the inherent risks associated with exceeding critical dimensions.

(2) Requiring the use of FOPS at the Galena mine will dictate wider and higher excavations to accommodate the FOPS. LHD operators will be subjected to exposures and hazards not faced today, and even greater exposure will exist for the personnel on the ground installing and maintaining the ground support and performing other essential tasks. A typical mining cycle in a mechanized area of the Galena mine only requires about 2 hours of the available work cycle; the remainder of the cycle is consumed by installing and maintaining the ground support, advancing utilities, and drilling and charging the next advance sequence. This work is performed from the ground with hand-held tools. All risks and exposures previously detailed for the LHD operators will be faced by the ground miner for an even greater period of time. Additionally, a miner's ability to adequately scale and provide for proper rock bolting processes will be negatively impacted by the higher, wider spans.

(3) Hanging wall stability in the Galena mine is most significantly influenced by two main factors: the geologic composition of the wall rock, and the height and attitude of the hanging wall. The higher and flatter the hanging wall, the greater the likelihood of deterioration or failure as a result of the effects of gravity, as well as the lateral stresses present that provide for rock burst potential.

(4) Mining higher and/or wider increases cycle times, increases exposure, and radically influences stability. Techniques and procedures have been developed at the

Galena mine that provide for safe mineral extraction on a sustained basis, and minimize the deterioration and failure potential of hanging walls in the ore producing areas. The positive effects of these techniques and procedures that have proved effective over time will be negated by creating wider and higher excavations.

g. FOPS will become entangled with existing ground support and compromise the existing ground control.

(1) Backs in the Galena mine complex vary in terms of height and the type of ground support used. Currently the LHDs used in the Galena mine are being used in stopes where wire mesh, roof bolts, cables, split sets, holey boards, mats, stulls, and screens are used. The primary supports used to address ground control in the area often protrude from the back and ribs and are vulnerable to damage by moving equipment. If the FOPS were to get caught in this material, not only would ground support be compromised if the FOPS inadvertently dislodged any of these support fixtures, but the equipment operator could also experience injury. In addition, the LHD itself could be damaged if there is impact with the rib or with ground support fixtures protruding from the rib.

(2) The Galena mine operates a number of other LHDs for which there are no original equipment manufacturer (OEM) FOPS available. This is significant because for those units where no OEM FOPS exists, there may not be adequate room to attach such a structure without impinging into the operator's compartment in such a way as to either increase the likelihood of injury or severely impede visibility.

h. FOPS would only provide protection from falling objects during a small fraction of the stoping cycle. Currently miners at the Galena mine spend 1-2 hours in the LHD mucking in each stoping cycle. The rest of the time the miners are on foot or using other equipment without FOPS, and those employees are considered to be safe enough with only personal protective equipment to protect them (for example, a miner bolting with a jackleg, loading a round, preparing for backfill, etc.). When considering that these miners are working without FOPS protection for most of their shifts, requiring FOPS on LHDs certainly flies in the face of logic.

i. The FOPS mounting hardware creates pinch points. The most dangerous pinch points on an LHD are in and around the articulation joint. The operator's cab is positioned immediately adjacent to the articulation, and operators must be very cautious to avoid this hazard. Clearances in the articulation area are small without FOPS installed and even more so with the canopy on. On the 2cy LHDs, a post must be installed to mount the canopy creating a pinch point hazard.

j. FOPS will reduce visibility to operators.

(1) Visibility is a key operational safety factor in operating any type of heavy machinery. This is particularly true in mechanized narrow-vein mining as practiced at the Galena mine. While operating an LHD with FOPS installed, the operator's sight lines become obstructed, increasing risk to the operator and to others working in the area.

