Appendix K - Three Supplements to the Ventilation Plan Concerning Omega Block Seals

U.S. Department of Labor
Mine Safety and Health Administration
604 Cheat Road
Morgantown, West Virginia 26508

OCT 2 4 2005

Mr. Jeffrey K. Toler
Superintendent
Anker WV Mining Company, Inc.
Route 9, Box 507
Buckhannon, West Virginia 26201

Dear Mr. Toler:

The request filed October 12, 2005, and revision filed October 19, 2005, to add an alternative method of seal construction to the ventilation plan for the Sago Mine, I.D. No. 46-08791, has been reviewed. The alternative method seal made with nonhitched-style Omega blocks is approved and will be included in your currently approved mine ventilation plan.

You are reminded that all changes or revisions to the mine ventilation plan, as specified in 30 CFR 75.370(d), must be submitted to and approved in writing by this office before they are implemented.

If you have any questions, please feel free to contact this office.

Sincerely,

Kevin G. Stricklin

Kevin G. Stricklin
District Manager

EParrish/aew

boc:
Bridgeport F/O (2)
W. Ponceoff
E. Parrish
Health Section
Map File
Math File
Anker West Virginia Mining Company
Rt. 9 Box 507
Buckhannon, WV 26201

October 12, 2005

Kevin Stricklin, District Manager
Mine Health and Safety Administration
604 Cheat Road
Morgantown, WV 26508
Attn: Tom Hlavsa

RE: Sago Mine's Ventilation Plan Changes

Mr. Stricklin:

Anker West Virginia Mining Company wishes to add an Omega Concrete Block Seal Method and Plan to our current Ventilation Plan for our Sago Mine, MSHA ID # 46-08791. It should be noted, that at this time, we only wish to add the non-hitched style to our plan. (See attached diagrams).

If you have any questions on this matter, please feel free to contact me at 304-471-3300.

Sincerely,

[Signature]

[Name]
Safety Director
Guidelines for Installation of Omega Block Concrete Seals

1. All loose material will be removed from the roof, ribs, and floor to accommodate seal construction and supplemental supports. The seals will be constructed at such a location so that a permanent block seal can be installed in front of the omega seal, if required in the future.

2. The seal will be constructed with Omega blocks using one of the following methods:

A) Total thickness of 40"
B) No hitching required.
C) Joints must be staggered.
D) A bonding agent (Blockbond #112551), will be used to seal between each layer and joining edges of blocks at least ¾" thick and will be applied to the front and back of the seal.
E) The Omega blocks will be either be sawed or constructed so as to bring the top blocks to within 2" of the mine roof.
F) Three rows of wood planks running the entire length of the seal shall be installed across the top of the seal.
G) Wedges will be placed on 1 Foot centers or less, with an approved sealant used to fill the gaps.
H) An approved sealant shall be used as full face coating on both sides of the seal.
I) Seals shall be installed at least 10 feet from the corner of the pillar.
J) Sample pipes shall be installed as per 75.335.
K) Water traps will be installed within 12" of the bottom or floor.
1. Total thickness 40 inches
2. No notching required
3. Joints must be staggered
4. All joints shall be a minimum ¼ inch thick and be motored using an approved molar/sealant
5. Three rows of wood planks running the entire length of the seal shall be installed across the top of the seal
6. Wedges will be placed on 1’ centers or less with an approved sealant used to fill the gaps
7. An approved sealant shall be used as full face cooling on both sides of the seal.

Seals shall be at least 10 feet from the corner of the pillar
Sampling pipes shall be installed as per 75.33.35
OCT 24 2005

Mr. Jeffrey K. Toler
Superintendent
Anker WV Mining Company, Inc.
Route 9, Box 507
Buckhannon, West Virginia 26201

Dear Mr. Toler:

The proposed location and sequence of seal construction across North East Mains and the intentional ventilation change filed October 12, 2005, at the Sago Mine, I.D. No. 46-08791, has been reviewed. The request is approved and will be included as a supplement to the mine ventilation map filed pursuant to 30 CFR 75.372.

