U. S. Department of Labor

SEP 11 2009

Mine Safety and Health Administration 100 Bluestone Road Mount Hope, WV 25880-1000



Mr. Chris Blanchard President Performance Coal Company POB 69 Naoma, WV 25140

Dear Mr. Blanchard:

Subject:

Mine Ventilation Plan, Section 75.370, 30 CFR 75, Upper Big

Branch Mine -South, I. D. No. 46-08436, Performance Coal

Company, Montcoal, Raleigh County, West Virginia

This will acknowledge receipt of the 2nd submittal of the annual ventilation map, dated August 19, 2009, and received by MSHA on August 18, 2009 for the subject mine. The ventilation plan continues to be approved and includes the following revisions: Revision for barrier thickness between No. 1 Tailgate and adjacent sealed area Tailgate No. 11 approved 02/13/09, construct one (1) 50-psi Minova "Main Line Tekseal" approved 03/26/09, surface blasting located at the Birchton Portals approved 07/27/09, ventilation scheme for the future longwall mining and gateroads, crossover entries, and bleeder entries, putting the bleeder fan for the Northern bleeder district on line, shows ventilation changes for the Old North Mains and Parallel North Mains shown on three (3) phase maps approved 08/06/09.

The following items, which you included on the map, are approved under Section 75.371: Existing and proposed evaluation points as shown on the map, both underground and surface.

You are reminded that pursuant to Section 75.372, three copies of an up-to-date mine map shall be submitted to this office **July 11, 2010**.

Should you have any questions concerning this matter, please contact the Ventilation Department at (304) 877-3900/Ext. 142.

Sincerely,

Robert G. Hardman

District Manager

Coal Mine Safety and Health, District 4



Performance Coal Company

P.O. Box 69

Naoma, WV

25140

August 19, 2009

Mr. Robert G. Hardman Mine Safety and Health Administration 100 Bluestone Road Mt. Hope, WV 25880

Re:

Upper Big Branch Mine MSHA ID 46-08436 State Permit U-3042-92 Ventilation Revision

Dear Sir:

Enclosed for your review and approval, please find three (3) copies of the Annual Ventilation Map for Upper Big Branch Mine. An updated ventilation base plan is also included. If you should have any questions or require any additional information, please feel free to contact me at your convenience.

At this time, Performance Coal Company, Inc. does not have a miners' representative at this mining operation.

Respectfully Submitted, Performance Coal Company

Eric Lilly

Mine Engineer

MSHA MOUNT HOPE, WV

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RECEI. -D VENTILATION

Ventilation Plan

Hansa Bir D. 1 3 G
Upper Big Branch Mine
Eagle Seam
Performance Coal Company, Inc.
P.O. Box 69 Naoma, WV 25140
46 – 08436
U-3042-92
April 29, 2009
Matthew Walker
Berman Cornett

General

- The roof in the bleeder entries and at the bleeder evaluation points (EP#'s) shall be supported in accordance with the approved roof control plan.
- Accumulations of water will be controlled primarily by natural drainage supplemented by pumping to prevent accumulations of water from affecting the bleeder ventilation system.
- The effectiveness of the bleeder system shall be determined by the methane and oxygen content, the direction of airflow, and quantity at the bleeder evaluation points located as shown typically on the drawings or as previously approved on the mine ventilation map submitted under 75.372
- During installation and removal of mechanized mining equipment, 9,000 CFM will be maintained at the last open crosscut of the section being set up or abandoned and at the intake end of a pillar line. Ventilation controls will consist of permanent stoppings, check curtains and brattice material, as necessary, to maintain the required ventilating current. The system of installing ventilation controls will be similar to those on face sketches.

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RECEIVED VENTILATION 75.371 (g), (m) Volume of air required in last open crosscut

Permanent stoppings will be maintained up to, but not including, the third connecting crosscut outby the working face. In order to insure that adequate ventilation is maintained, a minimum of 13,500 CFM in the last open crosscut will be provided when the last open crosscut is three breaks inby the permanent stopping. A minimum of 9,000 CFM will be maintained with one or two open crosscuts.

75.371 (x) A description of the bleeder system to be used, including its design (see 75.334) Blowing ventilation with outcrop punch-outs or ventilation holes and cut-throughs into mains on the back end of panels or rooms is proposed for the bleeder system evaluation for this mine. Typical bleeder designs are attached. Existing bleeder systems are shown on the 75.372 mine ventilation map.

Weekly examinations - Non-Pillared, Worked Out Areas

In addition to the requirements of 75.364(a)(1), measurements of methane, oxygen, air quantity, and air direction will be made in the last open crosscut or in the immediate return outby the last permanent

75.371 (hh) Ambient Level of Carbon Monoxide

The ambient level of carbon monoxide in all areas where carbon monoxide sensors are installed is 0 ppm. This ambient level is determined using a handheld, calibrated CO detector. Current settings are 5 PPM and 10 PPM, respectively, for alert and alarm levels. CO monitors will be spaced at a maximum 2000 foot

75.371 (uu), (vv), & (ww) Diesel Equipment

At this time, there is no diesel equipment in service at this mine.

Additional Information:

Belt Air

Where intake air is regulated into the belt, it will have a CO monitor upwind on the intake side and another one will be installed both inby and outby in the belt air course. The regulator feeding the air from the intake into the belt air course will have the capability of being adjusted remotely from outby the regulator in the intake and also outby in the belt air course. This is considered point feed. At this time, there is no point feed in the mine. A revision will be submitted and approved before adding a point feed.

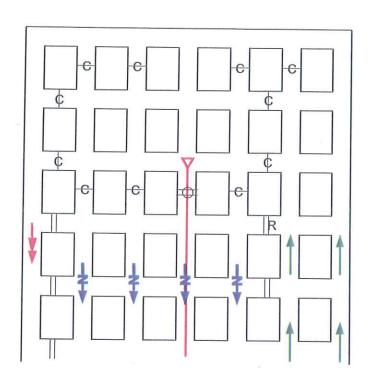
Northern Area Barrier Block

An adequate barrier will be maintained between the sealed old works and the Tailgate 1 North. The existing barrier is over 200 ft. The maximum hydrostatic head that a 200 ft barrier can withstand calculated using the Pennsylvania Mine Inspector's formula (Width = 20 + (4 * seam height) + (0.1 * seam height)hydrostatic head)) gives a value of 1580 ft. The maximum height that the water in the sealed area can achieve is 127 ft. Any amount above the 127 ft mark (917 elevation) would run out the water trap in seal set 15. Therefore, the existing barrier is sized for a water level over 12 times greater than the maximum height for the area.