(2) Miners at the Galena mine have stated they are opposed to the addition of FOPS to the LHDs because of the decrease of visibility to equipment operators. The reduction of line-of-sight visibility for the operator increases the potential for "struck by"

injuries to miners traveling or working in the vicinity of the equipment. Additionally, to alleviate the limited visibility, the miners may be inclined to lean out of the side of the equipment, which not only negates any benefit of the canopy, but also increases the risk for head and neck injuries.

k. FOPS will decrease operator space. The LHD operators' cabs at the Galena mine are already cramped, and will become even more cramped with FOPS installed. Some experienced operators and valued employees will no longer be able to operate the LHDs because they will not be able to fit in the cabs with FOPS installed. Overhead clearance within the operator's cab will likely be an issue as the LHD is subject to driving over potholes or rocks while tramming, causing the machine to bounce and the operators to hit their heads on the canopy.

l. FOPS would inhibit rescue efforts if a rescue is required. Having FOPS installed on LHDs would greatly inhibit any rescue efforts that required an operator to be removed from the cab. If FOPS were installed on the LHDs, it would be difficult to extract the operator from the cab, as extrication gear is designed to work in a vertical orientation. It would also be difficult to transport victims out over an LHD stalled in a narrow stope heading, because the FOPS structure itself would impose a vertical obstruction midway along the length of the machine that a stretcher would have to be lifted over or around. Under the current operating conditions, there is adequate room to perform extrication without undue complications.

m. The standard is not applicable to LHDs, which are low profile machines specifically designed for underground mining.

(1) LHDs perform differently than front-end loaders. Front end-loaders load trucks or hoppers. LHDs load themselves, generally by filling their bucket with muck, and then haul the loaded material over varying, often lengthy, distances to a dump point. In contrast, front-end loaders fill their scoops or buckets multiple times for very short trips to haul trucks or other forms of equipment used purely for haulage. While both LHDs and front-end loaders have a hydraulically operated digging and lifting bucket on the front, the similarities between the two pieces of equipment end there.

(2) The configuration of the two types of equipment is also strikingly different. In general, the operator's compartment of a front-end loader sits directly behind the scoop or bucket, facing forward to facilitate the equipment's sole mission of picking up multiple loads for the purpose of transferring them to haulage equipment. The operator's cab of a typical LHD is located in the middle of the machine to facilitate the equipment taking a single scoop or bucket load and then tramming in the opposite direction to a dump point. The midships positioning of the operator's cab on an LHD is intended to allow it to haul comparatively long distances in narrow areas where it is often unable to turn the machine around before initiating the haul. In this configuration the operator sits sideways, maximizing his ability to see where he is going when traveling in either direction.

(3) Although the standard clearly applies to front-end loaders used in surface operations, when discussing the standard for backup alarms, 30 CFR 57.14132 explicitly mentions and exempts load, haul, dump vehicles from that standard by name; [the back-up alarm/horn requirement] is applicable to surface mines and surface areas of underground mines only, because the construction of load, haul, dump vehicles generally

used underground is such that the view to the rear is less likely to be obstructed. If 30 CFR 57.14106(a) was meant to apply to LHDs, the standard would have specifically referenced this type of equipment.

The petitioner asserts that application of the existing standard would result in diminution of safety to the miners.

Docket No: M-2013-009-M.

Petitioner: Hecla Limited, 1801 California Street, Suite 4900, Denver, Colorado 80202.

Mine: Lucky Friday Mine, MSHA I.D. No. 10-00088, located in Shoshone County, Idaho.

Regulation Affected: 30 CFR 57.14106(a) (Falling object protection).

Modification Request: The petitioner requests a modification of the existing standard to permit the use of Load, Haul, Dump (LHD) utility vehicles underground without falling object protection structures (FOPS) because it would result in a diminution of safety to the miners affected.

a. Ground control at the Lucky Friday mine provides that there is no hazard from falling objects.

(1) Based on Lucky Friday's extensive rock burst and ground control plans, the mines current practice is to not exceed 11 feet in cut height. This is a major design component that is based on years of stoping experience in the Lucky Friday mine. In the past, stopes mined higher than 11 feet on a cut exhibited less reliable rib conditions.

(2) All of Lucky Friday's current stoping is being done by the underhand cut and fill method, which allows the operator to create an engineered stope backfill in a

completed stope heading that becomes the back in the next cut taken below. Because the back is constructed to engineered specifications, there is high confidence of low risk of roof failure under the typical variations of wall rock geology encountered in the Lucky Friday mine.