You are reminded that this ventilation change must be conducted in accordance with 30 CFR 75.324.

If you have any questions, please feel free to contact this office.

Sincerely,

Kevin G. Stricklin

Kevin G. Stricklin
District Manager

EParrish:aew

bcc:
Bridgeport F/O (2)
E. Parrish
Map File
Main File
October 12, 2005

Kevin Stricklin, District Manager
Mine Health and Safety Administration
604 Cheat Road
Morgantown, WV 26508
Attn: Tom Hlavsa

RE: Sago Mine’s Ventilation Plan Changes

Mr. Stricklin:

Anker West Virginia Mining Company wishes to seek approval relative to installing nine mine seals across our North-East Mains in our Sago Mine, MSHA ID # 46-08791.

The mine seals being proposed will be constructed across our North East Mains, just inby the area that will be the future location of the 2nd Mains Unit. The proposed seals will be constructed across the North East Mains area in such a manner that the No. 2-9 seals will be constructed first, with seal numbers 1 and 10 be constructed simultaneously. It should be noted that for a temporary time frame, (not to exceed a four week period after the construction of said seals), that we will course air from a left-to-right direction, (from the number 1 entry towards the number 9 entry), in order to ventilate these seals; however, once we have constructed the necessary overcasts on the future 2nd Left Mains the air flow direction will be switched to a right-to-left direction, (From the number 9 entry towards the number 1 entry). See attached mapping to see air flow direction and ventilation control devices.

If you have any questions on this matter, please feel free to contact me at 304-471-3300.

Sincerely,

[Signature]

Michael Schoonover
Safety Director
Mr. Jeffrey K. Toler  
Superintendent  
Anker WV Mining Company, Inc.  
Route 9, Box 507  
Buckhannon, West Virginia 26201  

Dear Mr. Toler:

The request filed October 31, 2005, to add an alternative method of seal construction to the ventilation plan for the Sago Mine, I.D. No. 46-08791, has been reviewed. The alternative method seal with non-hitched style Omega blocks is approved and will be included in the currently approved mine ventilation plan.

You are reminded that all changes or revisions to the mine ventilation plan, as specified in 30 CFR 75.370(d), must be submitted to and approved in writing by this office before they are implemented.

If you have any questions, please feel free to contact this office.

Sincerely,

Kevin G. Stricklin

Kevin G. Stricklin  
District Manager  

ElParrishaew

bcc:  
Bridgeport F/O (2)  
W. Ponceoff  
E. Parrish  
Health Section  
Map File  
Main File

Appendix _____
October 28, 2005

Kevin Stricklin, District Manager
Mine Safety and Health Administration
604 Chest Road
Morgantown, WV 26508
Attn: Tom Havsa
Re: Sago Mine’s Proposed Seal Plan Amendment

Mr. Stricklin:

Anker West Virginia Mining Company wishes to submit an amendment to the proposed mine seal plan that was submitted to your office on 09-29-05 for the Sago Mine, MSHA ID # 46-08791. This proposal will address the addition of utilizing pilasters with the Omega Mine Seals when the mined height exceeds eight feet. Please refer to the attached technical drawing depicting construction and dimensions of this application.

In closing if you have questions concerning this matter please feel free to contact me at 1-304-471-3300.

Sincerely,

John B. Stemple Jr.
Assistant Director of Safety

and Employee Development
40" THICK OMEGA BLOCK SEAL
FOR USF WITH SEALS UP TO 8 FT HIGH BY 20 FT WIDE
NO HITCHING REQUIRED

1. Total thickness of completed seal shall be 40 inches
2. No hitching required
3. Joints must be staggered
4. All joints shall be a minimum 1/4 inch thick and be mortared using "BlockBond"
5. Three rows of wood planks running the entire length of the seal shall be installed across the top of the seal
6. Wedges will be placed on 1' centers or less with "BlocBond" used to fill the gaps
7. "BlocBond" shall be used as full face coating on both sides of the seal.

