

APPENDIX I
NOHSM OCCUPATION, OPERATION, AND LOCATION
CODES, TITLES, AND DEFINITIONS FOR COAL MINES

The NOHSM names and definitions of the occupations, operations, and locations were taken directly from the MSHA list of occupations, operations, and locations for coal mines.

COAL OCCUPATION CODES

Underground Face

001 Belt Man/Conveyor Man	underground near the face to maintain ventilation.
One who sets up and tends conveyor belts in the underground face area.	009 Supply Man
002 Electrician	One who distributes supplies (roof bolts, timbers, etc.) underground at face operations.
A specialist who is skilled in electricity who maintains electrical equipment at the face in an underground mine.	010 Timberman; Propman; Jack Setter (Auger-Intake Side)
003 Electrician Helper	One who sets roof supports. Sets the intake side jack of an auger continuous miner.
One who assists an electrician at the face in an underground mine.	011 Wireman
004 Mechanic	One who installs and repairs communication lines and electric wires at the face of an underground mine. Also called lineman, mine wireman, wire hanger.
One skilled in repairing mining equipment underground at the face.	013 Cleanup Man
005 Mechanic Helper	One who collects and loads spillage at the face of an underground mine.
One who assists a mechanic underground at the face.	015 Fan Attendant
006 Rock Duster	One who installs and maintains an auxiliary ventilation system that provides the air current in the working faces.
A person who applies rock dust (powdered limestone) to underground coal surfaces near the face to reduce explosion hazards.	016 Laborer
007 Blaster; Shotfirer; Shooter	One who works at the face of an underground mine not otherwise classified. Excludes Rockman.
One who uses explosives in an underground coal mine. Also called powdergang, powderman, and powder monkey.	031 Shotfire Helper; Beater
008 Mason; Stopping Builder; Ventilation Man	A person who helps a shotfirer at the face of an underground mine.
One who builds walls of concrete, stone, metal, or brick and mortar to close off passageways or haulageways	

APPENDIX I (CONT.)

032	Brattice Man One who builds brattice (ventilation walls or partitions in underground coal passageways) of wood, canvas, or other flexible material to control proper circulation of air through passageways and to working places.	040	Headgate Operator A person who operates equipment at the head of a longwall face.
033	Coal Drill Helper One who helps the coal drill operator underground at the face.	041	Jack Setter (Long Wall) A person who sets the support for the roof of the mine on a longwall operation.
034	Coal Drill Operator One who operates a hand or mobile power drill to drill holes into the underground working face of the coal to allow placement of an explosive device.	042	Loading Machine Helper A person who assists a loading machine operator underground.
035	Continuous Miner Helper One who provides help to the continuous miner operator.	043	Loading Machine Operator A person who operates a mobile loading machine that loads coal into cars, or the like, for transportation from underground to the surface of the mine.
036	Continuous Miner Operator An operator of a continuous miner (a mining machine designed to remove coal from the face without the use of drills or explosive devices and load it onto conveyors or shuttle cars).	044	Shear Operator/Plow Operator Longwall One who operates a continuous coal-cutting machine along the longwall having a plough with knives that bite into the coal as it is pulled along the longwall face by a chain.
037	Cutting Machine Helper One who provides help to the cutting machine operator.	045	Rockman One who is the lead general laborer on a mining section.
038	Cutting Machine Operator One who operates an electrically or compressed-air-driven cutting machine which is used to cut out a channel in the working face so that it may be blasted down without shattering the mass.	046	Roof Bolter One who drills and places roof bolts at the face of underground mines to provide roof support. Boreholes are drilled upward in the roof and bolts are inserted into the holes and anchored. The bolt end protrudes below roof level and is used to support the roof bars, girders, or simple steel plates pulled tight up to the roof. Excludes roof bolter mounted.
039	Hand Loader A miner who loads coal by shovel rather than by machine.	047	Roof Bolter Helper One who assists a roof bolter.

APPENDIX I (CONT.)