(3) As a result, stope crews (including LHD operators) work under cemented backfill that is substantially reinforced internally with bolts, wire, timbers, and cables as needed. The fill reaches a compressive strength of 200 psi within two to three days, at which time stope crews are allowed to reenter beneath the filled areas. The fill reaches strengths of 500 to 700 psi in 28 days. Wire mesh is attached to the ends of the bolts protruding below the cemented fill as the stoping crew mines the next cut. When conditions warrant, additional bolting is installed in the fill.

b. There have been no documented falling object incidents at the Lucky Friday mine for 20 years. In the 1990's two miners were injured at the Lucky Friday mine when they were operating LHDs with FOPS under unsupported ground. Since that time, the mine's policies have been modified so that miners are prohibited from working under unsupported ground. No miner working in an LHD without FOPS has been injured by falling rock since the modification of this policy.

c. Rock burst potential at the Lucky Friday mine does not mean there is an increased hazard of falling objects.

(1) While geological conditions at the Lucky Friday mine may make the mine susceptible to rock bursts, rock bursts are not falling object events. They more typically involve the sudden expulsion of material from the ribs. Because of the more or less

horizontal nature of that expulsion, FOPS would provide little or no protection. Moreover, rock bursts typically occur at blasting time, after all personnel have exited active headings. Seismic activities at the Lucky Friday mine are actively monitored and a rock burst control plan is in place as required by 30 CFR 57.3461.

(2) This plan is specifically designed to reduce the occurrence of rock bursts, monitor procedures where detection methods are used, and provide additional measures to minimize exposure of persons to rock bursts, such as stress shadowing and other mining techniques.

d. Complying with 30 CFR 57.14106(a) would subject miners to greater hazards than they are subjected to under current conditions.

e. Significant changes to the ground control plan at the Lucky Friday mine would need to be made to accommodate clearance for the FOPS.

f. Clearance at the Lucky Friday mine over the FOPS would become an issue.

(1) At the stoping cut starts, there is generally adequate overhead clearance in a standard 11-foot-high cut to allow the LHD to operate without hitting the stope ventilation duct – a 30-inch vent bag. However, as the stope increases in length, or as stope headings branch off the main vein, a 42-inch vent bag is substituted on the fan end to reduce resistance in the duct and to keep airflow in the stope at acceptable volumes.

(2) Reducing the size of the vent bag is not an option, as ventilation would be compromised. In the Lucky Friday's hot humid stoping environment it is essential to maximize ventilation flows so as to optimize performance of the air cooling systems. This performance must be achieved in concert with effective removal of air contaminants

in the heading such as dust and diesel particulate matter, while providing adequate airflow for personnel and effective aspiration of diesel engines on the equipment. Any reduction in the size of the vent bag restricts airflow, negatively impacting ventilation performance in all of these areas. The 42-inch diameter vent bag now in use is the optimum size for the dimensions of the standard stopes.

(3) If the use of FOPS on LHDs is required, the only viable solution to clearance problems is to enlarge the minimum heading size, which will result in increased risks to miners.

g. Enlarging the heading heights exposes more rib height, which reduces the stope ribs' structure stability.

(1) The Gold Hunter portion of the Lucky Friday mine is a deep mining operation located within the Wallace formation. The Wallace is composed primarily of vertical, thinly bedded, relatively weak and plastic argillites. Due to the depth of this mine, some degree of yielding of the rock around development headings and stopes is typical and expected. When the rock yields and delaminates, it loses much of its inherent strength. The orientation of the bedding, which is parallel to the veins, has a distinct impact on the type and depth of yielding around a tunnel or stope. In particular, excavations that are driven parallel to the bedding (which includes all stopes since bedding strikes parallel to the vein structure) will experience some degree of delamination or buckling of the thin argillite beds when subjected to the normal in situ stress state. The onset of significant buckling, as well as the depth of the resulting damage to rock in the walls, is roughly proportional to the height of exposed vertical

walls in the stopes. Control of the yielding volume and deformation of stopes is achieved by two general design factors: (a) minimizing opening size; and (b) application of ground support with sufficient density and length to maintain the yielded rock around the excavation.

