

Publicly Funded Mine Drainage Treatment or Abatement Project Information Sheet

General Project Information

Project Name and or No.: BELLWOOD (LLOYDVILLE RUN) SITE A/B PA-071
Location: Municipality and County: CAMBRIA
Watershed: BELLS GAP RUN
USGS Quadrangle: BLANDBURG
Latitude and Longitude: 40.664444000000003 -78.401111

Contact Information

Contact Organization: PADEP BAMR
Contact Person: SCOTT HORRELL
Contact Address: 286 INDUSTRIAL PARK ROAD
EBENSBURG
PA
15931
Contact Telephone Number: 814472-1800
Contact Email: pmilavec@state.pa.us

Organization Currently Responsible For Project Operations, Monitoring and Maintenance

Is this organization different from Contact Organization? True
Organization Name: Altoona City Authority
Organization Contact Name: Tobias Nagle
Organization Contact Address: Westerly Wastewater Treatment Facility
3172 Rt. 764, Duncansville, PA 16635-7800
Organization Telephone Number: (814) 949-2250
Organization Email: acalab1@atlanticbnn.net

Site Information

Who owns the property the project is constructed upon?:
All Site Access and Treatment Systems Primary - Commonwealth of Pennsylvania, Pennsylvania Game Commission
State Game Lands #158
Site A Minor Fringe - Commonwealth of Pennsylvania, Department of Environmental Protection
The project also included surface reclamation upslope and east of the Site A/B systems. This area is the property of
the Commonwealth of Pennsylvania, Department of Environmental Protection and the Bellwood Borough Authority.

Driving Directions to the Project Site (from an easily identifiable reference point):

From Interstate 99 in Blair County, between the cities of Altoona and Tyrone, take the Bellwood Exit. The end of the exit ramp directs you immediately onto State Route 865. From the end of the exit ramp continue on SR 865 through the town of Bellwood, past the Bellwood Reservoir towards the village of Blandburg approximately 7.75 miles to where an abandoned railroad grade crosses the road at grade and at right angles. This abandoned railroad grade to the right (east) is the access road to Bellwood Site A/B. Approximately 200 feet from SR 865 is a locked gate across the access road. You are now entering State Game Lands #158. From this gate continue on the access road approximately 1/2 mile to Bellwood Site A/B.

Special instructions for entry to the site (gates, keys, notifications or permissions, etc.):

Travel along the site access road and Site A/B itself is within State Game Lands #158. A locked gate is located near the entrance of the access road approximately 200 feet from SR 865. There are two locks on this gate inside a protective metal box that swings open at the top. The locking mechanism is such that unlocking either of these locks will open the gate. One of the locks is a PA Game Commission lock and the other is a DEP lock. Distance from the gate to the site is approximately 1/2 mile. Arrangement for opening this gate can most readily be obtained by contacting, in advance, Max Scheeler at the DEP BAMR Cambria Office, 286 Industrial Park Road, Ebensburg, PA 15931, (814) 472-1800

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Is there a perpetual access agreement for monitoring and O&M?	No
Is the site readily accessible (by 2WD vehicle)?	Yes
Was project completed as part of an overall watershed restoration plan?	No
Is the plan available electronically?	N/A
Could you provide the DEP a copy of the plan?	N/A
Is a copy of the plan attached?	N/A

Project Description (Describe the treatment system including each individual component):

The area upslope of the Site A/B systems is an abandoned surface mine area that had been addressed previously by a Scarlift surface reclamation project. The Scarlift project vegetation did not survive and a large approximately 8 acre area of bare refuse and severe erosion soon developed. Non-point seepage from this area collects in a small drainage course which conveys it to an unnamed tributary (UNT) to Lloydville Run which is a tributary of Bells Gap Run and the source water for the Bellwood Reservoir. High water table combined with surface runoff and sedimentation from this barren area also created a large downslope killzone of approximately 13 acres and dimensions of approximately 2000 ft. long by 275 ft. wide. Refuse fines and sediment transported by acidic surface runoff smothered this area and accumulated in deep deposits at the downslope toe against the abandoned railroad grade.

