U.S. Department of Labor

Mine Safety and Health Administration
1100 Wilson Boulevard
Arlington, Virginia 22209-3939

April 16, 2009

MEMORANDUM FOR MICHAEL A. DAVIS
Deputy Assistant Secretary for Operations
Mine Safety and Health

FROM: CHARLES J. THOMAS
Director of Accountability
Mine Safety and Health Administration

SUBJECT: MSHA Office of Accountability Follow-Up Audit, Hillsboro, IL, Field Office, [redacted]

Introduction

This memorandum summarizes the Office of Accountability follow-up audit of the subject field office and mine. Follow-up audit subjects included MSHA field activities, level of enforcement, MSHA supervisory and managerial oversight, mine ventilation and roof control plans, Uniform Mine File (UMF), and the conditions and practices at the mine. The audit was conducted during the week of [redacted] by Charles J. Thomas. Accompanying the auditor was [redacted]

Overview

The initial audit at this field office was conducted between [redacted] Although that audit revealed several positive findings, there were also numerous issues that required corrective actions. The first initial audit mine visit also revealed roof control issues requiring correction.

The follow-up audit revealed that issues documented during the first audit, including the level of enforcement, determination of gravity and negligence, fire protection, accumulations have been addressed. The mine visit conducted during this follow-up audit revealed numerous improvements in roof control, belt conveyor water sprays, fire protection, and rock dusting.

A highly commendable effort has been put forth by MSHA Coal District 8, and the resulting improvements in the safety and health of the miners is evident. Each area of concern from the initial report is addressed below. Those issues are addressed by this report.

Roof Control Plan

Numerous changes were made to the roof control plan and a bullet summary is included:

[redacted] **TIME LINE OF EVENTS**

- [redacted] – Office of Accountability (OA) audit at the [redacted]
- [redacted] – Report by OA audit released.
- [redacted] – first revised roof control plan approved incorporating audit recommendations.
- [redacted] – OA follow-up mine visit.
- [redacted] – Tech Support mine visit.
- [redacted] – report from Tech Support on recommendations.
- [redacted] – District sent Tech Support report of recommendations to mine operator.
- [redacted] – began drafting letter to mine operator on plan revisions.
- [redacted] – discussed recommendations further with mine operator by phone. Completed letter to mine operator of needed plan revisions. Letter sent to operator outlining plan deficiencies.
- [redacted] – Call from mine operator to set up meeting to discuss roof control plan. Meeting set for [redacted]
- [redacted] - Letter sent to mine operator that addressed what needed to be included in their plan that Tech Support also recommended. The operator has until [redacted] to submit the complete revised Roof Control Plan.

Ventilation Plan

- Issue one on scrubber ventilation is ongoing, 30-foot cuts were not possible to observe and evaluate due to deteriorated roof conditions on one MMU.

- Cemenititious foam blocks were removed from the new approved ventilation plan.

- Current ventilation plan now has a seal sampling protocol which is attached.

- Ambient carbon monoxide level is now in the plan and the method for determining the carbon monoxide level. Note: That CO monitoring system is currently being installed along all belt conveyors at this mine.

Fire Protection

- All fire taps inspected during follow-up mine visit were operable and properly maintained.

Rock Dusting & Control of Coal Dust and Float Coal Dust

- Water sprays were wetting belt conveyors and no extensive float coal dust was observed during follow-up mine visit. Water sprays were incorporated into the approved ventilation and dust control plan. See attachment.

Enforcement

- The Mine Academy instructor conducted "Gravity, Negligence, and Citation and Order" writing class with both the Benton, IL and Vincennes, IN field offices for inspectors, supervisors, and conference officer which totaled approximately 50 AR's/trainees that participated in the training. Feedback from the assistant district manager, attendees, and supervisors was favorable. Review of recently issued citations indicates that an improvement in the determination of gravity and negligence evaluations by the District 8 inspectorate was evident. Three new supervisors are currently reviewing the enforcement actions and are conducting better oversight.

