Appendix A

Abandoned Mine Land Problem Areas and Features (East to West), USGS Identified Mine Drainage Points, 303(d) Listed Streams and Recent Mining Info

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East Jeddo [2108]

Summary:
Municipality: Foster Township                  Problem Area Size: 228.49 acres
Sub-Watershed: Black Creek                   Reclamation Status: 5 of 8 = 62.5 %
Mine Pool Basin: Big Black Creek Basin       Map Scale: 1:10,000

Infiltration Points Identified by the SRBC: This problem area contains Black Creek #2,
#6 & #7 (SRBC Pub. #204 pp 89,93,94). Black Creek #6 most likely refers to AMLF #01, #02 or #06 and is most likely reclaimed. Black Creek #7 is just outside of the problem area to the east. Black Creek #2 is just outside of the problem area to the south.


Narrative:
Update History:

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<td>COMPLETION UPDATE</td>
<td>AMLF #8</td>
<td>5/8/90</td>
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Current Mining near the Problem Area:
Northampton Fuel Supply – Highland 5 Mine [Site ID 446164, Facility ID 471396] an active surface mine and refuse reprocessing operation in compliance approximately 1,200 ft southeast of the problem area.

Reclaimed Higher Priority Problems (2 of 8):
AMLF #1 (HEF): This abandoned coal processing plant consisting of five badly deteriorated buildings and an electrically active transformer grid was demolished by the Jeddo-Highland Coal Company. There was an air shaft flooded at a depth of 25'. Site visitors also found a flooded pit with a pH of 3.8 and 1.5 mg/l iron in addition to a flooded slurry pond with pH 3.6 and 1 mg/l iron. Water flowed from pipes within the Jeddo Breaker.

AMLF #8 (DH): This flooded pit with highwall was reclaimed under the East Jeddo project, OSM 40(2108)101.1, in the 1985 OSM construction grant at a cost of $100,065.58. The project was completed on 8/27/88 and reclaimed about 20 acres.

Reclaimed Lower Priority Problems (3 of 8):
AMLF #2: This portal could not be located in the field and is presumed backfilled.

AMLF #6, 7: These features, originally shown as pits, are not pits but depressions where the refuse material was dumped and left an open space. Therefore, these features were deleted from the inventory.
AMLF #9: This feature, originally shown as a shaft or entry by earth-sat, is not a shaft, but the foundation of an abandoned structure. Outside of being unsightly, it poses no hazard.

AMLF #10: This discharge was sampled and had a pH of 6.09 and had no iron. This indicates that it is not an AMD problem and does not contribute to environmental degradation. Water flows out of the breaker and onto the road flowing west toward Jeddo. Flow rate was estimated at 200 gpm. (See note below.)

AMLF #11, 12: Two new features were added as a result of the 4/84 site investigation. These two pits were located just north of the abandoned coal processing plant (AMLF #1); however, these are not AML features but reservoirs. Therefore, they have been deleted from the inventory.

Note: AMLF #1 (HEF), #8 (DH), and #10 (WA) were originally part of the East Jeddo Project, OSM 40(2108)101.1, but AMLF #1 and 10 were taken care of by the Jeddo-Highland Coal Company.

Unreclaimed Lower Priority Problems (3 of 8):
AMLF #3 (GO) and AMLF #4,5 (SL): There are approximately 118 acres of fine silt refuse and 23 acres of slurry located within the area of the refuse pile on the southern side of LR 40006. There are two large sedimentation basins within the interior of the refuse area and steep embankments on the exterior sides of the piles. The refuse is aesthetically unpleasing and according to Irene Harakal, a local resident, the major problem is the dust that is generated on dry, windy days. Due to the fact that the refuse material will not promote vegetative cover, erosion takes place along the exterior embankments.

Estimated Cost:
AMLF #3 (GO), #4, 5 (SL): Reclamation of the remainder of the refuse (not used in the reclamation of AMLF #8) and reclamation of the slurry areas.

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<td>$ 641,550</td>
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<tr>
<td>SAY</td>
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<td>$ 650,000</td>
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Green Mountain [3219]

**Summary:**
Municipality: Foster Township
Sub-Watershed: Oley Creek
Mine Pool Basin: McNair Basin

Problem Area Size: 369.00 acres
Reclamation Status: 0 of 11 = 0%
Map Scale: 1:12,000

USGS Reported Discharge: McNair Basin [0.5 cfs] surface strip pool overflow which drains to Oley Creek.

Impaired Waters on the 303 (d) List: Tributary 28168 to Oley Creek flows out of the site, and is impairing 1.18 miles with abandoned mine drainage metals, pH and suspended solids in 2002.