As an effort to divert both surface and subsurface water away from the proposed work site prior to construction, the DEP BAMR Cambria Office Bituminous District In-House Construction Crew (BD Crew) constructed an open interceptor trench approximately 150 feet upslope from the proposed treatment location in the fall of 1999. This trench, which became known as "Existing Collection Trench A", was dug approximately 10 feet deep, 4 feet wide and runs approximately 450 feet and discharges into the same small drainage course mentioned previously that collects drainage from the upslope area. The site was monitored and resulted in the decision to install a second interceptor upslope from the first, which was constructed by the BD Crew in the spring of 2000 and became known as "Existing Collection Trench B." Trench B is a subsurface interceptor drain located approximately 500 feet upslope from the treatment location. This drain is a trench dug approximately 12 ft. deep by 4 ft. wide that was filled with sandstone, covered with geotextile, topped with soil and vegetated. This drain runs approximately 850 feet and discharges into the small drainage course mentioned previously that collects drainage from the upslope area. After the start of the project, construction had not progressed long before the decision was made to have a third interceptor installed by the contractor. This interceptor, known as Trench B-1, is aligned somewhat diagonally starting near the upstream end of Trench B and running 772 feet to discharge just upstream from the end of Trench A. Trench B-1 is approximately 10 to 12 feet deep and 5 feet wide. The trench has two 8 inch corrugated perforated black plastic pipes running along the bottom that are bedded in 2B stone to 12 inches over the top of the pipes. The remainder of the trench is filled with R-3 stone to within 2 feet of the surface. The top of the stone is covered with geotextile, backfilled with soil and vegetated. Also, as part of the original project plan, "Existing Collection Trench A" was stabilized by the contractor. Under contract, Trench A had the sides laid back at 2:1 slope, R-3 stone placed across the bottom width and the entire area vegetated.

STABILIZATION POND A/B

A single Stabilization Pond is common to both Site A and Site B as the shared initial unit for both systems. The Stabilization Pond impounds the small drainage course collecting seepage from the upslope area and the discharges from the three upslope interceptors. The normal discharge from the Stabilization Pond is directed into the primary treatment facility which is the Site A Vertical Flow System. Any overflow from the Stabilization Pond is directed into the adjacent secondary treatment facility which is the Site B Open Limestone Channel and Compost Wetland System. The Stabilization Pond has a pear shape of approximately 0.24 acres at the top of embankment inside perimeter with average dimensions of approximately 160 feet by 65 feet. The pond has 4:1 side slopes descending to an original water depth of 5 feet at the center which translates to an approximate water surface area of 0.11 acres. The pond is lined with 18 inches of compacted impervious soil obtained from best available on-site excavated material.

SITE A

The initial unit in the Site A Treatment System is a Vertical Flow Pond (VFP). The influent to the Site A VFP drains from the Stabilization Pond through a 10 inch PVC pipe. At the Stabilization Pond the influent end of this pipe is supported within a headwall constructed with timbers manufactured from recycled plastics. The influent end of this pipe is also enclosed within a custom made trash rack fabricated from plastic and fiberglass materials and anchored to the headwall. The Site A VFP is approximately 315 feet long by 115 feet wide and approximately 0.83 acres at the top of embankment inside perimeter. The total depth of the VFP is 10.5 feet. The design water surface area is approximately 0.7 acre. The pond is lined with 40 mil HDPE liner sandwiched between a bottom and top layer of 10 ounce non-woven geotextile. The VFP has 6 inches of AASHTO No.3 limestone bedding under a perforated PVC pipe bottom collection system. The bottom pipe collection system is covered by 3 ½ feet of AASHTO No.1 limestone which is overlain with 18 inches of a 60% / 40% mix of spent mushroom compost / AASHTO No.8 limestone. The VFP then has 3 feet of standing water and 2 feet of freeboard. Original design called for 4:1 side slopes through the