- 048 Roof Bolter Mounted**
One who drills and places roof bolts with a drill mounted on a piece of machinery, for example: mounted on a continuous miner.
- 049 Section Foreman**
A foreman who has complete charge of a section of a mine. Also called section man. Works at the face of an underground mine.
- 050 Shuttle Car Operator (On Side)**
One who operates a truck-like vehicle to move material between the face and transfer points of an underground mine. A shuttle car has a self contained conveyor to assist in loading and unloading. The shuttle car operator and the loader (continuous miner) operator are on the same side of the entry.
- 051 Stall Driver**
One who operates the machinery which extracts material from a limited area (stall area) at the tail of a longwall face to allow for better roof control along the rest of the face.
- 052 Tailgate Operator**
A person who operates equipment at the tail of a longwall face.
- 053 Utility Man**
A skilled miner capable of substituting for other miners in their absence. Works underground at the face.
- 054 Scoop Car Operator**
One who operates a vehicle with a scoop attached to one end, used for coal haulage and cleanup work underground.
- 055 Jack Setter (Auger Return Side)**
A person who sets the return side jack of an auger continuous miner.
- 070 Auger Operator**
A laborer who operates an auger (boring machine) which is used to extract coal at the face of an underground mine.
- 071 Auger Helper**
A laborer who assists the auger operator at the face of an underground mine.
- 072 Mobile Bridge Operator**
One who operates a moveable bridge.
- 073 Shuttle Car Operator (Off Side)**
One who operates a truck like vehicle to move material between the face and transfer points of an underground mine. The shuttle car operator and the loader (continuous miner) operator are on opposite sides of the entry. A shuttle car has a self contained conveyor to assist in loading and unloading.
- 074 Tractor Operator/Motorman**
A worker who operates a haulage tractor or the operator of a self-propelled vehicle which is mounted on wheels with large pneumatic tires.

APPENDIX I (CONT.)
UNDERGROUND NONFACE (BUT MAY BE IN THE VICINITY)

100 Miner	A skilled miner capable of substituting for other miners in their absence. Works underground away from the face.	110 Timberman	One who frames (cuts end and side notches) fits, and installs sets of timbers. Works anywhere underground except at the face.
101 Belt Man/Conveyor Man	One who sets up and tends conveyor belts away from the face.	111 Wireman	One who installs and repairs underground communication lines and electric wires away from the face. Also called lineman; mine wireman and wire hanger.
102 Electrician	A specialist who is skilled in electricity and maintains electric equipment underground away from the face in a mine.	112 Belt Vulcanizer	One who uses equipment to repair (vulcanize) the belt joints of underground conveyors. The process involves the use of heat, sulfur, and chemical accelerators to mend damaged conveyor belts.
103 Electrician Helper	One who assists or aids an electrician underground away from the face.	113 Cleanup Man	One who collects and loads spillage underground away from the face.
104 Mechanic	One skilled in repairing mining equipment underground away from the face.	114 Coal Sampler	One who obtains and prepares samples of coal for analysis from underground operations.
105 Mechanic Helper	One who assists or aids a mechanic underground away from the face.	115 Fan Attendant	One who installs and maintains a fan system which provides an adequate flow of fresh air in an underground mine away from the face.
106 Rock Duster	One who applies rock dust (powdered limestone) to underground coal surfaces away from the face to reduce explosion hazards.	116 Laborer	One who works underground away from the face not elsewhere classified.
108 Mason; Stopping Builder; Ventilation Man	A person who builds walls of concrete, stone, metal, or brick and mortar to close off passageways or haulageways underground away from the face to maintain ventilation.	118 Greaser; Oiler	A workman responsible for keeping underground machinery properly lubricated. Excludes beltman/conveyor man.
109 Supply Man	One who distributes supplies (block, timbers, etc.) underground away from the face.		

APPENDIX I (CONT.)

- 119 Welder (Welding, Cutting, Brazing, Hard Surfacing, Soldering)**
- One who completes the following tasks underground:
WELDING—The joining of two metal surfaces which have been heated sufficiently to melt and fuse together.
CUTTING—Cutting metal with a high temperature flame.
BRAZING—Joining metals by flowing a thin layer of nonferrous filler metal into the space between them. Generally exceeds 800° F.
HARD SURFACING—The application of a hard, wear resistant alloy to the surface of a softer metal by an arc or gas-welding process.
SOLDERING—Identical to brazing, except below 800° F.
- 122 Coal Dump Operator**
- One who controls the loading of coal at the end of a conveyor or the unloading of coal where the coal carrying cars are dumped at an underground location.
- 123 Transit Man**
- One who conducts underground surveys with a transit (a surveyor instrument that has a telescope mounted so that it can measure horizontal and vertical angles).
- 146 Roof Bolter**
- One who drills and places roof bolts in passageway ceilings to provide roof support. Boreholes are drilled upward in the roof and bolts are inserted into the holes and anchored. The bolt end protrudes below roof level and is used to support the roof bars, girders, or simple steel plates pulled tight up to the roof.
- 149 Bullgang Operator; Labor Foreman**
- One who supervises a group of laborers away from the face in an underground mine.
- 154 Belt Cleaner; Belt Picker**
- One who cleans up material around belt conveyors.
- 155 Chainman**
- One who assists a transit man in making underground surveys. Also called lineman or rodman.
- 156 Rock Driller**
- One working underground who drills into rock or slate as distinguished from coal.
- 157 Pumper**
- One who maintains the pumps in a mine that are used to force water, accumulated underground in low places, to a natural outlet or pumping station.
- 158 Rock Machine Operator**
- One who operates an underground loading machine which is used to load rock and other material (as distinguished from coal) into cars, etc., for transportation.
- 159 Water Line Man**
- One who installs and repairs water lines which carry water underground.
- 160 Shopman**
- A worker in an underground shop not elsewhere classified.
- 161 Belt Repairman**
- One who makes mechanical repairs to damaged conveyor belts.

