

DIVISION OF MINES	CHAPTER: IV Inspections
PROCEDURES MANUAL	
	PROCEDURE NO: 1.04.04
	ISSUE DATE: January 1, 1997
SUBJECT: Regular Inspections	LAST REVISED: October, 2000

OBJECTIVE AND INTENT

To provide regular complete inspections of coal mines to enforce compliance with the Mine Safety Act and improve the health and safety conditions and practices in Virginia's coal mines.

GENERAL

1. REQUIREMENT FOR REGULAR INSPECTIONS

- Inspections must be completed as prescribed by the Coal Mine Safety Laws of Virginia, 45.1-161.81, rules and regulations, and guidelines. An inspection of every underground coal mine must be completed not less frequently than every 180 days. Each surface coal mine must be inspected not less frequently than once per year. More frequent regular inspections of coal mines may be scheduled based on risk assessment. An inspection report/comment sheet must be completed for each regular inspection.

2. SCHEDULING INITIAL REGULAR INSPECTION

- Upon receipt of notification of the opening of a new mine, the inspector will visit the mine within five work days to verify the status of the mine. (See 5-Day Spot Inspection Guidelines)
- The inspector will inform the operator/representative of the requirements of the Coal Mine Safety Laws of Virginia, rules and regulations, and all required plans.
- After the operator has been informed of the requirements of the law, or after completion of the reopening inspection, a regular inspection will be initiated within 30 calendar days at underground mines and within 90 calendar days at a surface mine.
- Should the 30 day period carry into another inspection period, the mine will be considered inspected for the purposes of mandated 180 day inspections.

PROCEDURE

1. REGULAR INSPECTION CHECKLIST

- Surface Areas of Underground Mines
 - a. Mine examination record books
 - b. Mine map/verify through DM system
 - c. Certifications/verify through DM system
 - d. Mine fan
 - e. Mine license
 - f. *EMT and first aid equipment
 - g. *Housekeeping
 - h. Lightning arrestors
 - i. *Flammable or combustible materials
 - j. Lamp house and lamps
 - k. Stairways, platforms, runways, floors
 - l. Other conditions
 - m. *Shop and other equipment
 - n. *Electrical
 - (1) Overhead high-potential power lines
 - (2) Transformers
 - (3) Battery-charging station, substations
 - (4) Grounding
 - (5) Circuit Breakers and switches
 - (6) *Communication system; lightning arrestors
 - (7) Signal wires
 - (8) Inspection of electrical equipment
 - o. *Explosive magazine
 - p. Plans; Roof Control, Emergency Response, Shooting From Solid, Bleeder, Ground Control, Smoker's Search, Fan Stoppage (Intentional and Unintentional), Rescue and Recovery, Sealing, Mine Rescue Contract of Services/verified through DM system.
 - q. Check-in/check-out system
 - r. Sufficient quantity of safety materials and supplies
 - s. *Personal protective equipment
 - t. *Communication facilities
 - u. Hoisting
 - v. Required postings
- * Applies to both surface (where applicable) and underground

■ Underground

- a. Roof, Face and Ribs. During the underground inspection, the following items or conditions relating to roof, face and ribs should be inspected or checked:
 - (1) Roof Control Plan requirements
 - (a) Roof/rib conditions
 - (b) Bolt torque
 - (c) Spacing of bolts
 - (d) Width of places
 - (e) Sound and vibration test of roof
 - (f) Safety posts or jacks
 - (g) Brows
 - (h) Loose ribs
 - (i) Bar for dislodging loose roof
 - (j) Torque wrench
 - (k) Adequate supply of roof support material
 - (l) ATRS/certifications/approval
 - (m) Are roof examinations being made?
 - (n) Are installed roof bolts being tested?
 - (2) Two forty ton jacks or the equivalent
 - (3) Are unintentional roof falls reported?
 - (4) Pillaring
 - (5) Timbering
- b. Explosives And Blasting. During the inspection, the following items or conditions should be inspected or checked related to explosives and blasting:
 - (1) Storage magazines
 - (2) Transportation of explosives
 - (3) Proper storage
 - (4) Permissible explosives
 - (5) Permissible shot firing units
 - (6) Proper blasting practices
 - (7) Are gas tests made?
 - (8) Solid shooting permits
 - (9) Blasting cables
- c. Ventilation And Mine Gases. During the inspection, the following items or conditions should be inspected or checked relating to ventilation and mine gases:
 - (1) 45.1-161.216 C. 3. Multiple main mine fans provided with automatic doors to prevent air reversal.

- (2) Booster or auxiliary fans
 - (3) Volume of air passing last open crosscut (Not less than 9,000 cfm)
 - (4) Adequate volume and velocity
 - (5) Records of air measurements
 - (6) Bleeders, bleeder plan compliance and seals
 - (7) Seals. Record of required CH₄ test outby last seal in a set of seals
 - (8) Air courses (two or more entries)
 - (9) Battery-charging stations, substations, pumps, compressors, vented by separate split of air to main return
 - (10) 70 men limit on same air split
 - (11) Each section ventilated by separate split of air
 - (12) Air quality
 - (13) Breakthrough and stoppings:
 - (a) Breakthroughs are closed, except the one nearest the face
 - (b) Entries and rooms shall not be started off an entry beyond the last open breakthrough
 - (c) Permanent stoppings
 - (d) Man-doors every fifth crosscut
 - (14) Airlocks, overcast, undercast and doors
 - (15) Line brattices
 - (16) Abandoned workings
 - (17) Monthly calibration of methane detectors/indicators
 - (18) Are gas tests being made?
 - (19) Coal dust control and accumulations
 - (20) Rockdust
- d. Transportation. During the inspection, the following items or conditions should be inspected or checked relating to transportation:
- (1) Hoisting equipment and procedures
 - (2) Haulage road and truck
 - (3) Clearance on track haulage road
 - (4) Conveyor belt crossings
 - (5) Haulage equipment
 - (a) Condition
 - (b) Seating facilities
 - (c) Safety devices
 - (d) Safety practices
 - (6) Transportation of employees
 - (a) Mantrips
 - (b) Belt transportation
 - (7) Safe transportation facilities for injured persons
 - (8) Record of weekly inspection of transportation equipment