- Citations are being terminated more timely with shorter abatement times being set when issued in most cases.

Uniform Mine File

- Coal Headquarters is currently in the process of re-writing the UMF handbook and should soon be finalized. Current UMF for Crown III is accurate and up to date with recent plan changes.

Peer Reviews

- Three new supervisors are in place at the field offices and no peer reviews were audited during this follow-up audit. Most of the concerns were with gravity and negligence issues and the January training must be evaluated during second level reviews by both the supervisors and the Assistant District Manager to determine effectiveness of the training.

S&S Statistics

Significant and Substantial Percentages

S&S Rate Coal All Districts		Quarters	S&S Rate District 8
			10/01/2007 to 2/29/2008
37% S&S		2008Q1	25% S&S
35% S&S		2008Q2	26% S&S
			10/01/2008 to 2/28/2009
35% S&S		2009Q1	30% S&S
35% S&S		2009Q2	31% S&S

Mine Visit

A total of 3 citations were issued during this follow-up audit compared to 11 citations issued during the initial audit. The most notable reductions in violations were as follows:

Subject Area	Citations Issued On Initial Audit	Citations Issued On Follow-Up Audit
Accumulations in belt entries	1	0
Rock dusting	0	1
Ventilation (Plan/Onshift Exams)	1	1
Fire fighting equipment maint.	3	0
Supported Roof	4	1
Escapeways	1	0
Communications (ERP)	1	0

The overall conditions, practices, and attitude toward safety observed during the mine visit improved dramatically.

Attachments

A. Citations issued during follow-up audit

a. [redacted] 75.403
b. [redacted] 75.202(a)
c. [redacted] 75.370(a)(1)

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U.S. Department of Labor
Mine Safety and Health Administration

Section I–Violation Data

1. Date Mo Da Yr | 2. Time (24 Hr. Clock) | 3. Citation/ Order Number [redacted]

5a To [redacted] (Contractor)

5a. Written Notice (103g) ☐

Where rock dust is required to be applied, it shall be distributed upon the top, floor, and sides of all underground areas of a coal mine and maintained in such quantities that the incombustible content of the combined coal dust, rock dust, and other dust shall be not less than 65 per centum, but the incombustible content in the return aircourses shall be no less than 80 per centum. Where methane is present in any ventilating current, the per centum of incombustible content of such combined dusts shall be increased 1.0 and 0.4 per centum for each 0.1 per centum of methane where 65 and 80 per centum, respectively, of incombustibles are required. The roof and ribs located in the 2W Submain travelway, between cross cut #2 thru #8 and connecting cross cuts and not being maintained in such quantities of incombustible content. Two samples were collected to

See Continuation Form (MSHA Form 7000-3a) ☑

6. Violation	A. Health ☐ Safety ☑ Other ☐	B. Section of Act	C. Part/Section of Title 30 CFR	75.403

Section II–Inspector's Evaluation

10. Gravity:

A. Injury or Illness (has) (is): No Likelihood ☐ Unlikely ☑ Reasonably Likely ☐ Highly Likely ☐ Occurred ☐

B. Injury or Illness could reasonably be expected to be: No Lost Workdays ☐ Lost Workdays Or Restricted Duty ☑ Permanently Disabling ☐ Fatal ☐

Significant and Substantial: Yes ☐ No ☑ | D. Number of Persons Affected: 002

11. Negligence (check one) A. None ☐ B. Low ☐ C. Moderate ☑ D. High ☐ E. Reckless Disregard ☐

12. Type of Action 104(a) | 13. Type of Issuance (check one) Citation ☑ Order ☐ Safeguard ☐ Written Notice ☐

14. Initial Action A. Citation ☐ B. Order ☐ C. Safeguard ☐ D. Written Notice ☐ | E. Citation/ Order Number | F. Dated Mo Da Yr