> MSHA MOUNT HOPE, WV

> > SEP 03 2009

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Intake Air Return Air Secondary Intake Air Permanent Stopping V Belt Tailpiece R Regulator ¢ Curtain

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Box Check Line Curtain



PERFORMANCE COAL COMPANY, INC. P.O. BOX 69, NAOMA, WV 25140 UPPER BIG BRANCH MINE

M.S.H.A. ID No. 46-08436

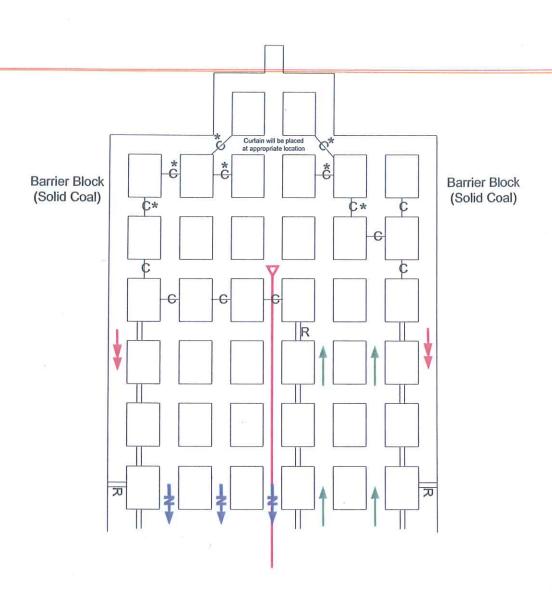
WV ID No. U-3042-92 Date: 04/27/09 DWG No. 1 of 1

SCALE: 1"=100" DRAWN BY: Rt. 3 Staff

Face Ventilation Typical Advance - Sweep Ventilation

CHECKED BY:

VENTILATION BASE PLAN

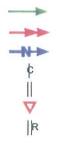


* When mining, one check curtain may be removed to allow haulage. At no time will curtains be removed to allow short circuit from intake to return side.

> MSHA MOUNT HOPE, WV

AUG 17 2009

RECEIVED VENTILATION



Intake Air Return Air Secondary Intake Air Check Curtain Permanent Stopping Belt Tailpiece Regulator



PERFORMANCE COAL COMPANY, INC. P.O. BOX 69, NAOMA, WV 25140

UPPER BIG BRANCH MINE

M.S.H.A. ID No. 46-08436 WV ID No. U-3042-92

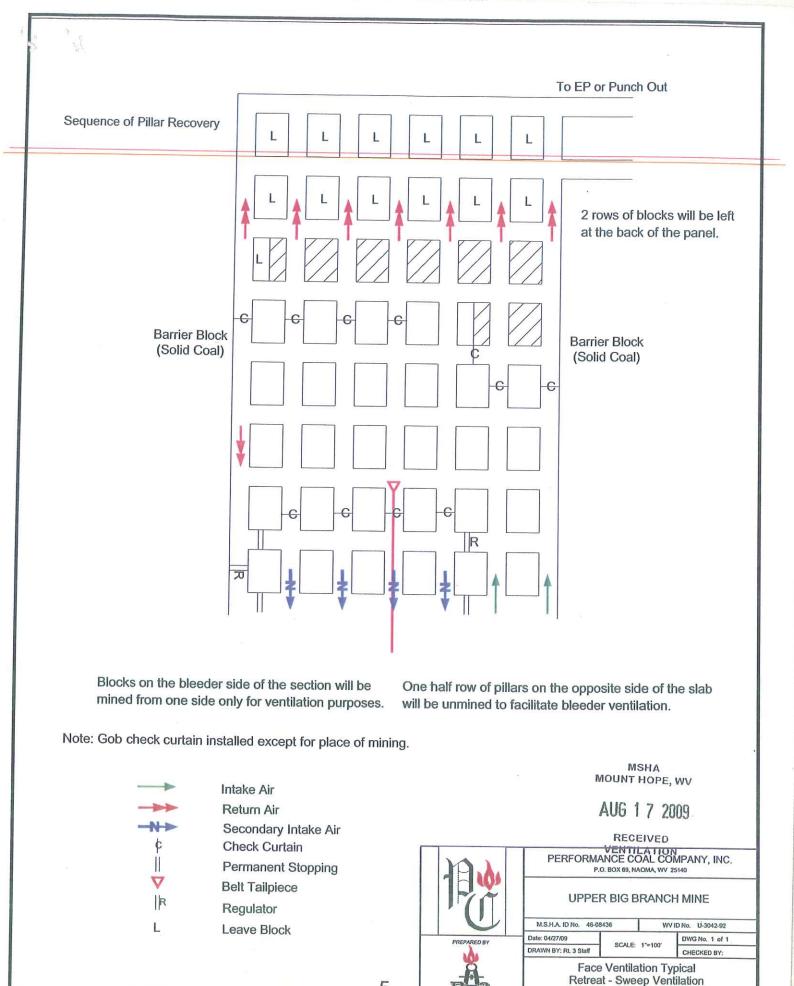
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Staff CHECKED BY:

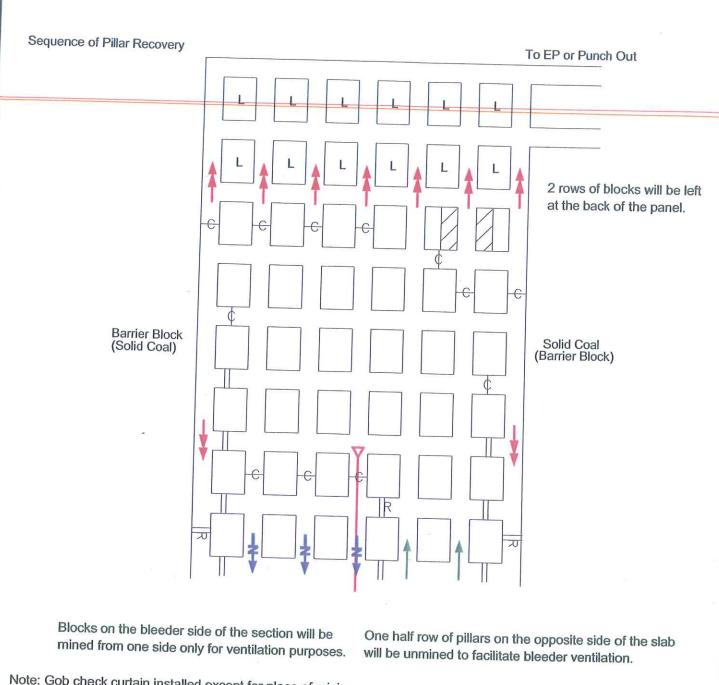
Face Ventilation Typical

Advance - Split Ventilation
VENTILATION BASE PLAN

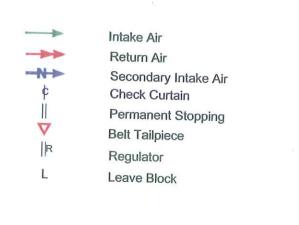
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VENTILATION BASE PLAN

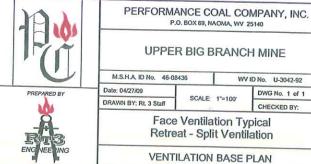


Note: Gob check curtain installed except for place of mining.