- seals shall be at least 10 feet from the corner of the pillar
- Sampling pipes shall be installed as per 75.335
PROPOSED PLAN FOR CONSTRUCTION OF NON-HITCHED OMEGA BLOCK SEALS

1. Each seal shall be substantially constructed of (8" X 16" X 24") Omega Blocks with joints plastered with "BlocBond" and all joints shall be adequately mortared. Inby and outby face of completed seal shall be fully coated with "BlocBond".

2. Seals shall be at least forty (40) inches thick.

3. Seals shall be at least ten (10) or more feet from the corners of a pillar.

4. Seals shall be constructed in solid floor that remains unbroken. Where this is not possible, preferred site is floor that is settled. All loose broken material shall be removed from the ribs, roof and floor for at least three (3) feet on both sides of the point where the seal is to be built. All cracks shall be grouted in the site preparation area.

5. Water shall be drained from the inby face of the seal (where standing water could weaken the seal or floor) into the open portion of the mine by using a sized for drainage non-corrosive pipe with a minimum twelve (12) inches deep water trap.

6. Seals must be protected from adverse roof and floor conditions by no less than two (2) rows of timbers on four (4) foot centers or three (3) cribs on both sides of the seal.

7. TEST PIPE: Sample pipes will be installed as per MSHA 75.335
40" THICK OMEGA BLOCK SEAL WITH PILASTER
FOR USE WITH SEALS UP TO 10 FT HIGH BY 20 FT WIDE

1. Total thickness of completed seal shall be 40 inches
2. No hitching required
3. Joints must be staggered
4. All joints shall be a minimum X1 inch thick and be mortared using "BlockBond"
5. Three rows of wood planks running the entire length of the seal shall be installed across the top of the seal
6. Wedges will be placed on 1' centers or less with "BlocBond" used to fill the gaps
7. "BlocBond" shall be used as full face coating on both sides of the seal.

---

seals shall be at least 10 feet from the corner of the pillar
Sampling pipes shall be installed as per 75.335
40" thick Omega Block Seal with Pilaster
For use with seals up to 10 ft high by 20 ft wide
Construction Plan

Alternate Courses to Stagger Joints
1. Total thickness of completed omega portion of seal shall be 40 inches.
2. No hitching required.
3. Joints must be staggered.
4. All joints shall be a minimum $\frac{3}{4}$ inch thick and be motored using "BlocBond".
5. Three rows of wood planks running the entire length of the seal shall be installed across the top of the seal.
6. Wedges will be placed on 1' centers or less with "BlocBond" used to fill the gaps.
7. "BlocBond" shall be used as full face coating on both sides of the seal.
8. Solid concrete pier will be built 64" wide (as noted on diagram).
9. Pier shall be constructed of 1101 series Quickcrete or equivalent. The pier will be allowed to cure 6 day before omega seal is built on top of pier.
10. The compressive strength of the quickcrete will be 1500 psi after 6 days, and 4000 psi after 28 days.
11. Quickcrete-omega interface will be plastered $\frac{3}{4}$ inch thick using "BlocBond" mortar, similar to all other joints.

- Seals shall be at least 10 feet from the corner of the pillar.
- Sampling pipes shall be installed as per 75.335.
40" THICK OMEGA BLOCK SEAL WITH CONCRETE PIER
FOR USE WITH SEALS UP TO 12 FT HIGH BY 20 FT WIDE

CONSTRUCTION PLAN

ALTERNATE COURSES TO STAGGER JOINTS

<table>
<thead>
<tr>
<th>24&quot;</th>
<th>10&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>16&quot;</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>16&quot;</th>
<th>24&quot;</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

40"