15. Area or Equipment

16. Termination Due | A. Date Mo Da Yr [redacted] | B. Time (24 Hr. Clock) [redacted]

Section III–Termination Action

17. Action to Terminate

18. Terminated | A. Date Mo Da Yr | B. Time (24 Hr. Clock)

Section IV–Automated System Data

19. Type of Inspection (activity code) E01 | 20. Event Number [redacted] | 21. Primary or MII

22. Signature [redacted] | 23. AR Number [redacted]

MSHA Form 7000-3, Apr 98 (Replaces) In accordance with the provisions of the Small Business Regulatory Enforcement Fairness Act of 1996 the Small Business Administration has established a National Small Business and Agriculture Regulatory Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. The Ombudsman annually evaluates enforcement activities and rates each agency's responsiveness to small business. If you wish to comment on the enforcement actions of MSHA, you may call 1-888-REG-FAIR (1-888-734-3247), or write the Ombudsman at Small Business Administration, Office of the National Ombudsman, 409 3rd St. SW MC 2120, Washington, DC 20416. Please note, however, that your right to file a comment with the Ombudsman is in addition to any other rights you may have, including the right to contest citations and proposed penalties and obtain a hearing before the Federal Mine Safety and Health Review Commission.

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Section I–Subsequent Action/Continuation Data

1. Subsequent Action 1a. Continuation	2. Dated (Original Issue)	3. Citation/ Order Number
☐ ☑	[redacted]	[redacted]

[redacted] (Continuation)

Section II–Justification for Action

Continuation of 8. Condition or Practice

substantiate the incombustible content.

See Continuation Form ☐

Section III–Subsequent Action Taken

8. Extended To	A. Date Mo Da Yr	B. Time (24 Hr. Clock)	☐ C. Vacated ☐ D. Terminated ☐ E. Modified

Section IV–Inspection Data

9. Type of Inspection E01	10. Event Number [redacted]			
11. [redacted] MSHA Form		AR Number [redacted]	12. Date Mo Da Yr	13. Time (24 Hr. Clock) [redacted]

Mine Citation/Order Continuation

U.S. Department of Labor
Mine Safety and Health Administration

Section I–Subsequent Action/Continuation Data

1. Subsequent Action 1a. Continuation	2. Dated (Original Issue)	3. Citation/ Order Number
☑	[redacted]	[redacted]

[redacted] (Contractor)

The area was adequately rock dusted.

See Continuation Form ☐

Section III–Subsequent Action Taken

8. Extended To	A. Date	B. Time (24 Hr. Clock)	☐ C. Vacated	☑ D. Terminated	☐ E. Modified

Section IV–Inspection Data

9. Type of Inspection	10. Event Number	AR Number	12. Date
E01	[redacted]	[redacted]	[redacted]

11. [redacted]

MSHA Form [illegible]

Mine Citation/Order

U.S. Department of Labor
Mine Safety and Health Administration

Section I–Violation Data

1. Date [redacted] | 3. Citation/ Order Number [redacted]

[redacted] (Contractor)

5. Condition or Practice | 5a. Written Notice (103g) ☐

The roof, face and ribs of areas where persons work or travel shall be supported or otherwise controlled to protect persons from hazards related to falls of the roof, face or ribs and coal or rock bursts. The roof located in the 2W Submain, entry #5, cross cut #15 is not being supported to protect persons from hazards related to roof fall. The exposed area measures approximately 7 feet by 8 feet. The roof located in the 2W Submain, between entry #5 and entry #6, cross cut #16 has a cutter running from the outby corner to midway down the cross cut, the cutter measures approximately 29 feet in length and approximately 3 inches to 15 inches in depth. The areas were immediately danger off to prevent travel.