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VENTILATION



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DRAWING 1 External Bleeder System Utilizing Barriers for Initial Pillar Section

- Drawing 1 illustrates a typical bleeder system for the initial pillar section utilizing a cut through into the mains.
- The panel will be fully developed and at least two entries will be connected into the old mains to establish the bleeder prior to pillaring.
- The bleeder will be regulated as shown at P-A and two full rows of blocks will be left in the back of the panel.
- The bleeder will be evaluated at P-A and the pillar line while the initial panel is being pillared for the weekly evaluations.
- One half row of blocks will be left on the solid coal side.
- Once the panel is completely pillared, the bleeder controls will be installed at the mouth of the section as shown typically at P-B on drawing 1. Controls to be plastered on pressure side.
- Three rows of pillars will be left to protect bleeder controls.
- Upon completion of pillaring the initial panel, the bleeder will be evaluated at P-A and P-B.
- The section returns will be properly regulated to ensure positive pressure on the gob or pillar line.
- Any mining off a mains or sub-mains, whether it is rooms or a pillar section, is considered a panel.
- Once Controls are constructed at mouth of panels, the first line of existing controls inby the constructed controls at mouth of panels constructed controls will be removed to make panels common.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.

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	PERFORMANCE COAL COMPANY, INC. PO. BOX 80, MOMA, WY 25140 UPPER BIG BRANCH MINE M.S.H.A. ID No. 46-08/35 WY ID No. U-3042-92 1802: 0427709 CHECKED BY: External Bleeder System Utilizing Barriers For Initial Pillar Section (Drawing 1)		
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		Sub-Mains	- 1

<u>DRAWING 2</u> <u>External Bleeder System Utilizing Barriers to Pillar Multiple Sections</u>

- Drawing 2 illustrates a typical bleeder system to pillar multiple sections utilizing a cut through into the mains and a barrier system between panels.
- The section and successive panels will be developed and cut through into the previous panels as shown on Drawing 2
- Adverse conditions may warrant stopping a panel short of the previous panels furthest extent. The bleeder can still be established by cutting through the barrier in the same manner as shown on Drawing 2.
- Two full rows of blocks will be left in the back of the panels and one half of a row of blocks left on the solid coal side.
- A barrier, minimum 50 feet, will be left between panels.
- While the second panel is being pillared, the air will be checked at the pillar line, P-A, P-B and P-C.
- Upon completion of pillaring the second and each successive panel, the bleeder controls will be installed as shown and evaluated at P-A, P-B, P-C, and P-D and so forth. Controls will be plastered on pressure side.
- Three rows of pillars will be left to protect bleeder controls.
- The return will be properly regulated to ensure air is entering the gob of the panel being pillared and the evaluation point at each previous pillar section already pillared which is tied into the same bleeder system.
- A ventilation revision will be submitted and approved before changing the air direction in the bleeder.
- Any mining off a mains, or sub-mains, whether it is rooms or a pillar section, is considered a panel.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.

DRAWING 2B External Bleeder System Utilizing Barriers to Pillar Multiple Sections

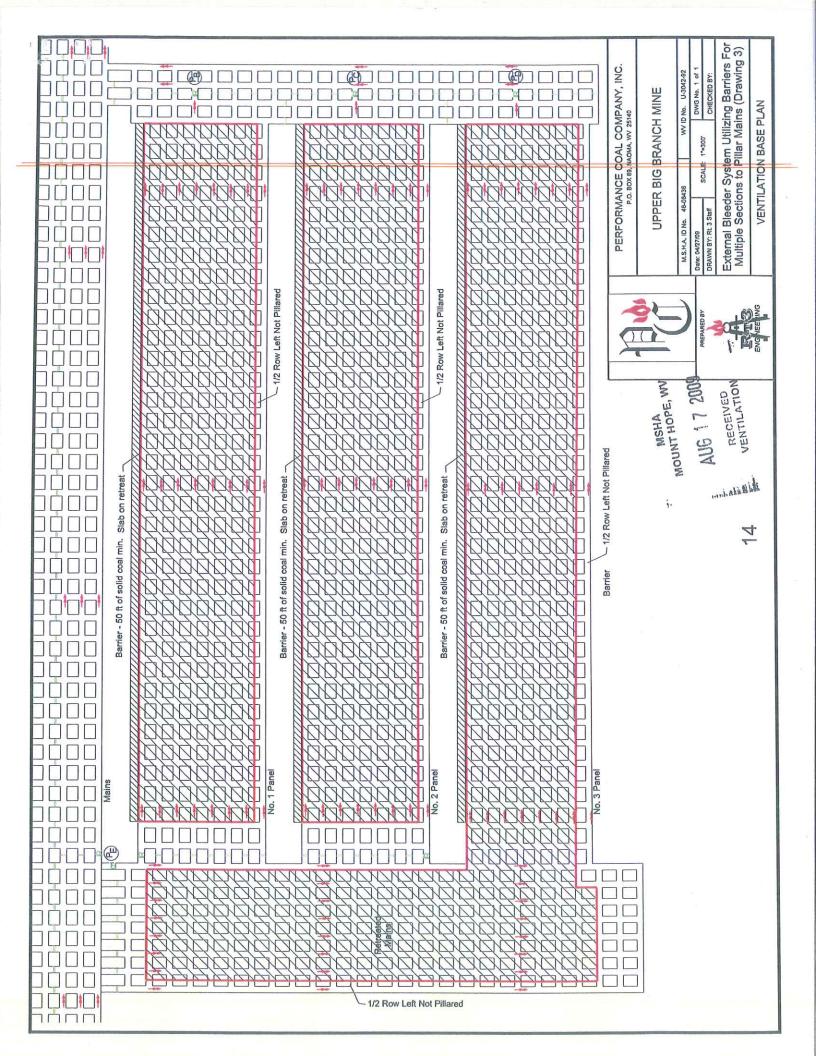
- Drawing 2B illustrates a variation of the bleeder system described in Drawing 2.
- After the second panel connects into the back of the first panel, the evaluation point at P-A would be eliminated. Air would then enter the last panel mined at P-C and exit at P-B.
- If additional panels are mined, air will enter the last panel mined and exit all previous panels (at P-C, P-D, etc.).
- Once established, air direction at P-B will not be changed unless a plan is submitted and approved prior to the change.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.