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freeboard area and water column and then 1:1 through the compost and limestone zones to the bottom. This configuration was changed during construction to a straight side slope from the specified bottom dimensions to the specified top dimensions. This resulted in as-built side slopes for the VFP of approximately 2 ½:1. The bottom collection system is three runs of 6 inch perforated PVC pipe aligned parallel and spaced 25 feet apart along the length of the pond bottom. At the discharge end of the VFP the 6 inch pipes connect into a 10 inch solid PVC header pipe running the width of the pond bottom. The 6 inch pipes angle up the sides of the pond at both ends extending above the water surface to provide 6 inch clean-outs at both ends of each of these pipes. The 10 inch header pipe provides a similar configuration to a 10 inch clean-out on its upstream end. The discharge end of the 10 inch header bottom collection pipe leads to a 10 inch wye fitting. The bottom run off of this wye discharges to the Site A Sedimentation Pond with a 10 inch PVC body gate valve installed near the end of the pipe for flushing purposes. The branch off of the 10 inch wye serves as the primary discharge from the VFP. The branch angles vertically upward with 10 inch PVC to a 45° fitting that turns the piping horizontal. The horizontal discharge pipe then runs to a 5 foot high inline style water level control box. 10 inch PVC pipe connects from the outlet side of the level control box. The VFP effluent from this 10 inch pipe then aerates over a 2 foot vertical fall into a grouted R-3 rip-rap channel. The channel falls 7 feet over an approximate 25 foot length down the outslope of the VFP, further aerating the VFP effluent and discharging it into the Site A Sedimentation Pond below. Two additional 10 inch PVC flush pipes are installed across the width of the VFP bottom making a total of 3 flush pipes for the VFP. These 2 additional flush pipes are spaced from the 10 inch PVC header pipe at the discharge end of the VFP bottom, upstream at 100 foot intervals. Each of these two 10 inch flush pipes is connected across all 3 of the 6 inch perforated PVC collection pipes at right angles by cross fittings and tees and then discharge through the VFP outslope into the Site A Sedimentation Pond. Near the end of each flush pipe is a 10 inch PVC body gate valve used for flushing. All gate valves are covered with valve boxes which extend to the surface with locking lids and are equipped with extension rods from the valve operating nut to the top of the box to allow for valve operation using a short operating key.

The Site A Sedimentation Pond is approximately 245 feet long by 90 feet wide and approximately 0.5 acres at the top of embankment inside perimeter. The total depth of the Sedimentation Pond is 7 feet with 4:1 side slopes and a design water depth of 5 feet and 2 foot freeboard which translates to a design water surface area of approximately 0.39 acres. The pond is lined with 18 inches of compacted impervious soil obtained from best available on-site excavated material. Flush water from the adjacent VFP discharges directly into the Sedimentation Pond. The Site A Sedimentation Pond discharge structure is a custom ordered dual outlet 7 foot high inlet style water level control box installed on a timber cribbing access ramp. The level control box has a 10 inch bottom outlet connected to a 10 inch PVC pipe which discharges to the UNT to Lloydville Run. Near the end of this pipe a 10 inch PVC body gate valve is installed. This bottom outlet with gate valve is used to draw down the sedimentation pond in preparation for flushing of the VFP and remains closed during normal system operation. Prior to flushing the VFP, the gate valve on the bottom outlet is opened and clear water is decanted from the sedimentation pond surface by incrementally removing stop logs from the top of the stack, one at a time until the desired water level is reached. Approximately 3 feet above the bottom outlet on the level control box is a second 10 inch outlet. A 10 inch PVC pipe installed on this outlet discharges the normal operating flow to an adjacent polishing wetland. The sedimentation pond design water level of 5 feet can be adjusted up to 12 inches lower while still maintaining normal operation through the upper level control box outlet. The gate valve on the bottom outlet is covered with a valve box which extends to the surface with locking lid and is equipped with an extension rod from the valve operating nut to the top of the box to allow for valve operation using a short operating key.