See Continuation Form (MSHA Form 7000-3a) ☐

9. Violation	A. Health ☐ Safety ☑ Other ☐	B. Section of Act	C. Part/Section of Title 30 CFR	75.202(a)

Section II–Inspector's Evaluation

10. Gravity:

A. Injury or Illness (Incl) (Is): No Likelihood ☐ Unlikely ☐ Reasonably Likely ☑ Highly Likely ☐ Occurred ☐

B. Injury or Illness could reasonably be expected to be: No Lost Workdays ☐ Lost Workdays Or Restricted Duty ☑ Permanently Disabling ☐ Fatal ☐

Significant and Substantial: Yes ☑ No ☐ | D. Number of Persons Affected: 001

11. Negligence (check one): A. None ☐ B. Low ☐ C. Moderate ☑ D. High ☐ E. Reckless Disregard ☐

12. Type of Action: 104(a) | 13. Type of Issuance (check one): Citation ☑ Order ☐ Safeguard ☐ Written Notice ☐

14. Initial Action: A. Citation ☐ B. Order ☐ C. Safeguard ☐ D. Written Notice ☐ | E. Citation/ Order Number | F. Dated Mo Da Yr

15. Area or Equipment

16. Termination Due | A. Date Mo Da Yr [redacted] | B. Time (24 Hr. Clock) [redacted]

Section III–Termination Action

17. Action to Terminate

18. Terminated | A. Date Mo Da Yr | B. Time (24 Hr. Clock)

Section IV–Automated System Data

19. Type of Inspection (activity code): 103 | 20. Event Number [redacted] | 21. Primary or Mill

22. Signature [redacted] | 23. AR Number [redacted]

MSHA Form 7000-3 (Rev. 12/2004) ... Pursuant to the provisions of the Small Business Regulatory Enforcement Fairness Act of 1996, the Small Business Administration has established a National Small Business and Agriculture Regulatory Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. The Ombudsman annually evaluates enforcement activities and rates each agency's responsiveness to small business. If you wish to comment on the enforcement actions of MSHA, you may call 1-888-REG-FAIR (1-888-734-3247), or write the Ombudsman at Small Business Administration, Office of the National Ombudsman, 409 3rd St. SW, MC 8120, Washington, DC 20416. Please note, however, that your right to file a comment with the Ombudsman is in addition to any other rights you may have, including the right to contest citations and proposed penalties and obtain a hearing before the Federal Mine Safety and Health Review Commission.

Mine Citation/Order Continuation

U.S. Department of Labor
Mine Safety and Health Administration

Section I–Subsequent Action/Continuation Data

1. Subsequent Action 1a. Continuation	2. Dated (Original Issue)	3. Citation/ Order Number
☑ 1 ☐	[redacted]	[redacted]

ed To [redacted]

5. Operator [redacted] (Contractor)

Section II–Description Of Action

The roof was adequately re-supported.

See Continuation Form ☐

Section III–Subsequent Action Taken

8. Extended To	A. Date Mo Da Yr	B. Time (24 Hr. Clock)	☐ C. Vacated	☑ D. Terminated	☐ E. Modified

Section IV–Inspection Data

9. Type of Inspection E01	10. Event Number [redacted]		
11. [redacted]	AR Number [redacted]	12. Date [redacted]	

MSHA Form 7000-3a, Mar 88 (revised)

Mine Citation/Order

U.S. Department of Labor
Mine Safety and Health Administration

Section I–Violation Data

1. Date [redacted] | 3. Citation/ Order Number [redacted]

4. To [redacted] | 5. Operator [redacted] (Contractor)

6. Condition or Practice | 6a. Written Notice (103g) ☐

The approved ventilation plan for this mine is not being followed. The plan states that 20,000 CFM shall be maintained at all times in the last open cross cut. Unit 2 (MMU 003) working section is not maintaining the quantity required. The last open cross cut reading is 16,200. Management was notified of this condition immediately.