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PERFORMANCE COAL COMPANY, INC. PO. BOX 88, MOMA, WY 25140 UPPER BIG BRANCH MINE M.S.H.A. ID No. 48-08436 WY ID No. U-3042-92 **********************************	

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<u>DRAWING 3</u> <u>External Bleeder System Utilizing Barriers For Multiple Sections to Pillar Mains</u>

- Drawing 3 illustrates the bleeder system to be utilized that will allow the mains to be pillared after all the panels in a bleeder system have been developed and pillared.
- Before pillaring the mains, the bleeder controls must be installed at the back of each of the old pillar sections. The evaluation points at the mouth of each panel (P-B, P-C, etc.) will be relocated to the back of each panel.
- A barrier, minimum 50 feet, would have been left between panels already pillared off the mains and the bleeder established as shown.
- At least two rows of blocks will be left at the back of each of the pillar sections to protect the bleeder controls.
- One half row of blocks will be left on the solid side of the last panel pillared prior to pillaring the mains.
- Two rows of blocks will be left in the back of the mains and tied into the one half row of blocks left in the last panel by a one half row of blocks to be left in the mains as shown in Drawing 3.
- One half row of blocks will be left on the solid side of the mains.
- The returns will be properly regulated to insure air entering the gob and the bleeder operating normally.
- Once the mains are completely pillared, as shown on Drawing 3, this area will be evaluated at P-B, P-C, P-D, and P-E or sealed. A ventilation revision will be submitted and approved before changing the air direction in the bleeder.
- Any mining off a mains, or sub-mains, whether it is rooms or a pillar section, is considered a panel.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.



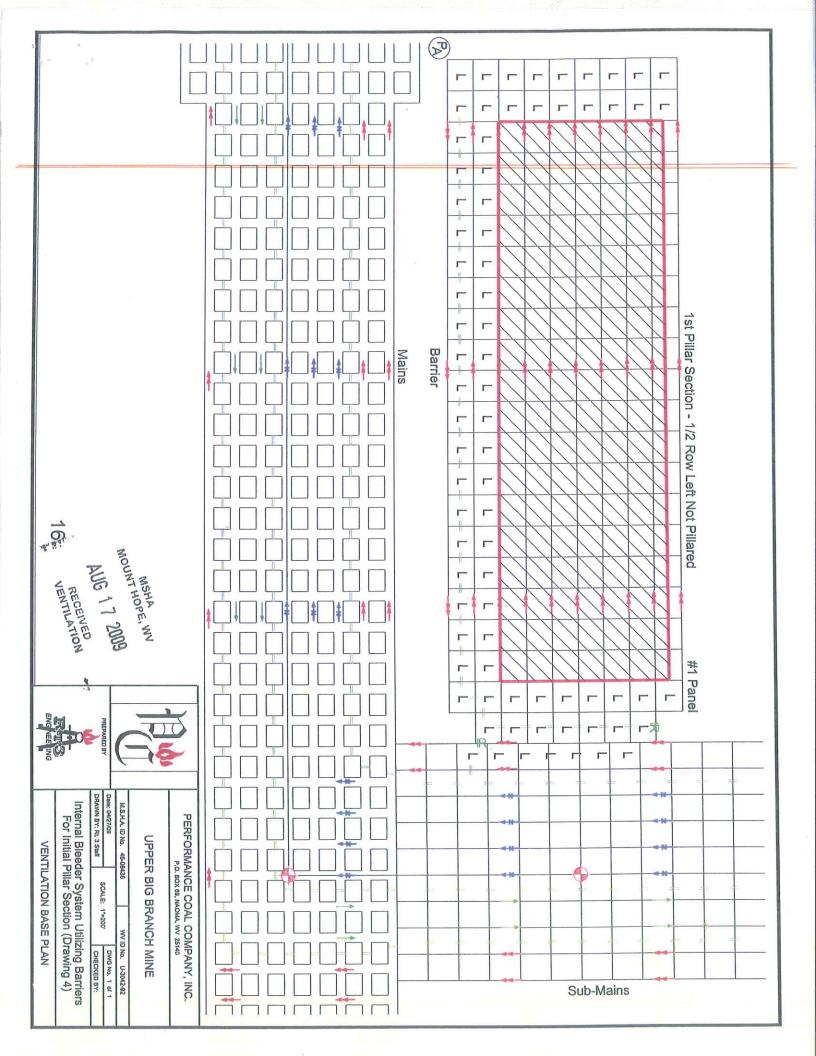
DRAWING 4 Internal Bleeder System Utilizing Barriers for Initial Section

- Drawing 4 illustrates how an internal bleeder system will be established for the initial panel to be pillared.
- A stopping line will be installed in the first block on either side of the panel driven for bleeder controls.
- Evaluation point P-A will be established on the back of the panel as shown prior to pillaring.
- Two rows of blocks will be left in the back end of the bleeder and down the internal bleeder side to protect the bleeder stoppings.
- One half row of blocks will be left on the side of the panel opposite the bleeder blocks and stoppings to facilitate air flow in the bleeder.
- The returns will be regulated to insure air entering the gob and traveling to P-A and back down the panel behind the bleeder stopping line.
- Upon completion of pillaring this section, the bleeder controls at the mouth of the section will be installed as shown on Drawing 4. Controls to be plastered on pressure side.
- Three rows of pillars will be left to protect bleeder controls.
- Until the next panel can be driven parallel to this section and connected into the back of this initial panel as shown on drawing 5, the bleeder will be evaluated at P-A, to determine its effectiveness weekly.
- This type of bleeder system will only be used in rare occurrences when an external bleeder system can not be practically installed.
- While pillaring this section, the bleeder will be evaluated weekly at the pillar line and P-A.
- Any mining off a mains or sub-mains, whether it is rooms or a pillar section, is considered a panel.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow. G:\Engineering\Mining\Rt3\Seams\Eagle\Mines\UBB\Ventilation Revision\2009\New Base Plan\UBB Vent Plan.doc