APPENDIX I (CONT.)
TRANSPORTATION (UNDERGROUND, SOME DISTANCE FROM THE FACE)

201	Belt Man/Conveyor Man	261	Battery Station Operator
	One who sets up and/or tends conveyor belts underground some distance from the face.		One who is responsible for charging and exchanging batteries used in a mine.
216	Trackman	262	Brakeman; Rope Rider
	One who lays or repairs track for rail transportation. May work in a track crew.		One who attends to a brake on an underground vehicle such as a railroad car. Also called trip rider.
220	Cager	263	Track Foreman
	One who loads and unloads men and material from a cage (elevator); signals hoist operator when to move cage. Works underground.		One who supervises the track gang in laying or repairing tracks.
221	Hoistman	265	Dispatcher
	One who uses a hoist (drum on which cable is wound to raise and lower equipment or material in a shaft). Works underground.		One who controls or monitors the traffic on underground haulageways and informs others when to move haulage equipment.
240	Leader Head Operator; Roscoe Operator	269	Motorman
	One who operates a conveyor belt feeder.		One who operates a locomotive underground for moving men, material, supplies, or coal, by rail.
250	Shuttle Car Operator	276	Driver
	One who drives a truck-like vehicle to move material underground some distance from the face. A shuttle car has a self-contained conveyor to assist in loading and unloading.		One who transports men, material, supplies, or coal underground not otherwise classified. For example: a mule driver.
		277	Buggy Pusher
			One who manually pushes a small cart for transportation of coal or rock underground.

**APPENDIX I (CONT.)
SURFACE**

301	Conveyor Operator One who operates conveyor belts on the surface used to transport coal at a mine.	312	Belt Vulcanizer One who uses equipment to repair (vulcanize) the belt joints of surface conveyors., The process involves the use of heat, sulfur, and chemical accelerators to mend damaged conveyor belts.
302	Electrician A specialist who is skilled in electricity and maintains electrical equipment at the surface.	313	Cleanup Man One who collects and loads spillage at the surface.
303	Electrician Helper One who assists or aids an electrician at the surface.	314	Coal Sampler One who obtains and prepares samples of coal for analysis from surface operations.
304	Mechanic One skilled in repairing mining equipment at the surface.	315	Fan Attendant One who operates and maintains a fan system that forces air into or exhausts air from underground workings for ventilation. Works on the surface.
305	Mechanic Helper One who assists or aids a mechanic at the surface.	316	Laborer; Blacksmith One who works at surface operations not otherwise classified.
307	Blaster; Shotfirer; Shooter One who uses explosives at a surface operation. Also called powder gang, powderman; powder monkey.	318	Greaser; Oiler A workman responsible for keeping machinery properly lubricated at surface operations.
308	Mason One who is skilled in laying brick, block, and stone at surface operations.	319	Welder; (Shop) Blacksmith One who completes the following operations on metal at surface operations: welding (joining two metals by heat), cutting, brazing, hard surfacing, and soldering.
309	Supply Man One who distributes supplies on the surface.	320	Cage Attendant/Cager One who loads and unloads men and material from a cage (elevator); signals hoist operator when to move cage. Works on the surface.
310	Pan Scraper Operator One who operates a vehicle that removes material by scraping material into a pan and later dumping the material into a desired location. Example: removes topsoil for reclamation purposes.		
311	Wireman One who installs and repairs surface com-		

APPENDIX I (CONT.)