The final unit in the Site A system is an aerobic polishing wetland. The wetland is L-shaped with constant cross section of a 20 foot bottom width and 2:1 side slopes. As per design, the wetland has 10 inches of spent mushroom compost substrate with 2 inches of freestanding water. At the water surface the wetland dimensions are approximately 125 feet long by 25 feet wide and approximately 0.07 acre. The wetland was seeded with an obligate wetland seed mix. The Site A Sedimentation Pond discharges into one end of the L-shaped wetland and at the other end the wetland discharges through a 90° V-notch weir. The wetland V-notch weir is a headwall constructed with timbers manufactured from recycled plastics. A rectangular opening at the center of the headwall is covered on the upstream side with a ¼ inch thick aluminum plate that has the 90° V-notch cut out of it. The wetland/Site A system final discharge then enters an R-4 rip-rap limestone channel where it combines with the discharge from the Site B system.

SITE B

Any overflow from the Stabilization Pond discharges through a rectangular weir and into the Site B system initial unit which is an Open Limestone Channel (OLC). The rectangular weir at the Stabilization Pond outlet to the Site B system is constructed with timbers manufactured from recycled plastics. The weir is broad-crested with a 34 inch wide opening. The Site B OLC is approximately 550 feet long. The channel is lined with a 12 inch thickness of R-3 limestone rip-rap to provide a 3 foot bottom width and extends up the 2:1 side slopes to provide a 2 foot channel depth. Along its course, the Site B OLC also intercepts non-point seepage from a smaller upslope seepage area and kill zone that is not captured by the Stabilization Pond. The OLC discharges into the Site B Compost Wetland.

The Site B Compost Wetland is knife blade shaped with the OLC discharging into it at the tip end. The wetland's vegetated compost area is approximately 0.36 acres with approximate average dimensions of 300 feet long by 50 feet wide. The wetland substrate is a 3 foot depth of a 60%/40% mix of spent mushroom compost /AASHTO No.8 limestone, seeded with an obligate wetland seed mix. The wetland is designed to promote subsurface flow through

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the compost with the design water level 6 inches below the compost surface. This flow regimen is initiated by use of an R-4 limestone rip-rap filter dike installed within the basin across the width, approximately 40 feet from the OLC discharge into the wetland. The upstream area between the dike and the OLC discharge into the wetland has no compost and is open water. The top of the dike is level with the compost surface and impounds the compost 6 inches above the design water level in the open water area on the other side of the dike. On the opposite end of the wetland is a grouted R-3 rip-rap spillway with the crest set at the wetland design water level. A second filter dike is placed across the spillway channel inlet which again impounds the compost 6 inches above the spillway crest i.e. design water level. Within the crest of the spillway a half section of 6 inch PVC pipe is embedded in the grouted R-3 rip-rap creating a trough along the middle of the invert. At the downstream end of this half-pipe the wetland effluent aerates over an approximate 18 inch vertical fall and into a short approximately 15 foot long grouted R-3 rip-rap channel where it is discharged into a sedimentation pond. At the half-pipe outfall the Compost Wetland effluent flow can be measured by bucket and stopwatch as long as the flow remains moderate and stays within the half-pipe.

The Site B Sedimentation Pond shape approximates a right triangle. The pond is approximately 0.22 acres at the top of embankment inside perimeter with approximate average dimensions of 140 feet long by 70 feet wide. The sedimentation pond has 4:1 side slopes with a design water depth of 5 feet which translates to a water surface area of approximately 0.15 acres. The sedimentation pond has a spillway discharge with a grouted R-4 rip-rap limestone crest. The sedimentation pond/Site B system final discharge is conveyed via R-4 rip-rap limestone channel approximately 40 feet to where it is combined with the Site A System discharge.

After the Site A and Site B system discharges are combined, the total combined treated effluent from the project then travels approximately 25 feet in the R-4 rip-rap limestone channel to an existing cut-stone box culvert running under the abandoned railroad grade/site access road that borders the downslope edge of the project. On the opposite side of the abandoned railroad grade/site access road, the project treated effluent emerges from the stone box culvert as the UNT to Lloydville Run.