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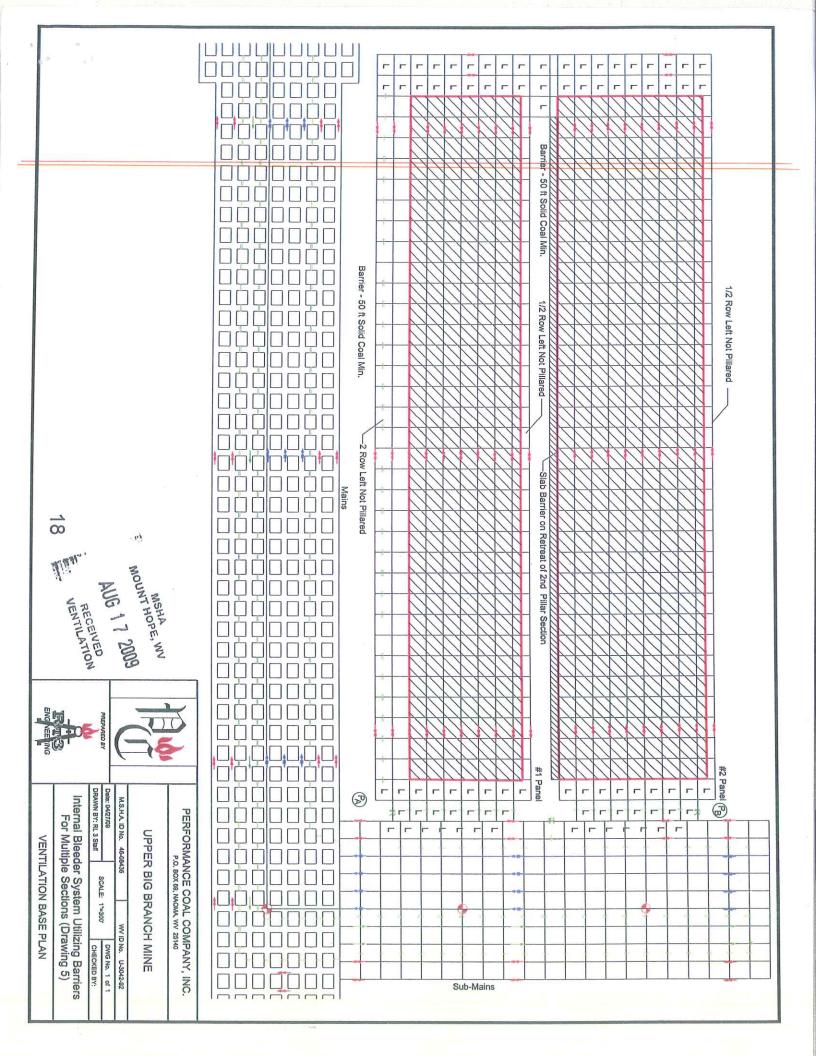
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<u>DRAWING 5</u> <u>Internal Bleeder System Utilizing Barriers for Multiple Section</u>

- Drawing 5 illustrates the bleeder system required to pillar the second and subsequent panels utilizing an internal bleeder system established in the first panel.
- Once the second panel connects into the back of the first panel, the evaluation point P-A will be moved from the back of the first panel, as shown on drawing 4, to the mouth of the first panel as shown on drawing 5.
- Two rows of blocks will be left as shown on the back of the second panel.
- The second panel will connect into the back of the first panel as shown, not necessarily where shown.
- A barrier, minimum 50 feet, will be left between each panel.
- One half row of blocks will be left on the solid coal side.
- While the second and subsequent panels are being pillared, the bleeder will be evaluated weekly at the pillar line and at the mouths of the previous panels at P-A, P-B, etc.
- Once the second and each subsequent panel is finished the bleeder controls will be installed at the mouth of the section as shown on drawing 5. The evaluation points P-A, P-B, etc. will be evaluated weekly. Controls to be plastered on pressure side.
- Three rows of pillars will be left to protect bleeder controls.
- The air will exit all previous panels pillared and enter the last panel developed. The return will be regulated to maintain positive air movement and prevent air reversals. A ventilation revision will be submitted and approved before changing the air direction in the bleeder. The air directions in bleeders will be shown on the mine ventilation map submitted under 75.372.
- Any mining off a mains or sub-mains, whether it is rooms or a pillar section, is considered a panel.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.



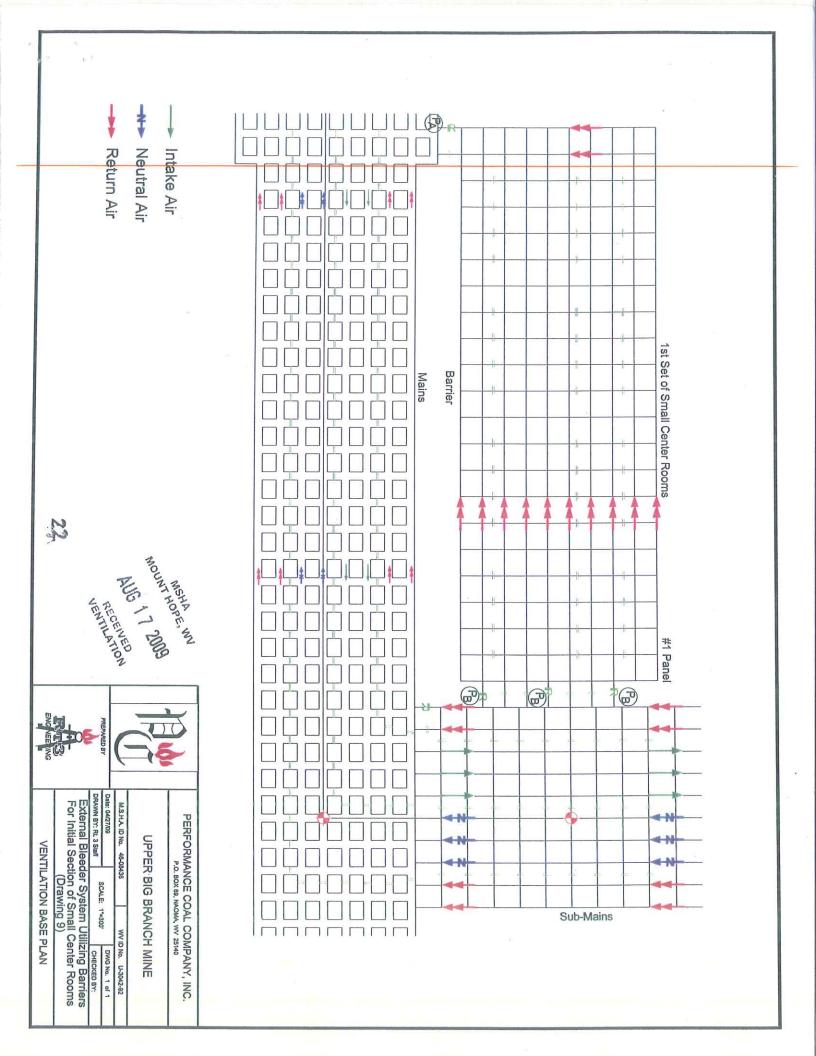
DRAWING 6 Internal Bleeder System Utilizing Barriers to Pillar Submains