321 Hoist Engineer/Operator	345 Crusher Attendant
One who uses a hoist (drum on which cable is wound to raise and lower equipment or material in a shaft). Works on the surface.	One who regulates the amount of material fed into crushers and/or operates the crusher on the surface.
323 Transit Man	347 Froth Cell Operator
One who conducts surface surveys with a transit (a surveying instrument that has a telescope mounted so that it can measure horizontal and vertical angles).	One who operates a process for cleaning fine coal on the surface in which the coal, with the aid of a reagent, becomes attached to air bubbles in a liquid medium and floats as a froth. The coal particles are thus removed from impurities.
331 Clam Operator	348 Machinist
One who operates a twin-jawed bucket hung from a boom by a cable in order to pick up, transport, and dump material at surface operations.	One who is skilled in the use of metal working tools on the surface.
333 Coal Drill Helper	349 Rotary Dump Operator
One who assists the coal drill operator at surface operations.	One who operates an apparatus on the surface for overturning mine cars to discharge coal.
334 Coal Drill Operator	350 Shuttle Car Operator
One who operates a hand held or mobile power drill for drilling holes in coal at surface operations.	One who operates a truck-like vehicle to move material between transfer points on the surface. A shuttle car has a self-contained conveyor to assist in loading and unloading.
341 Beltman/Conveyor Man	351 Scoop Operator
One who sets up and tends conveyor belts at surface operations.	One who operates a vehicle with a scoop attached to one end for material haulage and cleanup work at surface operations.
342 Bit Sharpener	352 Steel Worker
One who operates a bit grinding machine that shapes and sharpens cutting edges of detachable drilling bits. Also called bit grinder.	A construction worker employing steel, iron, or other metal products.
343 Car Trimmer/Car Loader	354 Sweeper Operator
One who loads material into a car on the surface.	One who operates mobile equipment to remove dust at surface operations.
344 Car Shake-Out Operator	355 Chainman
One who operates a mechanical device on the surface to empty material from a car by vibrating or shaking the car.	One who assists a transit man in making surface surveys. Also called lineman or rodman.

APPENDIX I (CONT.)

356 Rock Driller	368 Bulldozer Operator
One who drills holes into rock for blasting purposes at surface operations. Excludes driller; highwall operator.	One who operates a heavy gasoline or diesel-driven machine having a front-mounted vertical blade for moving earth or coal.
357 Washer Operator	369 Motorman
One who washes coal, using equipment such as launders, shakers, screens, and conveyors to separate coal from slate, rock, and other impurities, usually by gravity separation. Also called coal-washer tender; wash-coal conveyorman; washerman. Excludes froth cell operator.	One who operates a locomotive at surface operations for moving material by rail.
360 Shopman Repair Cars	370 Auger Operator
One who repairs haulage vehicles in a shop.	One who operates an auger (boring machine) which is used to extract coal at surface operations.
362 Brakeman	371 Auger Helper
One who attends to a brake on a surface vehicle such as a railroad car. Also called trip rider.	A laborer who assists the auger operator at surface operations.
365 Dispatcher	372 Barge Attendant
One who controls and monitors the traffic on surface haulageways and informs others when to move haulage equipment.	One who works on a barge (water craft for transportation of material).
366 Waterboy	373 Car Dropper
One who supplies drinking water to other miners.	One who controls the movement of material-carrying cars to be loaded or dumped.
367 Coal Shovel Operator	374 Cleaning Plant Operator
One who operates a mechanical device on the surface for excavating and loading coal consisting of a digging bucket at the end of an arm suspended from a boom which extends from the powerplant of the machine. When digging, the bucket moves forward and upward so that the machine does not excavate below the level on which it stands.	One who operates a coal preparation plant or cleaning plant. For example: may operate froth cell, washers, etc.
	375 Road Grader Operator
	One who operates a machine to level mine roads.
	376 Coal Truck Driver
	One who operates a self-propelled (gasoline or diesel) wheeled vehicle which operates on public or private highways to transport material between transfer points.

APPENDIX I (CONT.)

<p>378 Dragline Operator; Crane Operator</p> <p>One who operates excavating equipment with a wire rope-hung bucket often used for removing overburden at surface coal mines.</p>	<p>387 Rotary Bucket Excavator Operator</p> <p>One who operates mobile equipment with rotary buckets.</p>
<p>379 Dryer Operator</p> <p>One who operates a device which removes the moisture from coal.</p>	<p>388 Scalper - Screen Operator</p> <p>One who separates material from coal that is being processed. Also called screenman.</p>
<p>380 Fine Coal Plant Operator</p> <p>One who operates a facility which produces small size coal particles.</p>	<p>390 Silo Operator</p> <p>One who controls the loading and unloading of a coal storage silo.</p>
<p>381 Hoist Operator Helper</p> <p>One who assists the hoist operator.</p>	<p>391 Stripping Shovel Operator</p> <p>One who operates a mechanical device on the surface for excavating and loading overburden consisting of a digging shovel at the end of an arm suspended from a boom which extends from the powerplant of the machine.</p>
<p>382 Highlift Operator</p> <p>One who operates a mobile machine for lifting and transporting materials to and from locations on the surface.</p>	<p>392 Tipple Operator</p> <p>One who operates a surface facility which receives and loads coal to be transported from the facility.</p>
<p>383 Driller; Highwall Helper</p> <p>One who assists the driller of the highwall.</p>	<p>393 Weighman</p> <p>One who determines the weight of material by use of a scale. Also called scaleman.</p>
<p>384 Driller; Highwall Operator</p> <p>One who drills holes into overburden in preparation for blasting at surface operations.</p>	<p>394 Carpenter</p> <p>One who builds or repairs wooden structures.</p>
<p>385 Lampman</p> <p>A person having responsibility for cleaning, maintaining, and servicing of miners' lamps. Also called lamp cleaner; lamp-house man lamp keeper; lamp repairer; safety-lamp keeper.</p>	<p>395 Water Truck Operator</p> <p>One who operates a truck which applies water to reduce dust generation.</p>
<p>386 Refuse Truck Driver</p> <p>One who operates a truck which removes tailings or waste material from surface operation sites.</p>	<p>396 Watchman</p> <p>One who patrols facilities to prevent theft.</p>
	<p>397 Yard Engine Operator</p> <p>One who operates a locomotive which moves material carrying railcars</p>