- e. Electricity. During the inspection, the following items or conditions should be inspected or checked relating to electricity:
 - (1) Transformers
 - (2) Battery charging stations, substations, etc.
 - (3) Power circuits, trolley wires, and feeders
 - (4) Grounding
 - (5) Circuit breakers and switches
 - (6) Communication system
 - (7) Electric equipment
 - (8) Trailing cables
 - (9) Records of equipment checks
 - (10) Methane monitors/calibration test and proper testing methods.
 - (11) Illumination
 - (12) Portable illumination (cap lamps)
 - (13) Permissibility must be checked at all mines
 - f. Mechanical Equipment. During the inspection, the following items or conditions must be inspected or checked relating to mechanical equipment:
 - (1) Face equipment
 - (2) Shop and other equipment
 - (3) Hydraulic hoses
 - (4) Guards
 - g. Fire Prevention. During the inspection, the following items or conditions should be inspected or checked relating to fire prevention:
 - (1) Fire fighting equipment
 - (2) Fire extinguishers location/examination
 - (3) Emergency Response Plan compliance
 - (4) Storage of flammable materials
 - (5) Equipment move records
 - (6) Diesel equipment (rules and regulations)
 - (7) Mine map
 - (8) Oil and gas wells penetrating the coal bed
 - (9) Approaching abandoned workings
 - (10) Mine outlets (50 ft. solid strata)
 - (11) Mine openings and escapeways
 - (12) Smoking materials, cutting, and welding
 - (13) Required postings
 - h. Apply all other applicable rules and regulations adopted by the Division of Mines. Include job observations, safety contacts, safety meetings.
- Surface, Strip, and Auger. During the inspection of strip and auger operations, the following items or conditions should be checked or inspected:

- a. General
 - (1) Review mine information available relevant to maps, certification, accidents, violations, etc.
 - (2) Applicable map requirements; i.e., intersecting old works, auger holes, etc.
 - (3) Mine license
 - (4) Certifications
 - (5) First aid equipment
 - (6) Mine records
 - (7) Blasting log (where applicable)
 - (8) Housekeeping
 - (9) Natural gas pipelines. 45.1-161.256 E
- b. Personal Protective Equipment
 - (1) Safety shoes
 - (2) Safety hats
 - (3) Safety glasses (where required)
- c. Ground Control
 - (1) Ground Control Plan (approval not required)
 - (2) Condition of highwall
 - (3) Loose material, cracks, overhangs
- d. Haulage Roads
 - (1) Condition of road/berm
 - (2) Slides
 - (3) Proximity to highwalls
 - (4) Breaks in road
 - (5) Traffic controls
- e. Mobile Equipment
 - (1) Brakes
 - (2) Lights
 - (3) Condition of windows
 - (4) Back up alarms
 - (5) Fire extinguishers
 - (6) Guards on fans
 - (7) Ladders, or other means of entering and leaving equipment
 - (8) Procedures for changing shifts in relation to equipment parking, location, hazards associated with
- f. Explosives
 - (1) Certified Blasters
 - (2) Storage, use, and handling
 - (3) Compliance with rules and regulations governing blasting in surface mining operations.
 - (4) Blasting practices
 - (5) Required postings

- g. Flammable or Combustible Materials
 - (1) Storage
 - (2) “No Smoking” signs
 - (3) Compressed gas cylinders
- h. Fire Prevention
 - (1) Fire extinguisher - location/examinations of
 - (2) “No Smoking” signs
 - (3) Fuel storage
 - (4) Compliance with 45.1-161.200 E
 - (5) Minimum fire fighting equipment. 45.1-161-200 A-F
- i. Auger Equipment
 - (1) Shields
 - (2) Guards
 - (3) Gears
 - (4) Sprockets
 - (5) Pulleys
 - (6) Fan Blades
 - (7) Friction devices
 - (8) Coupling

4. REGULAR INSPECTION REPORTING

- The inspector will render a certificate of inspection and deliver one copy to the operator, agent, or mine foreman; one copy to the employees’ safety committee; and one copy shall be posted at a prominent place on the premises where it can be read conveniently by the miners.
- The report will consist of a computer generated inspection report (DM-CM-3S), Notices of Violation/Orders, *Risk Assessment, and Diesel Equipment Data Form (DM-DE-01-S or DM-DE-02-S) when applicable.
 - *Risk assessment conducted and reviewed with operator/agent during Regular/Spot inspection.
- Inspection reports will be uploaded to the DM Enforcement System daily/weekly when inspections commence and as the inspection progresses along with daily/weekly itinerary activity entries. The report will be consistent with the Coal Mine Safety Laws of Virginia, Section 45.1-161.89 A, B, and C; rules and regulations; and inspection guidelines.