Pre-Construction Discharge Flow and Monitoring Data

Is data available electronically? Yes
In what format? Microsoft Excel X Access Database Other(specify)
Indicate how flow was measured: 90° V-notch weir
Indicate laboratory that analyzed samples (or whether field kits were used) DEP Lab
Could you provide this data to the DEP? Yes
Is a copy of the data attached? No

Pre-Construction Receiving Stream Flow and Monitoring Data

Is data available electronically? Yes
In what format? Microsoft Excel X Access Database Other(specify)
Indicate how flow was measured: No Stream Flow Measurement
Indicate laboratory that analyzed samples DEP Lab
Were any biological or fish surveys completed? Yes
Could you provide this data to the DEP? Yes
Is a copy of the data attached? No

Treatment System Design Information and Criteria

Who or what firm completed project design? (Include name, address, phone, email and contact person, if available): MAX SCHEELER
PADEP BAMR
814 472-1800

Are digital photographs of the site before, during and/or after construction available? Yes
Was there a Specific Restoration or Treatment Goal for this treatment system? Yes
If yes, please describe the goal: Enhance source water quality for Bellwood Reservoir and improve aquatic habitat in Bells Gap Run
What is the Design Flow Rate? 100 gpm
Other design criteria (retention time, acidity loading or removal rate, metals loading or removal rate, alkalinity generation rate, etc.) Design Life = 25 Years

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VFP Design Retention Time = 24 Hours at the end of the 25 year design life. VFP design retention time was calculated accounting for limestone dissolution over the design life using 200 mg/L alkalinity generation for a stone dissolution factor and 87% CaCO₃ content for the stone. Retention time for the newly completed VFP based on the total stone volume = 45 hours.

Sedimentation Pond Design Retention Time = 67 Hours at the end of the 25 year design life accounting for sludge accumulation over the design life using 8.15 mg/L of metals and 1.09 gm/cm³ of sludge. Retention time for the newly completed sedimentation pond is 69 hours.

Does the treatment system take all of the flow or is some of the flow bypassed? All

Plans and Specifications:

As-Bid Project Drawings and Technical Specifications

Is this information available electronically? Yes

Could you provide the DEP a copy of the plan? Yes

Is a copy attached? No

As-Built Drawings

Is this information available electronically? Yes

Could you provide the DEP a copy of the plan? Yes

Is a copy attached? No

Construction and Project Funding Information

What year was the project constructed? 2001

When (specific date) did project construction begin? 08/08/2000

When (specific date) was project construction completed? 10/10/2001

Who was the Construction Contractor? (Name, Address, Phone, email, contact person)

T.J. Mining, Inc., P.O. Box 370, Carrolltown, PA 15722

When (specific date) did the treatment system go on-line? 11/21/2001 VFP was still filling. 12/11/2001 first sample taken of Site A VFP and Site B Compost Wetland effluent. Sampling note indicates initial flow through systems. Limestone fines still being flushed.

Primary Funding Partners, and funding provided:

Source	True or false	Amount
Title IV, Appalachian Clean Streams	True	\$166,454.65
PADEP Growing Greener	True	\$337,515.39
10% AMD Set Aside Funds	False	\$.00
EPA Section 319	False	\$.00
OSM Watershed Cooperative Assistance Program	False	\$.00
NRCS	False	\$.00
EPA Watershed Protection	False	\$.00
USCOE	False	\$.00
University	False	\$.00
Private/Foundation	False	\$.00

█: The Bellwood (Lloydville Run) Project included the Site A, Site B and Site C treatment systems plus surface reclamation. The above amounts are for the project total. Costs for individual systems were not calculated.

How or by whom was treatment system construction funded or other funding not included in the table?