APPENDIX I (CONT.)

for loading and unloading purposes on the surface.

398 Groundman

One who removes spillage from the roadbed where power shovels travel.

399 Laboratory Technician

One who assists or completes tests or analysis often of a chemical nature in support of mining activity.

**APPENDIX I (CONT.)
ADMINISTRATION/MANAGEMENT**

402	Master Electrician		
	A specialist who is skilled in electricity and maintains electrical equipment in a mine and often oversees the work of other electricians.		lems involving the properties of matter and sources of energy; or one who assists in such activity. For example an electrical engineer designs and specifies the system to safely transport electricity to mining equipment.
404	Master Mechanic	462	Fireboss, Pre-Shift Examiner
	One skilled in assembling and repairing mining equipment and often oversees the work of other mechanics.		A person designated to examine the mine for gas and other dangers usually before but also during the shift. Also called mine examiner.
414	Dust Sampler	464	Inspector
	One who assesses the airborne dust content of the mine environment.		One who checks the mine to determine the health and safety conditions.
418	Maintenance Foreman	481	Superintendent
	One who supervises the work of the maintenance crew such as mechanics, electricians, etc.		One who supervises the overall work at one or more mining facilities.
423	Surveyor	489	Outside Foreman
	One skilled in the science of making angular and distance measurements necessary to determine the relative position of points on or beneath the surface of the earth or to establish such points. Locates boreholes, shafts, and tunnels in order to document and guide mining activity. Often supervises the work of the transit man.		A foreman who supervises all operations at the surface of a mine. May report to a superintendent.
430	Assistant Mine Foreman/Assistant Mine Manager	494	Prep Plant Foreman
	One who provides aid to the mine foreman or mine manager.		A foreman who supervises all operations at a coal preparation plant. May report to a superintendent.
449	Mine Foreman, Mine Manager	495	Safety Director
	One charged with the general supervision of the workings of a mine and the persons employed therein. The foreman or manager may report to a superintendent.		One in charge of health and safety for a mine or several mines. May supervise mineral industrial safety officers.
456	Engineer (Electrical, Ventilation, Mining)	496	Union Representative
	One who is skilled in the application of science and mathematics to practical prob-		One who represents the concerns of a union of workers in discussions with the management of a mine. Excludes safety representative.
		497	Clerk, Timekeeper
			A member of the administrative staff of a mine who is responsible for record keeping.

APPENDIX I (CONT.)

590 Education Specialist

One who provides training to miners over a broad range of subjects. (Excludes safety topics.)

591 Mineral Industrial Safety Officer

One who is responsible for seeing that mine work is completed in a safe manner. Investigates and reports on accidents and remedial measures. May report to a safety director.

592 Mine Safety Instructor

One who provides training to miners on health and safety related topics such as first aid, mine rescue, mine fires, respirator use, etc.

593 Safety Representative

A representative of miners who recommends action on safety concerns to mine management.