- Drawing 6 illustrates the controls required for a bleeder system to allow a set of submains to be pillared on an internal bleeder system which utilizes barriers.
- Once an internal bleeder system with barriers has been fully developed as shown and described on drawings 4 and 5, it may become desirable to pillar the sub-mains.
- The last panel pillared off the sub-mains will not require bleeder controls installed at the mouth of the panel. One half row of blocks will be left in the last panel pillared on the solid side and tied into the two rows of blocks to be left at the back end of the sub-mains.
- Three rows of blocks will be left (as shown on drawing 6) at the mouth of the panels off the sub-mains to protect the bleeder controls. Controls to be plastered on pressure side.
- One half row of blocks will be left on the solid side to better facilitate air flow in the gob area.
- While the sub-mains are being pillared, the bleeder will be evaluated (weekly) at the bleeder evaluation points P-A, P-B, and at the pillar line.
- The sub-mains pillar line will be stopped (as shown on drawing 6) one row inby the first panels bleeder evaluation point. A set of bleeder controls will be built across the submains as shown on drawing 6.
- Upon completion of pillaring the panels and sub-mains, the bleeder will be evaluated, as shown on drawing 6, at P-A, P-B, and P-C or sealed at P-C.
- Any mining off a mains or sub-mains, whether it is rooms or a pillar section, is considered a panel.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.

Barrier - 50 ft Solid Coal Min 1/2 Row Left Not Pillared -2 Row Left Not Pillared 20 MOUNT HOPE, WV RECEIVED <u></u> - E -r r r DRAWN BY: Rt 3 Staff Date: 04/27/09 Internal Bleeder System Utilizing Barriers to Pillar Sub-Mains (Drawing 6) M.S.H.A. ID No. 46-08436 PERFORMANCE COAL COMPANY, INC.
P.O. BOX BB, NAOMA, WV 25140 UPPER BIG BRANCH MINE VENTILATION BASE PLAN -г SCALE: WY ID No. DWG No. 1 of 1 CHECKED BY: U-3042-92

DRAWING 9 External Bleeder System Utilizing Barriers for Initial Section of Small Center Rooms

- Drawing 9 illustrates a typical bleeder system for a single set of small center rooms.
- Rooms will be developed to the deepest point of penetration and cut into a parallel set of mains to establish the bleeder.
- Bleeder controls will be installed as shown at P-A and P-B. All permanent ventilation controls will be plastered.
- Evaluation points will be established at P-A and P-B for the weekly bleeder evaluations.
- The returns will be properly regulated to ensure air movements through the bleeder from P-B to P-A
- Any mining off a main or sub-main, whether it is rooms or a pillar section, is considered a panel.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.
- Stoppings, as shown in the drawing, will be removed every 600' in the first and subsequent panels to make the entries common when the evaluation points are established.



DRAWING 10 External Bleeder System Utilizing Barriers for Multiple Sections of **Small Center Rooms**

Drawing 10 illustrates a typical bleeder system for multiple sets of small-center rooms

A barrier, minimum 25 feet, will be left between successive panels.

Bleeder controls will be installed as shown at P-A, P-B, P-C, and P-D. All permanent ventilation controls will be plastered.

Evaluation points will be established at P-A, P-B, P-C, and P-D for weekly evaluations.

The returns will be properly regulated to insure air movements through the bleeder. Air will enter P-B and P-C and exit P-A and P-D. Under some ventilating conditions, the airflow may differ. Airflow will, however, be maintained at the evaluation points.

Any mining off a main or sub-main, whether it is rooms or a pillar section, is considered a panel.

If additional panels are mined, air movement in all panels will travel inby and exit at P-A.

Once established, air direction at P-B will not be changed unless a plan is submitted and approved prior to the change.

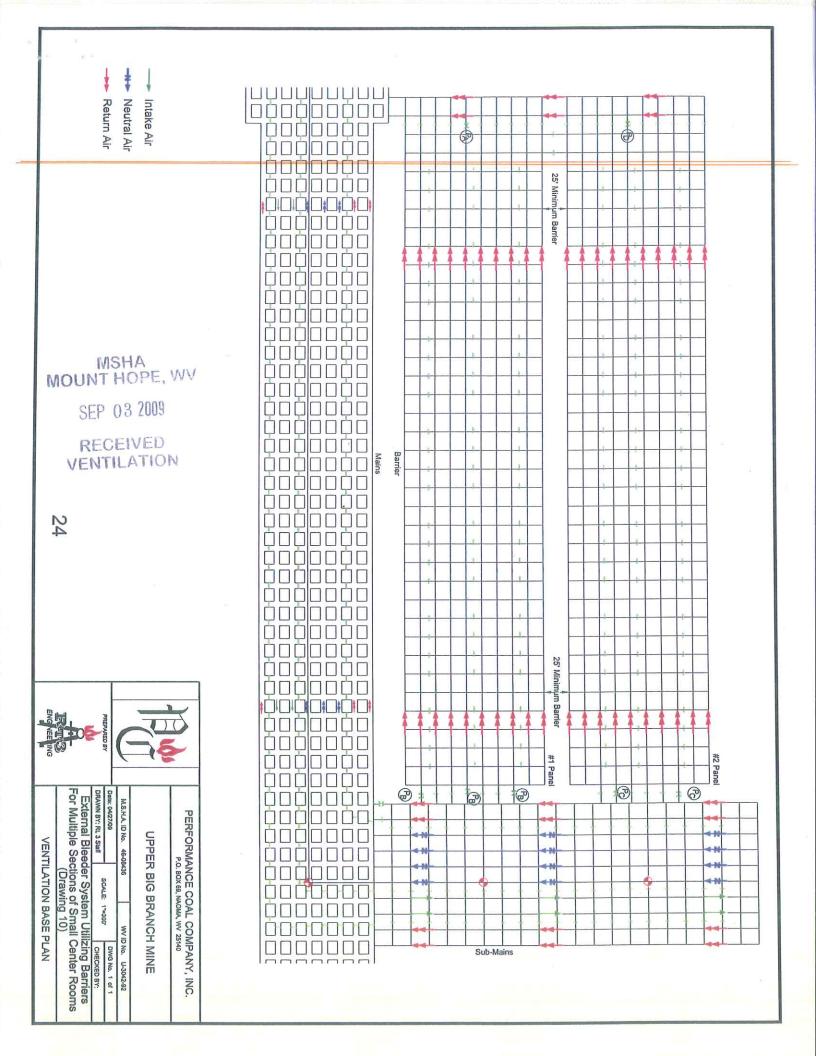
DRAWING 10B

Drawing 10B illustrates a variation of the bleeder system described in Drawing 10.