Source	Amount
	\$.00
	\$.00

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Post Construction Operation, Monitoring and Maintenance

Is there a Sampling and Monitoring Plan? Yes. Sampling Plan is included in O&M Plan

Is the plan available electronically? Yes

Is a copy of the plan attached? No

Is treatment system currently being sampled and monitored? Yes

If so, by whom? Altoona City Authority

Approximately how many hours per year are spent doing O,M&M for this system? Don't Know

Where are samples being analyzed? (Name, Address, Phone, email, contact person) DEP Lab

If DEP Lab is being used, what is the project ID and the Sample Information System (SIS) monitoring point IDs? See Attached

Is there an Operation and Maintenance Plan? Yes

Is the plan available electronically? Yes

Could you provide the DEP a copy of this information? Yes

Is a copy of the information attached? No

Comments on the treatment system: _____

Post- Construction Discharge Flow and Monitoring Data

Is the data available electronically? Yes

In what format? Microsoft Excel X Access Database Other(specify)

Indicate how flow was measured: No flow measurement on raw discharge. Site A VFP effluent should equal raw discharge flow when no Stabilization Pond overflow to Site B system. Bucket & Stopwatch on Site A VFP effluent. 90° V-notch weir on Site A system final effluent. Underdrain discharges into Site A Sed Pond therefore Site A system final effluent may be greater than VFP effluent. Rectangular weir on Site B influent. Raw discharge flow should equal Site A VFP effluent plus Site B influent when Stabilization Pond has overflow to Site B system. Site B Wetland effluent can be measured by bucket & stopwatch from half-pipe in spillway invert as long as flow is low enough to stay within half-pipe. No other Site B system flow measurement capability is available.

Could you provide the DEP a copy of this information? Yes

Is a copy of the information attached? No

Post-Construction Receiving Stream Flow and Monitoring Data

Is the data available electronically? Yes

In what format? Microsoft Excel X Access Database Other(specify)

Indicate how flow was measured: No Stream Flow Measurement

Could you provide the DEP a copy of this information? Yes

Is a copy of the information attached? No

Were any biological or fish surveys that were completed on the receiving stream? Yes

Treatment System Maintenance and/or Rehabilitation

Has rehabilitation work been performed at the site? No

True(yes) or false(no): False

If yes, please list the rehabilitation activity. _____

If yes, please list the date of rehabilitation. 0

If yes, please list the rehabilitation cost. \$

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What routine or non-routine maintenance issues have arisen since system was put online?

Gas had accumulated under Site A VFP HDPE liner causing mounds in liner on the side slopes above water surface within the freeboard zone. Small slits were cut in freeboard area of liner to relieve this subsurface gas pressure. Site A final polishing wetland has dead vegetation accumulated to where 10 inch PVC pipe from Sedimentation Pond is completely submerged. Original fall from this pipe invert was about 10 inches. This same accumulation is also clogging the 90° V-notch weir at the wetland outlet. Stabilization Pond trash rack over Site A influent pipe needs plastic mesh covering replaced.

How was maintenance work funded? No Cost

What routine or non-routine maintenance is currently needed or anticipated in the next 1-3 years?

Correct Site A final polishing wetland and Stabilization Pond trash rack issues described above.

Other Comments

Person(s) Completing this Form (Name, Address, Phone, email, Date Completed):

Max Scheeler, DEP BAMR Cambria Office

286 Industrial Park Road, Ebensburg, PA 15931

(814) 472-1800, mscheeler@state.pa.us

Form Completed: 03/30/2009

Is there any other person, company or organization that should be contacted for information about this treatment system or the information requested in this form?

(Include Name, Address, Phone, email, etc): None

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Attachments

DEP Sample Information System (SIS) - Monitoring Points For Bellwood (Lloydville Run) Site A/B Project

03/30/2009

Project/Monitoring Points

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Project Unit: Abandoned Mine Reclamation
 Project ID: PA2568
 Project Name: Bellwood(Lloydville Run)