**APPENDIX I (CONT.)
COAL OPERATION CODES**

- | | |
|--|--|
| <p>001 Hand Mucking</p> <p>The operation of loading broken coal or other material by hand with a shovel.</p> | <p>007 Loading, Hauling, Dumping
—Diesel Equipment</p> <p>LOADING—Maneuvering material removed from the mining process into trucks, mine cars, conveyors, etc. by diesel equipment.
HAULING—The transporting of the product of the mine from the working places by diesel equipment.
DUMPING—Unloading material taken from a mine by diesel equipment.
DIESEL EQUIPMENT—Equipment powered by diesel engines (a type of internal combustion engine in which air is compressed to a temperature sufficiently high to ignite fuel injected directly into the cylinder, where the combustion and expansion actuate a piston. Thermodynamically, its operation approximately follows the ideal diesel cycle. The efficiency of the diesel engine is higher than that for other engines). Burns diesel fuel as opposed to gasoline.</p> |
| <p>002 Timbering</p> <p>The operation of setting supports in mine workings or shafts to support the roof or face during evacuation.</p> | <p>008 Loading, Hauling, Dumping
—Gasoline Equipment</p> <p>LOADING—Maneuvering material removed from the mining process into trucks, mine cars, conveyors, etc. by gasoline equipment.
HAULING—The transporting of the product of the mine from the working places by gasoline equipment.
DUMPING—Unloading material taken from a mine by gasoline equipment.
GASOLINE EQUIPMENT—Equipment powered by gasoline (a refined petroleum naphtha which, by its composition, is suitable for use in internal combustion engines) engines.</p> |
| <p>003 Roof Bolting</p> <p>A system of roof support in mines. Boreholes are drilled upward in the roof and bolts are inserted into the holes and anchored by expansion shells; resin cartridges; or similar devices. The protruding bolt head below roof level is then used to support roof bars, girders, or simple steel plates pulled tight up to the roof. The idea is to clamp together roof beds to form a composite beam with a strength considerably greater than the sum of the individual beds acting separately.</p> | <p>009 Loading, Hauling, Dumping
—Compressed Air Equipment</p> <p>LOADING—Maneuvering material removed from the mining process into trucks, mine cars, conveyors, etc. by compressed air equipment.
HAULING—The transporting of the product of the mine from the working places by compressed air equipment.</p> |
| <p>004 Blasting</p> <p>The operation of breaking coal by boring a hole in it, inserting an explosive device, and detonating or firing it. Also called shot firing.</p> | |
| <p>005 Drilling</p> <p>The act or process of making a circular hole with a drill for blasting.</p> | |
| <p>006 Loading, Hauling, Dumping
—Electrical Equipment</p> <p>LOADING—Maneuvering material removed from the mining process into trucks, mine cars, conveyors, etc. by electrical equipment.
HAULING—The transporting of the product of the mine from the working places by electrical equipment.
DUMPING—Unloading material taken from a mine by electrical equipment.
ELECTRICAL EQUIPMENT—Equipment powered by electricity.</p> | |

APPENDIX I (CONT.)

- DUMPING**—Unloading material taken from a mine by compressed air equipment.
- COMPRESSED AIR EQUIPMENT**—Equipment powered by compressed air (air compressed in volume and transmitted through pipes for use as motive power for underground machines).
- 010 Mining Machine Operating**
- Operations that involve the use of power machines and equipment in the excavation and extraction of coal that is not elsewhere classified.
- 011 Track Crew**
- Operations that involve the installation and maintenance of rail tracks in the mine.
- 012 Complete Mining Cycle**
- The cycle of operations which includes all phases of mining. This cycle may include cutting the coal, drilling the shot holes, charging and shooting the holes, loading the broken coal, installing roof support, and hauling.
- 013 Hoisting**
- The operation of raising and lowering coal, men, or materials in a shaft. The conventional system is to employ two cages actuated by a drum type of winding engine with steel cables attached at either end of the drum, one over and the other under it, so that as one cage ascends the other descends and they arrive at pit top and bottom simultaneously.
- 014 Bulldozing**
- The movement of earth or coal by means of a curved blade mounted on the front of a heavy gasoline or diesel driven machine.
- 015 Crushing**
- Operations where coal is reduced into a relatively coarse material by mechanical means.
- 016 Sizing**
- The process of separating coal particles of various sizes into groups of particles all of the same size, or into groups in which all particles range between definite maximum and minimum sizes. The process is usually completed by passing the particles through screens of differing mesh size.
- 017 Washing**
- The act of separating saleable coal from impurities by using differences in specific gravity. The separation may occur in air, water, air and sand, water and sand, water and chemicals (float sink), etc.
- 018 Administration**
- The act of supervising and managing the work of miners.
- 019 Drying**
- The removal of water from coal by the application of heat.
- 020 Continuous Mining**
- Mining coal by a machine (continuous miner) that removes coal from the face and loads it into cars or conveyors without the use of drills or explosives.
- 021 Longwall Mining**
- An underground method of coal extraction where coal is removed in one operation by means of a shear or plow along a face or wall (may be several hundred feet).
- 022 Auger Mining**
- Coal extraction by means of a boring machine (Auger). As the auger turns, the head breaks the coal and the screw removes it, much like boring holes in wood.

APPENDIX I (CONT.)