**Narrative:**

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<td>AMLF #5</td>
</tr>
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<td>ORLANDINI</td>
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<td>AMLF #1, 11</td>
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</table>

General Description:
Approximately 75% of the spoil area is revegetated with deciduous forest. The west end of the problem area drains into a tributary of Oley Creek. The naturally steep slopes (60%) at the mine outflow have been disturbed and appear to be erosion prone areas. Spoil in the large pit appears to have been partially graded.

Current Mining within Problem Area:
Pagnotti Enterprises Inc. – Lehigh 5 Mine [Site ID 446167, Facility ID 471401] – Active surface mine in compliance, eligible for bond release (stage 2). South Tamaqua Coal Pockets Inc. also received a coal mining exploration permit on this site in 2006.

Jeddo Highland Coal Co. - Lehigh 6 Mine [Site ID 445343, Facility ID 470353] - Active surface mine in compliance that is operative, but not currently producing.

Unreclaimed High Priority Problems (3 of 11):
AMLF #1 (DH, HWB): This 2000' long pit measures approximately 400' wide and 50-60' deep. Steeply sloping rock lines the northern side while the southern slopes gently to the water surface. The water measures approximately 10 acres and averages approximately 25' deep around the edges and appears to be deeper through the middle. Large rocks and ledges are visible through the water. Vegetation throughout this area is minimal to moderate and a road parallels the northern side. Evidence of site visitation was in the form of tire tracks near the edge of the pit.

AMLF #11 was included within AMLF #1 as a hazardous water body rather than a separate feature.
AMLF #5 (DH): The dangerous highwall exists in the western end of a highly disturbed pit area 1600' long, 100' wide and 40-60' deep. Bottom rock is evident in the southwest end. Numerous spoil piles are located within the pit, which as 30% vegetation. An access road enters the pit from the west and winds through the pit to the bottom. The highwall at the western end is 300' long, 50-60' deep and 150' wide. The highwall consists of a 100' long slumped section which steeply slopes to the pit's bottom. This section is flanked by two vertical sections 100' long. The area is accessible via a dirt road from the Upper Lehigh Problem Area, which leads to a road which is within 20' to the north of the highwall. Numerous roads leading to the area are blocked; however, trees are cleared to by-pass the roadblocks. Approximately 200 cubic yards of garbage has been dumped from the highwall. According to Norman Kurmm (Building 18, Apartment 5, Evancho Circle, Freeland, PA), this area is frequented by ATV's, four-wheel drives, and hunters. Mr. Krumm patrols this property for Jeddo-Highland Coal Co. to insure all gates are closed and that trespass posters are intact. Mr. Kurmm feels the highwall is a hazard to anyone using the nearby access road. He fears someone could be seriously or fatally injured after falling or driving from the highwall. He favors reclamation of the entire problem area.

Estimated Costs:

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<tr>
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Unreclaimed Lower Priority Problems (8 of 11):

AMLF #2 (PI): The water filled pit is 400' x 200' x 35'. The moderately sloped sides are 60% vegetated. An access road lies south of the pit.

AMLF #3 (PI): The 500' x 250' x 55' pit is bounded on the south by a small reclaimed area. Sidewalls of the pit are steep and 30% vegetated.

AMLF #4 (SA): This was listed as a pit but is actually an area between spoil piles.

AMLF #6 (SA): Piles range from 15-50' in height and are 50-80% vegetated.

AMLF #7 (SA): Most of this spoil has been graded flat except small portions of the north and south ends. Area is 75% vegetated.

AMLF #8,9 (EP): The erosion prone areas on either side of the discharge from AMLF #11 are very steeply sloped with unconsolidated material and numerous erosion gullies and slide areas. It could not be determined if this area was disturbed by mining of natural processes.
AMLF #10 (WA): This is the discharge from AMLF #11. It flows over the mountainside into Oley Creek. It is believed this flow is at least partially to blame for the severe erosion (AMLF #8,9) to the mountainside west of AMLF #11. USGS data indicates the McNair strip pond is overflowing at 225 gpm to Oley Creek and into an impoundment. The pH of the overflow is 3.0 with 1 mg/l of iron.
**JEDDO SOUTH [2110]**

**Summary:**
Municipality: Jeddo Borough, Hazle & Foster Townships  
Sub-Watershed: Black Creek  
Problem Area Size: 75.00 acres  
Reclamation Status: 0 of 6 = 0 %  
Map Scale: 1:10,000

Impaired Waters on the 303 (d) List: Black Creek flows out of the site, and was listed as affected by abandoned mine drainage metals and suspended solids in 1996 then, for pH in 2002.

Infiltration Points Identified by the SRBC: This problem area contains Black Creek #4 which refers to AMLF #1 & #5 (SRBC Pub. #204 pp 91).