See Continuation Form (MSHA Form 7000-3a) ☐

7. Violation | A. Health ☐ Safety ☑ Other ☐ | B. Section of Act | C. Part/Section of Title 30 CFR: 75.370(a)(1)

Section II–Inspector's Evaluation

10. Gravity:

A. Injury or Illness (has) (is): No Likelihood ☐ Unlikely ☐ Reasonably Likely ☑ Highly Likely ☐ Occurred ☐

B. Injury or Illness could reasonably be expected to be: No Lost Workdays ☐ Lost Workdays Or Restricted Duty ☑ Permanently Disabling ☐ Fatal ☐

gnificant and Substantial: Yes ☑ No ☐ | D. Number of Persons Affected: 006

11. Negligence (check one): A. None ☐ B. Low ☐ C. Moderate ☑ D. High ☐ E. Reckless Disregard ☐

12. Type of Action: 104(a) | 13. Type of Issuance (check one): Citation ☑ Order ☐ Safeguard ☐ Written Notice ☐

14. Initial Action: A. Citation ☐ B. Order ☐ C. Safeguard ☐ D. Written Notice ☐ | E. Citation/ Order Number | F. Dated Mo Da Yr

15. Area or Equipment

16. Termination Due | A. Date [redacted] Mo Da Yr | B. Time (24 Hr. Clock) [redacted]

Section III–Termination Action

17. Action to Terminate: Repairs were made to the ventilation controls and the approved quantity was restora.

18. Terminated | A. Date [redacted] | B. Time (24 Hr. Clock) [redacted]

Section IV–Automated System Data

19. Type of Inspection (activity code): E01 | 20. Event Number [redacted] | 21. Primary or Mill

22. Signature [redacted] | 23. AR Number [redacted]

MSHA Form 7000 ...tions of the Small Business Regulatory Enforcement Fairness Act of 1996, the Small Business Administration has established a National Small Business and Agriculture Regulatory Ombudsman and 10 Regional Fairness Boards to receive comments from small businesses about federal agency enforcement actions. The Ombudsman annually evaluates enforcement activities and rates each agency's responsiveness to small business. If you wish to comment on the enforcement actions of MSHA, you may call 1-888-REG-FAIR (1-888-734-3247), or write the Ombudsman at Small Business Administration, Office of the National Ombudsman, 409 3rd St., ... MC 3120, Washington, DC 20416. Please note, however that your right to file a comment with the Ombudsman is in addition to any other rights you may have, including the right to contest citations and proposed penalties and obtain a hearing before the Federal Mine Safety and Health Review Commission.

Attachment B - Ventilation plan changes:

75.371 (g)
LOCATIONS REQUIRING GREATER THAN 3,000 CFM

1. Blowing line curtains will be maintained to within 20 feet of the working face of the cut being mined with a minimum quantity of air reaching the inby end of the curtain of 7,000 cfm with the scrubber off. When operating with our single split supersection system, the minimum quantity will be 7,000 cfm and measured with the scrubber off.

2. During the first 10 feet of development of a room, entry, or crosscut in the solid off a ventilating entry or crosscut, the scrubber can be the sole ventilation control device. A minimum of 7,000 cfm must pass over the machine.

3. When gob material is loaded from an entry or crosscut near a working face, the curtain must be within 55' of the face with a minimum air quantity of 5,000 cfm. The miner will not be allowed to cut coal from the face without a curtain being installed to within 20' of the face, except as stated in item #2 above.

4. If diesel scoops are utilized to dump material at the working face, a blowing line curtain will be maintained to within 55' of the face with the equipment approval plate air quality behind the line curtain.

75.371 (j)

MACHINE MOUNTED DUST COLLECTOR OPERATING VOLUME

The minimum operating volume of the machine mounted dust scrubber is 5,000 cfm.

75.371 (l)

INSTALLED DISTANCES AND LOCATIONS OF FACE VENTILATION CONTROL DEVICES

1. Blowing line curtains will be maintained to 20 feet of the working face of the cut being mined with a minimum quantity of air reaching the inby end of the line curtain of 7,000 cfm with the scrubber off. When operating with our single split supersection system, the minimum quantity will be 7,000 cfm and measured with the scrubber off.