(2) Hecla's experience at the Gold Hunter portion of the Lucky Friday mine indicates that wall stability in stopes is particularly sensitive to wall height. For example, experience in the 550-14 stope (5500 Level) illustrates the issue fairly clearly. In 2010, mining in the 550-14 stope was initiated beneath the 15 stope, which was completed approximately 5 years prior. The initial plan was to leave a 10-feet-high solid ore pillar beneath the 15 stope backfill during cut #1 of 550-14 stope. This pillar was to be left since the backfill in the 15 stope had been in place for a long time and had deteriorated due to stope closure and water accumulation. As cut #1 of the 14 stope was advanced, it became obvious that a 10-feet-pillar height was insufficient and that 15 feet would be required. Cut #1 was stopped and cut #2 was initiated and advanced below the new backfill in cut #1 with the objective that it would be mined beyond the limits of cut #1 where the cut height would be increased from 10 feet to 15 feet, thus creating the desired 15-feet-pillar height. In the process of increasing the stope height from the standard 10 feet to the taller 15 feet, the wall of the stope failed at a height of 13 feet by buckling of beds. The failure, which was about 18 feet in length and 10 feet in height and approximately 6 feet to 8 feet in depth, occurred roughly 59 feet behind the advancing stope face. Currently, cut heights in stopes at the Gold Hunter are limited to 10 feet to minimize the potential of this type of failure.

h. Keeping stope height to a minimum is fundamental to support strategy in potentially seismic conditions. Seismic conditions can sometimes occur at the Gold Hunter portion of the Lucky Friday mine primarily due to encountering preexisting, poorly oriented fault structures in proximity to the mining. A seismic event, resulting from slip on a fault structure will result in production of a seismic wave that transits through the rock mass and can impact the stopes. Damage from these events is largely the result of expulsion of disturbed (yielded) rock from the walls of the stopes. Since the back of stopes in the underhand mining method is engineered, damage has primarily been observed from the disturbed rock in the walls. Control of the expulsion of the pre-damaged wall is performed by limiting the height of the stopes and by installation of ground support, including heavy bolting and meshing. Increasing stope height results in greater depth of yielded/damaged rock in the walls. This greater depth of yielding creates a greater mass of weakened material that could potentially be ejected into a tunnel under seismic loading. The density and length of ground support required to dissipate the kinetic energy of this mass increases dramatically with the size of the failed zone. Thus, keeping the stope height to a minimum is fundamental to support strategy in potentially seismic conditions.

i. To minimize the deterioration and failure potential of hanging walls in the ore producing areas, techniques and procedures developed at the Lucky Friday mine provide for safe mineral extraction on a sustained basis. The positive effects of these techniques and procedures that have proved effective over time will be negated by creating wider and higher excavations.

j. FOPS will become entangled with existing ground support and compromise the existing ground control.

(1) Backs in the Lucky Friday mine complex vary in terms of height and the type of ground support used. Currently the LHDs in the Lucky Friday mine are being used in stopes where wire mesh, roof bolts, cables, split sets, holey boards, mats, stulls and screens are used. The primary supports used to address ground control in the area often protrude from the back and ribs and are vulnerable to damage by moving equipment. If the FOPS were to get caught in this material, not only would ground support be compromised if the FOPS inadvertently dislodged any of these support fixtures, but the equipment operator could also experience injury. In addition, the LHD itself could be damaged if there is impact with the rib or with ground support fixtures protruding from the rib.

(2) In a recent test at the Lucky Friday mine where an experienced LHD operator was asked to test performance of LHD equipment with FOPS, the LHD became trapped in a stope heading as the FOPS hooked on a split set that was installed to hold wire mesh against the rib. The operator was not trapped in the cab and was able to exit safely, but another LHD had to be brought in to extricate the trapped machine. A test of a LHD with a newly installed FOPS showed damage from the impacts with the stope rib after only minutes of operation.

k. FOPS would only provide protection from falling objects during a small fraction of the stoping cycle. Currently miners at the Lucky Friday mine spend 1-2 hours in the LHD mucking in each stoping cycle. The rest of the time the miners are on foot or

using other equipment without FOPS, and those employees are considered to be safe enough with only personal protective equipment to protect them (for example, a miner bolting with a jackleg, loading a round, preparing for backfill, etc.). When considering that these miners are working without FOPS protection for most of their shifts, requiring FOPS on LHDs certainly flies in the face of logic.

l. The FOPS mounting hardware creates pinch points.

(1) The most dangerous pinch points on an LHD are in and around the articulation joint. The operator's cab is positioned immediately adjacent to the articulation, and operators must be very cautious to avoid this hazard. Clearances in the articulation area are small without FOPS installed and even more so with the canopy on. On the 2cy LHD's, a post must be installed to mount the canopy creating a pinch point hazard.