<p>023 Silo Operations</p> <p>Controlling the loading or unloading of a coal storage silo.</p>	<p>108 Belt Maintenance</p> <p>Operations involving repair and upkeep of conveyor belt systems including the belt itself, a driving unit, supporting structure, and idler rollers between the terminal drums and accessories, which include devices for maintaining belt tension and equipment for cleaning and protecting the belt.</p>
<p>024 Weighing</p> <p>Determining the weight of material by use of a scale.</p>	<p>109 Bratticing</p> <p>Building and maintaining ventilation walls or partitions (brattices) in underground passageways.</p>
<p>101 Concrete Operations</p> <p>Those operations involving mixing, pouring, finishing, putting up forms, etc. of concrete (an intimate mixture of stone, sand, water, and a binder, usually portland cement, which hardens to a stonelike mass). Excludes bratticing.</p>	<p>110 Electrician</p> <p>The operation of maintaining and repairing the electrical wiring and equipment of a mine.</p>
<p>102 General Labor & Cleanup</p> <p>Activities involving general duties and cleaning not elsewhere classified.</p>	<p>111 Ventilation</p> <p>The provision of an adequate flow of fresh air along all roadways, workings, and service points underground. Ventilation is an essential factor in safety, health, and working efficiency and is also necessary to dilute and remove noxious or flammable gases and to abate such problems as dust.</p>
<p>103 General Shop Work</p> <p>Any operation in a shop which is not otherwise classified. Does not include welding, mechanic, and electrician.</p>	<p>112 Rock Dusting</p> <p>The act of applying powdered limestone to underground coal surfaces thereby reducing explosion hazards.</p>
<p>104 Welding</p> <p>The process of joining two metal surfaces which have been heated sufficiently to melt and fuse together. Includes operations of cutting, brazing, hard surfacing, and soldering.</p>	<p>113 Lubrication</p> <p>The operation of oiling or greasing machinery.</p>
<p>105 Mechanic</p> <p>Activities that involve the repairing and assemblage of machines.</p>	<p>114 Battery Station Operation</p> <p>Charging and exchanging batteries used in a mine.</p>
<p>106 Supply Handling</p> <p>Receiving, storing, and providing equipment, spare parts, and other materials necessary to the operation of the mine.</p>	
<p>107 Technical Services</p> <p>Operations that involve having special and unusual practical knowledge especially of a mechanical or scientific subject. Examples include directing</p>	

APPENDIX I (CONT.)

- | | | | |
|------------|---|------------|--|
| 115 | Dispatching
Controlling or monitoring the traffic on haulageways. | 119 | Water Truck Operations
Applying water to reduce dust generation. |
| 116 | Road Grading
Operating a machine to level mine roads. | 120 | Security
Patrolling facilities to prevent theft. |
| 117 | Lamp Operations
Cleaning, maintaining, and servicing miners' lamps. | 121 | Pump Maintenance
Lubricating and maintaining pumps. |
| 118 | Carpentry
Building or repairing wooden structures. | | |

**APPENDIX I (CONT.)
COAL LOCATION CODES**

001	Underground Mechanized Mining Unit Locations by the transfer point to a belt line or other means of moving the coal out of the mine.	006	Coal Preparation Plant Locations where raw coal is cleaned and sized following extraction.
002	Underground Shop Specially equipped locations beneath the surface of the earth in an underground coal mine where mining equipment is repaired or maintained.	007	Underground Warehouse Underground locations which are dedicated primarily to the storage of supplies used for mine operations of any kind.
003	Surface Pit Locations above the surface of the earth where coal is extracted by the removal of overburden (the soil and rock above the coal). Includes auger mining locations where coal is brought to the surface using boring machines. Includes haulage roads.	008	Underground Miscellaneous Underground locations which are not otherwise classified. Includes underground belt line and haulage areas.
004	Surface Shop Locations above the surface of the earth where equipment is repaired or maintained.	009	Surface Warehouse Surface locations which are dedicated primarily to the storage of supplies used for mine operations of any kind.
005	Surface Miscellaneous Locations above the surface of the earth not otherwise classified.	010	Surface Laboratory Surface locations which are dedicated primarily to the analysis or examination of any substance or material.
		011	Surface Bathhouse Surface locations available for miners to shower or change clothes.

APPENDIX J
INTENDED CONTROL CODES, NAMES, AND DEFINITIONS

The intended controls are defined as the measures which were intended by management to protect the employees to any potential exposures.