2. During the first 10 feet of development of a room, entry, or crosscut in the solid off a ventilating entry or crosscut, the scrubber can be the sole ventilation control device. A minimum of 7,000 cfm must pass over the machine.

3. When gob material is loaded from an entry or crosscut near a working face, the curtain must be within 55' of the face with a minimum air quantity of 5,000 cfm. The miner will not be allowed to cut coal from the face without a curtain being installed to within 20' of the face except as stated in Number 2 above.

Attachment B - Ventilation plan changes:

SEAL SAMPLING PROTOCOL

1.) Sampling Procedures

We will be using an industrial scientific ATX 620 detector to obtain samples from behind our seals. Measuring ranges for the ATX 620 are as follows: Methane – 0 to 100%, Oxygen – 0 to 30%, and Carbon Monoxide – 0 to 999 PPM. The detector will be maintained according to manufacturers' recommendations and shall be calibrated with a known standard of gas at least every 31 days. A record of the calibration will be kept. Sample pipes (20' L x 2" dia.) will be opened to determine if seals are outgassing. If outgassing, the sample pipe will be fully opened to purge. Purging will take approximately 2 minutes. A plug with reducer will be attached to the end of the sample pipe and a sample will be taken from inside the pipe. The sampling hose will be attached to the plug and once the readings have stabilized to ensure that the pipe has been purged, they will be recorded. A tube will be used inside the pipe to allow for reduced purge time (approximately 30 seconds using ATX 620 with suction pump).

2.) Baseline

Fourteen (14) samples will be taken to establish a baseline for a future sampling cycle at each set of seals. These samples will be taken daily. Samples will only be taken when the seals are outgassing. If the seals are not outgassing, sampling for the baseline period will continue until fourteen (14) samples are taken. At the completion of the baseline sampling, if warranted, the sampling frequency will be revised in the protocol.

For newly constructed seals, sampling will begin the day following completion of the seal construction. The baseline shall be established after the atmosphere the sealed area is inert or the trend reaches equilibrium. Daily samples will be taken at each sampling pipe in each seal until the baseline is established. These samples will be collected over a 14-day sampling cycle to establish a baseline for a future sampling cycle at each sampling point. If the results of the 14-day sampling cycle indicate that the samples from both sample pipes in each seal are similar, then only one sample pipe may be designated to be sampled.

Samples will only be taken when seals are outgassing during the baseline period. If the seals are not outgassing during any of the days of sampling, the baseline period will be extended until 14 samples are taken.

3.) Frequency of Sampling

The designated sample pipe in each set of seals will be sampled weekly and samples will be taken only while outgassing. If the seals are ingassing for two consecutive weekly examinations, then they will be checked daily until they finally outgas and can be sampled. Reducing the number of seals that are sampled in a set of seals requires approval from the District Manager.

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Attachment B - Ventilation plan changes:

4.) Training for seal sampling:

A. Sampling must be done by a certified person (a person with examiner's papers).

B. We will be using hand held detectors to sample behind the seals. Check instrument on the surface for charge, zero, and calibration.

C. When preparing to take a sample, make sure that you are upwind of the pipe.

D. Open the valve in the upper pipe and determine if the seal is in-gassing or out-gassing: feel with your hand, use an anemometer, use a smoke tube, use flagging
Do not use your face to check the air movement, the air coming out may be low in oxygen content or high in carbon monoxide and be harmful or deadly.

E. If the seal is outgassing, open the valve fully and allow it to purge for at least 2 minutes, put the plug into the pipe and connect the sample hose to the detector and the plug. If the seal is ingassing, no sample will be taken.

F. Run the pump until the readings stabilize (both methane and oxygen), usually around 90 seconds. Record the methane and oxygen readings, and shut the valve, and remove the plug.