(2) On one occasion at the Lucky Friday mine (before the FOPS were removed in the 1990s), a miner lost his finger when his LHD started to tip over and he grabbed the FOPS canopy for support. His finger was caught between the canopy and stope rib and was amputated.

m. FOPS will reduce visibility to operators.

(1) Visibility is a key operational safety factor in operating any type of heavy machinery. This is particularly true in mechanized narrow-vein mining as practiced at the Lucky Friday mine. While operating an LHD with FOPS installed, the operator's sight lines become obstructed, increasing risk to the operator and to others working in the area.

(2) Miners at the Lucky Friday mine have stated they are opposed to the addition of FOPS to the LHDs because of the decrease of visibility to equipment operators. The reduction of line-of-sight visibility for the operator increases the potential for "struck by" injuries to miners traveling or working in the vicinity of the equipment. Additionally, to alleviate the limited visibility, the miners may be inclined to lean out of the side of the equipment, which not only negates any benefit of the canopy, but also increases the risk for head and neck injuries.

n. FOPS will decrease operator space. The LHD operators' cabs at the Lucky Friday mine are already cramped, and will become even more cramped with FOPS installed. Some experienced operators and valued employees will no longer be able to operate the LHDs because they will not be able to fit in the cabs with FOPS installed. Overhead clearance within the operator's cab will likely be an issue as the LHD is subject to driving over potholes or rocks while tramming, causing the machine to bounce and the operators to hit their heads on the canopy.

o. FOPS would inhibit rescue efforts if a rescue is required. Having FOPS installed on LHDs would greatly inhibit any rescue efforts that required an operator to be removed from the cab. If FOPS were installed on the LHDs, it would be difficult to extract the operator from the cab, as extrication gear is designed to work in a vertical orientation. It would also be difficult to transport victims out over an LHD stalled in a narrow stope heading, because the FOPS structure itself would impose a vertical obstruction midway along the length of the machine that a stretcher would have to be

lifted over or around. Under the current operating conditions, there is adequate room to perform extrication without undue complications.

p. The standard is not applicable to LHDs, which are low profile machines specifically designed for underground mining.

(1) LHDs perform differently than front-end loaders. Front end-loaders load trucks or hoppers. LHDs load themselves, generally by filling their bucket with muck, and then haul the loaded material over varying, often lengthy, distances to a dump point. In contrast, front-end loaders fill their scoops or buckets multiple times for very short trips to haul trucks or other forms of equipment used purely for haulage. While both LHDs and front-end loaders have a hydraulically operated digging and lifting bucket on the front, the similarities between the two pieces of equipment end there.

(2) The configuration of the two types of equipment is also strikingly different. In general, the operator's compartment of a front-end loader sits directly behind the scoop or bucket, facing forward to facilitate the equipment's sole mission of picking up multiple loads for the purpose of transferring them to haulage equipment. The operator's cab of a typical LHD is located in the middle of the machine to facilitate the equipment taking a single scoop or bucket load and then tramming in the opposite direction to a dump point. The midships positioning of the operator's cab on an LHD is intended to allow it to haul comparatively long distances in narrow areas where it is often unable to turn the machine around before initiating the haul. In this configuration the operator sits sideways, maximizing his ability to see where he is going when traveling in either direction.

(3) Although the standard clearly applies to front-end loaders used in surface operations, when discussing the standard for backup alarms, 30 CFR 57.14132 explicitly mentions and exempts load, haul, dump vehicles from that standard by name; [the back-up alarm/horn requirement] is applicable to surface mines and surface areas of underground mines only, because the construction of load, haul, dump vehicles generally used underground is such that the view to the rear is less likely to be obstructed. If 30 CFR 57.14106(a) was meant to apply to LHDs, the standard would have specifically referenced this type of equipment.

The petitioner asserts that application of the existing standard would result in diminution of safety to the miners.

Dated: July 12, 2013

_____

George F. Triebsch
Director
Office of Standards, Regulations and Variances

[FR Doc. 2013-17202 Filed 07/17/2013 at 8:45 am; Publication Date: 07/18/2013]