- After the second panel connects into the back of the first panel, the evaluation point at P-A could be eliminated, if so desired. Air would then enter the last panel worked P-C and exit P-B.
- If additional panels are mined, air will enter the last panel mined and exit all previous panels (at P-C, P-D, etc.).
- Once established, air direction at P-B will not be changed unless a plan is submitted and approved prior to the change.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.
- Stoppings, as shown in the drawing, will be removed every 600' in the first and subsequent panels to make the entries common when the evaluation points are established.

MSHA MOUNT HOPE, WV

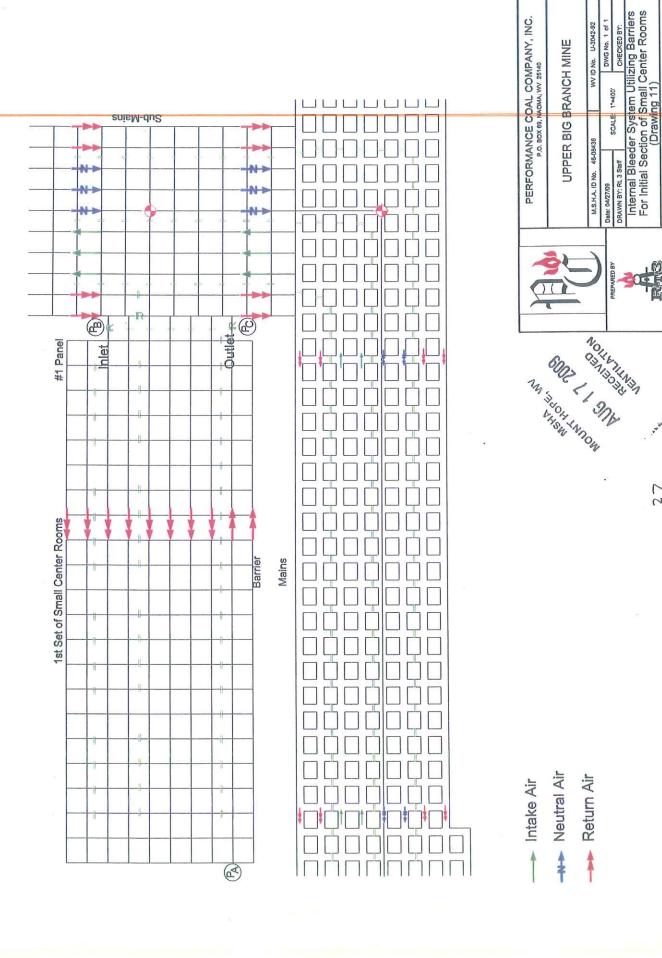
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¥ Return Air Neutral Air Intake Air -Integrity of stoppings will be checked weekly and recorded مِهْم،مالمُوم،مُ ם'פִים'ם פוים'ף 25' Minimum Barrier MSHA MOUNT HOPE, WV SEP 03 2009 RECEIVED VENTILATION Barrier و ۋە واۋو ۋ و ف و و اف و ف 25 ە ۋە ماۋە ۋ 25' Minimum Barrier وفووافوف #1 Panel #2 Panel External Bleeder System Utilizing Barriers
For Multiple Sections of Small Center Room
(Drawing 10B) DRAWN BY: RL 3 Staff و ۋو واۋو ف 6 Date: 04/27/09 3 0 B) 6 M.S.H.A. ID No. 46-08436 PERFORMANCE COAL COMPANY, INC. UPPER BIG BRANCH MINE VENTILATION BASE PLAN SCALE: 1"=400" WY ID No. U-3042-92 Center Rooms Sub-Mains DWG No. 1 of 1

<u>DRAWING 11</u> <u>Internal Bleeder System for Initial Section of Small Center Rooms</u>

- Drawing 11 illustrates a typical bleeder system for the initial section of small center rooms.
- The rooms will be developed to their furthest extent.
- The bleeder controls will be installed at the mouth of the section as shown. All permanent ventilation controls will be plastered.
- The bleeder will be evaluated by establishing an evaluation point at the deepest point of the rooms developed as shown on Drawing 3 as P-A and also at the inlet and outlet shown as P-B and P-C.
- The returns will be properly regulated to ensure air movement in this initial set of rooms.
- Any mining off a main or sub-main, whether it is rooms or a pillar section, is considered a panel.
- A Stopping line will be maintained to the deepest point of penetration.
- Weekly evaluations will include examinations of the stopping line.
- Two safe travelways will be maintained to the bleeder evaluation check points.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.