G. If the sample shows 3 % to 20 % methane and more than 10% oxygen, the Action Plan will be implemented.

H. Hazardous conditions must be corrected immediately or the area posted. A record of the readings and any hazardous conditions must be recorded in the book and reviewed and countersigned by the mine foreman. Records must be maintained for at least one year.

5.) Location of Sampling Points, Size, and Conditions of Sealed Areas

[redacted]utilizes room and pillar mining. There are no pillared areas or bottom mining in the sealed areas. There are no restrictions near the seals. The sample pipes will be clearly marked. Drainage pipes are located in the same seal as the sample pipes. They are 20' long, 2" diameter, with a trap and valve on the end of them.

Attachment B - Ventilation plan changes:

SEAL NAME	TYPE	SECONDARY MINED	NUMBER OF SEALS	AVERAGE SEAM HT	PIPE LOCATION	ACRE FEET
MAIN SOUTH	PUMPABLE	NO	12	7.5'	4	1,753
MAIN NORTH	PUMPABLE	YES	17	7.5'	10	3,506
2ND NORTH	MITCHELL BARRETT	YES	10	7.5'	4	15,548
4TH EAST/MS	PUMPABLE	NO	4	7.5'	2	162
5TH WEST/MS	PUMPABLE	NO	4	7.5'	2	292
MW/MS	PUMPABLE	NO	6	7.5'	3	1,002
6TH EAST/MS	PUMPABLE	YES	5	7.5'	3	1,630
7TH EAST/MS	PUMPABLE	YES	6	7.5'	3	1,295
8TH EAST/MS	PUMPABLE	NO	5	7.5'	3	1,175
9TH EAST/MS	PUMPABLE	NO	5	7.5'	3	1,596
10TH EAST/MS	PUMPABLE	YES	5	7.5'	3	1,657
11TH EAST/MS	PUMPABLE	YES	5	7.5'	3	1,657
12TH EAST/MS	PUMPABLE	NO	5	7.5'	3	1,596
13TH EAST/MS	PUMPABLE	YES	8	7.5'	3	1,834
WSM/MS	PUMPABLE	YES	9	7.5'	5	3,175
1ST WEST/SSM	MITCHELL BARRETT	YES	5	7'	2	309
1ST NORTH/2W	MITCHELL BARRETT	YES	5	7'	4	156

6.) Atmospheric Monitoring Systems

No atmospheric monitoring system will be used.

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Attachment B - Ventilation plan changes:

75.371 (u)

METHANE AND DUST CONTROL IN UG BELT HAULAGE SYSTEM

Along travelways we will cleanup, wet and/or spread dust suppressors. Along section haulage roads, we will wet down, unless sufficient water (natural) is present to make this effort redundant.

Belt heads

1/4" fine mist orifice size .20, ---flow .12GPM @ 100 PSI (minimum of 1)
BDM 2: orifice size .78, ---flow .98GPM @ 200PSI (minimum of 1)

Belt Transfer Points

Flat fan: orifice size .11, ---flow.67 GPM @ 200 PSI (minimum of 1)

Feeders

BDM 2: orifice size .78, ---flow .56 GPM @ 80 PSI (minimum of 3 required)

ISOLATION ENTRIES

In all areas of the mine developed after July 14, 2000, the number of neutral entries will be limited to a maximum of four. However, following a belt move more than four neutral entries may exist for twenty-four (24) hours within the area from the previous belt tail to the new belt tail.

ADDITIONAL INFORMATION

In the event, the average concentration of respirable dust samples taken for an individual MMU become non-compliant, we will:

1. Require the MMU to revert back to our previously approved 20' layout and lift sequence. The 20' layout and lift sequences are attached on the following pages.

2. Roof bolting machines will only install roof bolts in one place each production shift downwind of the continuous mining machine during cutting and loading shift.

[redacted]