**Narrative:**

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Current Mining within Problem Area:

Unreclaimed High Priority Problems (1 of 6):
AMLF #2 (HEF): This feature is a group of structures comprising the abandoned Jeddo-Highland colliery yard and located 160' south of Highland Street in Jeddo Borough. The buildings consist of:
Main office complex - (140' x 100' x 40' high) A collage of masonry wood and steel construction. The south side has partially collapsed into AMLF #1 (PI). Huge steel girders and masonry walls are hanging precariously, approximately 30' above ground on the south side with the walls stress cracked and leaning (about to fall). Some of the many roofs and floors have collapsed within the building creating an unstable tangle of debris.
Heavy equipment repair shop - (80' x 30' x 35' high) Consisting of wood construction that is corrugated iron clad. This structure appears relatively stable, however, the doors and windows are all smashed in. The southern most corner is hanging precariously over the rim of AMLF #1 (PI). Eventually this area will give way and collapse into the pit (a fall of over 100').
Machine tool shop - (160' x 80' x 15' high debris) This building has burned to the ground leaving a tangled mess of steel drive systems, charred timbers, corrugated sheet metal and heavy cast iron metal working machinery.
Boiler house - (20' x 30' x 35' high) Consists of a cracked and crumbling brick furnace enclosed in a 3 story wood structure clad with corrugated sheet metal. This building is located at the base of a spoil pile, a very unstable rotting deck leads from the top of spoil to the second floor bridging a 20' drop.

3 small facility buildings - (16' x 12' x 16', 20' x 15' x 16', and 15' x 15' x 12' high) These features are of wood construction with the last clad in corrugated sheet metal. All these buildings are open and in various stages of collapse, roofs have holes and side walls are bowed. All windows and doors are open or smashed. The two wood buildings are located 150' south of the residence at 1154 Highland Street.

Powder shed - (12' x 8' x 5' high) Consists of crumbling brick and concrete construction. The door and front wall are smashed in, with a 8' x 2' hole in the roof. Loose bricks or the roof collapsing on a child is a possibility in the attractive "cubby hole."

Concrete manhole - (6' x 6' x unknown depth) Flush to the ground and adjacent to the north side of the blacktop pavement leading into the complex. It has a steel plate cap with an unlocked hinged access door. This facility is 8' deep to the water level.

These facilities all draw local children as a place to explore and play. Graffiti and foot prints within these structures are evidence of heavy ongoing visitation. The rotted or collapsing condition of these facilities create an extreme danger for anyone near or inside. They can be seriously injured or killed if these masonry walls, heavy timbers, or iron were to collapse on them. The buildings that still stand have holes in the roofs, walls, and floors. Much of the glass is broken and strewn about. Beer cans and other refuse show that people visit the site. It is located 700' from the village playground and 400' from the nearest home. It is easily accessible by foot or motorbike by a trail direct from the playground and by other routes from town. Residents say that children are not allowed in the area but still are known to explore there. Resident William Ferry believes that is a very dangerous site.

Estimated High Priority Costs:
Estimate # PA2110-A including AMLF #2 (HEF):

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Unreclaimed Lower Priority Problems (5 of 6):
AMLF #1 (PI): Located 500' south southeast from the intersection of route 940 and L.R. 40006 in a highly disturbed area, the stripping pit measured 2000' x 600' x 100-150' in depth. Being 30-35% revegetated with birch, the western corner contained water approximately 150' in diameter (depth unknown). The pit's slopes were gradual to moderate unconsolidated material with spoil piles along the northern and southern limbs (40-70' high). The closest residents are 500-1000' northwest from the pit, located in the town of Japan. Visible to the general public, the pit is an eyesore and also creates unnatural drainage patterns and limits land use.

AMLF #3, 4, 6 (SA): All three spoil areas are located near pit #1 and are basically interconnected. Bank #6 measured 40-60' in height approximately 800' in length and 2
acres in area. Located 250' southeast from the intersection of route 940 and L.R. 40006, the bank was 50% revegetated with birch and stable gradual slopes. Being along the northern limb AMLF#1, the spoil could be used for backfilling the area. Property land value and use are limited and it creates an eyesore for the neighboring town of Japan. Spoil area #3 was 50-70% high, 40-50% revegetated with birch and evergreens and approximately 1500' in length. Being 13 acres in area, the southeast corner appeared partially regraded (area 300' x 800'). Located along pit #1, southern limb, it could be used for backfilling.

Spoil area #4 is located adjacent to pits #1 and #5 and runs southwest approximately 1500'. Being 40' high, 25% revegetated with birch and having gradual slopes, the spoil can be used for backfilling the pits (20 acres in area). The banks are accessible via haul road leading in from Stockton Mountain Road approximately 6000' west of the problem area.

AMLF #5 (PI): Pit #5 is located 300' south from the intersection of route 940 and L.R. 40006. Being 1000' x 600' x 125' in depth and 40% revegetated with birch, the pit contained gradual to moderate dipping slopes with small amounts of garbage. The western corner appeared regraded and vegetated approximately 65-70%. The closest residents live in Japan approximately 200' north of the pit. Access is available via haul road from Stockton Mountain Road, 6000' west of the problem area. The pit is used as a dump site and degrades the properties' land use, value and beauty. Natural drainage patterns are also altered by the pit's existence.