VENTILATION BASE PLAN

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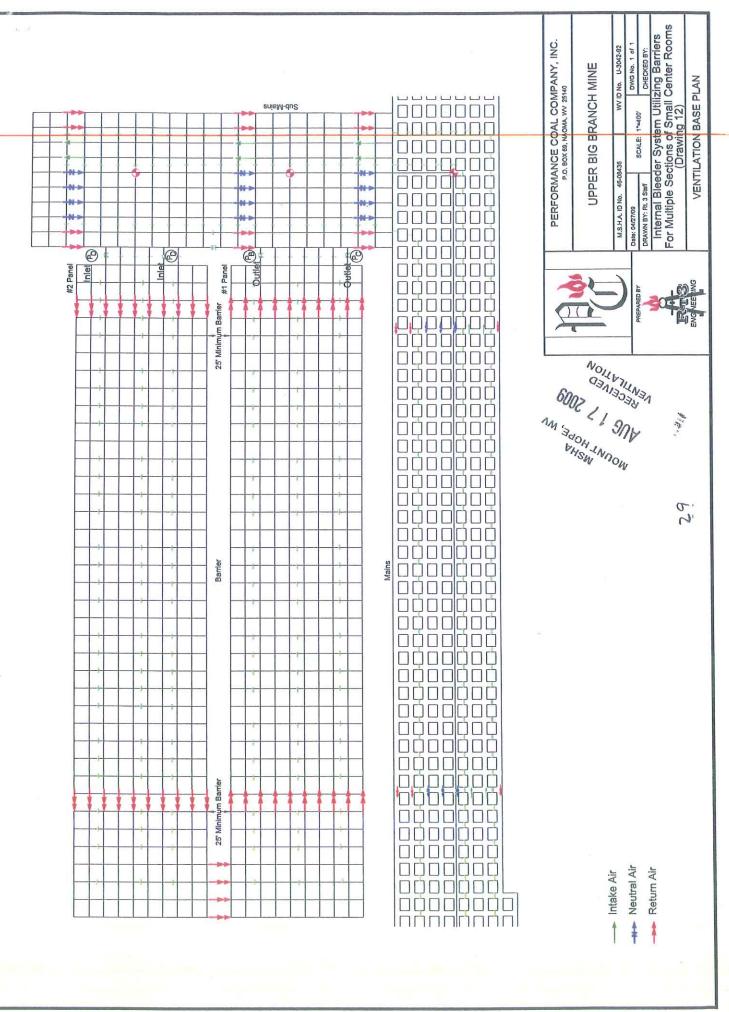
DRAWING 12 Internal Bleeder System Utilizing Barriers for Multiple Sections of Small Center Rooms

- Drawing 12 illustrates a typical bleeder system for multiple sets of small-center rooms.
- A barrier, minimum 25 feet, will be left between successive panels.
- The panels will be connected, at the point of furthest development, as shown on Drawing
- Bleeder controls will be installed at the mouths of the panels as shown. All permanent ventilation controls will be plastered.
- Evaluation points will be established at P-B, P-C, and P-D for weekly evaluations.
- The returns will be properly regulated to insure air movements through the bleeder. Air will enter P-D and exit P-B and P-C.
- Any mining of a main or sub-main, whether it is rooms or a pillar section, is considered a panel.
- If additional panels are mined, air will enter the last panel mined and exit at all previous panels.
- Water will not be allowed to accumulate and block or obstruct bleeder flow.
- Stoppings, as shown in the drawing, will be removed every 600' in the first and subsequent panels to make the entries common when the evaluation points are established.

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The overall bleeder system for the Northern District will consist of a total of five longwall panels. The panel lengths vary due to the lay of the coal reserves.

The bleeder design and panel development layout typically utilizes three or four entry gateroads. Bleeder entries are developed across the back-end of each longwall panel, separate from the longwall set-up entries. This design allows for proper evaluation of individual panels.

The ventilation of the initial longwall panel and the subsequent panels in this district will direct air through the headgate entries, across the longwall face, into the tailgate entries, and then into the bleeder entries. The air will exit out of the bleeder entries at the bleeder return airshaft.

Water Control:

The water in the Northern District will be controlled by natural drainage and dewatering systems currently in place in the mine. Water in the bleeder entries and gateroads will be pumped to a central location within the district and removed from the mine via deep-well turbine pumps.

Water in the area of the dewatering pumps will not be allowed to reach a depth great enough to block travel of personnel or air flow.

Roof Control:

The immediate and main mine roof will be supported in accordance with the approved roof control plan. Additional supplementary roof support, which may consist of cribs, jacks, post, propsetters or other approved roof support material, will be installed in the bleeder entries as necessary to maintain these airways throughout the life of the bleeder system.

Bleeder System Evaluation:

The bleeder system is designed to maintain positive ventilating pressure against the gob while providing an adequate quantity and quality of air to the longwall face. This system will allow for effective ventilation of the gob area as each panel is mined and to prevent and minimize methane accumulation within the bleeder system. As the air exits the longwall face and enters the tailgate it will split and the air will travel inby into the gob and outby for at least one crosscut before entering the bleeder system.

Bleeder evaluation checkpoints, Evaluation Points (EP's), and Monitoring Points (MP's), will be established and maintained within the bleeder system district as each longwall panel is completed. EP's and MP's will be established in the headgate and tailgate entries of the retreating longwall face, to assure proper air flow quality and quantity. These checkpoints will be located inby on the headgate side and outby on the tailgate. During mining the EP's LW - 1 and LW - 2 and MP's A and B will move outby as the longwall face advances (See Typical Longwall Face Sketch).

MP's will also be established along the headgate entries, starting at the set-up face and at intervals of approximately 2,000 feet. These MP's will become active once the

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longwall face passes by the pre-established points (See Longwall Bleeder Map). These MP's will assure proper airflow inby the longwall face headgate entries. These points will be established on each consecutive longwall panel and will remain part of the bleeder system evaluation and will be examined on a weekly basis, until the active panel is completed.

Doors will be maintained from the active tailgate entry into the adjacent longwall bleeder entries in order to determine air quality in the adjacent longwall gob. In order to facilitate safe inspection, supplemental support will be installed on 4ft centers from the door to the bleeder entry. These MP's will be maintained no more than 3,000ft apart. Measurements will be taken at these locations until the active longwall retreats outby these points.

As each longwall panel is completed, bleeder evaluation check points will be established in the existing gateroads just outby the longwall recovery face. Stoppings and regulators will be installed in the entries and adjusted for proper airflow direction and quantity. EP's will also be established at the back end of each active and mined out longwall panel as the district is developed. These EP's will be examined weekly for proper airflow direction, air quality, air quantity, and methane and oxygen content. The information obtained during the weekly exam shall determine the effectiveness of the bleeder system. EP's are located at strategic locations to allow a thorough review and evaluation of the bleeder system. The locations of these points are shown on the Line Diagram Map.

Should methane levels increase by 1% or more at an EP between weekly examinations, the mine management shall immediately evaluate the entire bleeder system.

Additional intake air to assist in the dilution of methane gas being liberated along the longwall face during mining will be supplied from the belt entry. This additional air quantity will also help remove respirable rock and coal dust away from the longwall face. The belt air will be monitored and comply with 30 CFR 75-350. Pyatt Boone (Model 980A and 1703 or equivalent) CO monitors will be installed to comply with 30 CFR 75-351.

Proposed and estimated air quantities are shown on the accompanying maps. Once the bleeder fan is activated, and proposed ventilation controls are installed and/or removed an evaluation of the bleeder system's Northern District will be conducted to assure intended airflow direction and air quantities.

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TYPICAL LONGWALL FACE VENTILATION Performance Coal Company Upper Big Branch Mine 46-08436 (U-3042-92) No. 1 North Panel Start-Up