State: PA

County: Cambria

Municipality: Reade Twp

MP Alias/ID	Type	Latitude	Longitude	Elevation	Active	Inactive	Last Sampled	Location/Name
ABRAW/STB/69747	STRM	40-39-52	078-24-04	2,176.00	09/20/2002			Bellwood (Lloydville Run)
ASAP/SED/69749	MPTRM	40-39-49	078-24-09	2,169.00	09/20/2002			Site A SAP discharge to sediment pond.
ASED/WET/69750	MPTRM	40-39-51	078-24-09	2,162.00	09/20/2002			Site A sediment pond discharge to wetland.
ASTB/SAP/69748	MPTRM	40-39-51	078-24-06	2,176.00	09/20/2002			Site A SAP influent from stabilization pond.
AWETOUT/69751	MPTRM	40-39-51	078-24-08		09/20/2002			Site A system final discharge from wetland.
BG1/68445	STRM	40-38-12	078-23-38		05/17/2002			Bells Gap Run Upstream Reservoir
BG2/68446	STRM	40-38-19	078-23-43		05/17/2002			Shaw Run Mouth
BG3/68447	STRM	40-38-25	078-23-59		05/17/2002			Bells Gap Run downstream Lloydville Run
BG4/68448	STRM	40-38-35	078-24-12		05/17/2002			Bells Gap Run upstream Lloydville Run
BG5/68449	STRM	40-38-39	078-24-06		05/17/2002			Lloydville Run Mouth
BG6/68450	STRM	40-39-25	078-24-18		05/17/2002			Lloydville Run 1 mile upstream of BG5
BG7/68451	STRM	40-40-09	078-24-22		05/17/2002			Lloydville Run Headwaters
BLR1/58755	STRM	40-39-51	078-24-10	2,150.00	02/10/2000			UNT Lloydville Run Weir At Abandoned RR Grade
BLR2/58756	STRM	40-39-49	078-24-21	1,995.00	02/10/2000			Lloydville Run Upstream Of UNT
BLR3/58757	STRM	40-39-48	078-24-21	1,990.00	02/10/2000			Lloydville Run Downstream Of UNT
BLR4/58758	MDSEP	40-39-54	078-24-24	2,105.00	02/10/2000			Discharge From Pipe Under Rt865, ALD Source
BLR5/58782	STRM	40-39-56	078-24-22	2,040.00	02/11/2000			Lloydville Run Upstream Of ALD
BOLC/WET/69754	MPTRM	40-39-57	078-24-07	2,166.00	09/20/2002			Site B OLC discharge to wetland.
BSEDOUT/69767	MPTRM	40-39-52	078-24-08	2,164.00	09/23/2002			Site B system final discharge from sed. pond.
BSTB/OLC/69753	MPTRM	40-39-52	078-24-06		09/20/2002			Site B stb. pond discharge to open limestone channel.
BWET/SED/69755	MPTRM	40-39-54	078-24-08	2,166.00	09/20/2002			Bellwood (Lloydville Run)

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Project/Monitoring Points

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Project Unit: Abandoned Mine Reclamation
 Project ID: PA2568
 Project Name: Bellwood(Lloydville Run)

State: PA County: Cambria Municipality: Reade Twp

MP Alias/ID	Type	Latitude	Longitude	Elevation	Active	Inactive	Last Sampled	Location/Name
CALD/SED/69758	MPTRM	40-39-55	078-24-23	2,090.00	09/20/2002			Site C system final discharge from sediment pond.
CRAW/ALD/69757	MDSEP	40-39-55	078-24-22	2,090.00	09/20/2002			Site C ALD discharge to sediment pond.
CSEDOUT/69761	MPTRM	40-39-56	078-24-22	2,090.00	09/23/2002			Site C system final discharge from sediment pond.
LVRUSC/69764	STRM	40-39-56	078-24-21	2,070.00	09/23/2002			Lloydville Run upstream of Site C.
SAPOUTE/70646	MPTRM	40-39-49	078-24-16	2,169.00	12/10/2002			SAP EAST OUTLET (FLUSH WATER)
SAPOUTM/70647	MPTRM	40-39-48	078-24-17	2,152.00	12/10/2002			SAP MIDDLE OUTLET (FLUSH WATER)
SAPOUTW/70648	MPTRM	40-39-47	078-24-19	2,133.00	12/10/2002			SAP WEST OUTLET (FLUSH WATER)
UNTATLVR/69763	STRM	40-39-49	078-24-20	1,995.00	09/23/2002			Mouth of UNT at Lloydville Run.
UNTDSRR/69762	STRM	40-39-52	078-24-10	2,140.00	09/23/2002			UNT downstream of railroad grade.