PERSONNEL PROTECTIVE EQUIPMENT

EP	Ear (Hearing) Protection Muffs, Plugs. The wearing of ear plugs or muffs to protect ones hearing from noise.	CH	Chemical Cartridge Respirator (Half Facepiece) The wearing of a half facepiece chemical cartridge respirator to protect the respiratory system.
EF	Eye and Face Protection Face shields, Safety glasses, Welding helmets, Laser glasses, and Goggles. The use of any protection against some form of electromagnetic radiation from a welding operation or similar source.	CQ	Chemical Cartridge Respirator (Quarter Facepiece) The wearing of a quarter facepiece chemical cartridge respirator to protect the respiratory system.
HG	Hand Gloves The use of gloves to control a potential skin exposure.	FF	Particulate Filter Respirator (Full Facepiece) The wearing of a full facepiece particulate filter respirator to protect the respiratory system.
BC	Barrier Cream The use of barrier cream to control a potential skin exposure.	FH	Particulate Filter Respirator (Half Facepiece) The wearing of a half facepiece particulate filter respirator to protect the respiratory system.
PA	Apron The wearing of an apron to control a health-related agent.	FQ	Particulate Filter Respirator (Quarter Facepiece) The wearing of a quarter facepiece particulate filter respirator to protect the respiratory system.
PC	Coat The wearing of a coat to control a health-related agent.	FP	Powered Air Purifying Respirator The wearing of a powered air purifying respirator to protect the respiratory system.
PP	Pants The wearing of pants to control a health-related agent.	RF	Combined Particulate Filter & Chemical Cartridge Respirator (Full Facepiece) The wearing of a full facepiece respirator which uses the particulate filter and the chemical cartridge to protect the respiratory system.
PS	Full Protective Suit The wearing of a full protective suit to control a health-related agent.		
CF	Chemical Cartridge Respirator (Full Facepiece) The wearing of a full facepiece chemical cartridge respirator to protect the respiratory system.		

APPENDIX J (CONT.)

RH Combined Particulate Filter & Chemical Cartridge Respirator (Half Facepiece)

The wearing of a half facepiece respirator which uses the particulate filter and the chemical cartridge to protect the respiratory system.

RQ Combined Particulate Filter & Chemical Cartridge Respirator (Quarter Facepiece)

The wearing of a quarter facepiece respirator which uses the particulate filter and the chemical cartridge to protect the respiratory system.

GR Gas Mask (Canister) Respirator Devices

The wearing of a gas mask (canister) respirator to protect the respiratory system.

SR Supplied Air Respiratory Devices

The wearing of a self-contained respiratory apparatus, an air line respirator, a hose mask with and without blowers or abrasive blasting helmets, hoods, or masks to protect the respiratory system.

OR Other Respiratory Devices

The wearing of any respirator that is not listed above to protect the respiratory system.

APPENDIX J (CONT.)

VENTILATION

DV Dilution Ventilation

The dilution of contaminated air with uncontaminated air in the underground mine, room, or building for the purpose of health hazard or nuisance control. This includes systems with:

1. Supply fans in which air is used to create a slight positive pressure which forces air out of the mine or building through relief vents or openings.
2. Exhaust fans which allow air to be removed from a space by creating a slight reduction of pressure which causes outdoor air to be brought in through vents or openings.
3. Both exhaust and supply air fans.

LV Local Exhaust Ventilation

Local exhaust ventilation prevents the spread of air contaminants throughout the working atmosphere. The criteria for local exhaust should always be that the contaminant is controlled at its source of generation. This may include exhaust ventilated process enclosures such as drilling machines, paint spray booths, welding booths, and abrasive blasting booths.

Local exhaust ventilation also includes canopy hoods, slot ventilation hoods, flexible hose ventilation, tailpipe exhaust systems, downdraft hoods, and sidedraft hoods.

NV Natural Ventilation

The dilution of contaminated air with uncontaminated air in the underground mine, room, or building for the purpose of health hazard or nuisance control. This includes systems with:

1. Supply fans in which air is used to create a slight positive pressure which forces air out of the mine or building through relief vents or openings.
2. Exhaust fans which allow air to be removed from a space by creating a slight reduction of pressure which causes outdoor air to be brought in through vents or openings.
3. Both exhaust and supply air fans.

LG Local Gravity Ventilation

Ventilation using ducted thermal ventilation with no mechanical fans such as stove flues, melt pots, etc., to prevent the spread of air contaminants throughout the working atmosphere.

**APPENDIX J (CONT.)
OTHER MEANS OF CONTROL**

AC	Administration Rest periods for heat exposures and rotation of workers for the purpose of controlling exposure.	OC	Other Controls Any control used that is not listed in this appendix.
IC	Isolation, Enclosure, Shielding Any special attempt to physically separate the worker from a health related agent for the purpose of controlling exposure.	WA	Water Spray with Additive Water sprays with additives used as a dust control.
NC	No Control No use of controls while potentially exposed to a chemical or physical agent.	WS	Water Spray Water sprays used as a dust control.