Notes: An active reclamation bank project is currently being conducted approximately 4000' east of the problem area (within pa2108). Active strip mining is being conducted 5000-6000' west of the problem area adjacent to Stockton Mountain Road.

Estimated Lower Priority Costs:
Estimate # PA2110-B including AMLF #1 (PI), #3 (SA), #4 (SA), #5 (PI), #6 (SA):

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**Drifton South [3217]**

**Summary:**
Municipality: Hazle & Foster Townships & Jeddo Borough
Sub-Watershed: Black Creek
Mine Pool Basin: Cross Creek Basin

Problem Area Size: 55.89 acres
Reclamation Status: 0 of 7 = 0%
Map Scale: 1:10,000

Impaired Waters on the 303 (d) List: Black Creek flows out of the site, and was listed as affected by abandoned mine drainage metals and suspended solids in 1996 then, for pH in 2002.


**Narrative:**

Update History:

| ORIGINAL PADAFO | FILE | AMLF #1-6 | 06/81 |
| HYRB/PRUTZMAN/KELLY | W-B SITE VISIT | AMLF #1-7 | 03/86 |
| FRANCIS O'DONNELL | INTERVIEW | AMLF #4, 7 | 03/86 |
| ORLANDINI | W-B SITE VISIT | AMLF #3 | 04/04/89 |

Unreclaimed High Priority Problems (3 of 7):

AMLF #3 (DH): This pit is located 50' east of pa route 940. The close proximity to the highway has turned it into a popular place to dump garbage. The pit measures approximately 300' long, 150' wide and 50' deep with nearly vertical unconsolidated highwall along the southern side. Access is easy by foot from route 940. A 30% cover of vegetation exists around this pit and a house exists approximately 500' west of it.

AMLF #4 (DH): The pit is approximately 220' long, 110' wide, and 60' deep. It is located 150' south of the last house on Slope Street. The 60' deep highwall is vertical. Garbage is being dumped from the highwall which is easily accessible by vehicle from Slope Street or Route 940. See justification note.

AMLF #7 (P): The 3' high, 12' wide opening dips approximately 40 degrees to the north. The opening extends an unknown distance. The portal is located at the base of the highwall in AMLF #4. The opening is hazardous to anyone entering it. Well worn paths were found around the portal and the pit containing the portal. See justification note.

Justification note: Francis O’Donnell, 112-114 Slope Street, Drifton, PA, lives within 150' of the pit and portal. Mr. O’Donnell cites frequent use of this area by children and dumpers. He fears someone will be seriously or fatally injured after falling from the highwall. He also believes the portal is a hazard to children who play in this area.

**Estimated High Priority Costs:**

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<th>UNIT COST</th>
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13 of 104
### Table: Costs

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</table>

Unreclaimed Lower Priority Problems (4 of 7):

**AMLF #1 (WA):** This is a 1 acre pond formed by water being impounded by the adjacent spoil area (AMLF #2). Water appears to be shallow and the impoundment is silt laden. The area directly south of the impoundment appears to have been reclaimed recently.

**AMLF #2 (SA):** The spoil area is adjacent to route 940. It is 40% vegetated, mainly with white birch. A small amount of garbage was seen on the bank. Spoil material reaches a maximum height of 40'.

**AMLF #5 (PI):** The pit is 250' southeast of the last house on Slope Street and 150' east of AMLF #4. The pit is 200' long, 90' wide, and 20' deep. The sides consist of large, boulder like spoil. The area is 40% vegetated.

**AMLF #6 (SA):** The spoil piles are located around AMLF #'s 3, 4, 5. The piles consist of large boulder like material which is 50% vegetated. Heights range from 10-30' high. The spoil could be used as a source of fill for nearby pits.
Freeland South [1381]

Summary:
Municipality: Hazle and Foster                        Problem Area Size: 56.15 acres
Townships                                              Reclamation Status: 1 of 4 = 25%
Sub-Watershed: Black Creek                            Map Scale: 1:10,000
Mine Pool Basin: Cross Creek Basin

Cost $16,659.20, What: a 9 Acre Subsidence Area [Undetermined Priority]

Infiltration Points Identified by the SRBC: Black Creek #5 refers to AMLF #02 and an
area east of this problem area. Black Creek #8 is about 6,500' northeast of the problem
area, near the village of Highlands (SRBC Pub. #204 pp 92,95).

Grant: OSM 40(1381)101.1, When: Anticipated Bid Opening 6/30/2006, Cost: Unknown,
What: 15 acres

Narrative:

Update History:

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<th>Date</th>
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<tr>
<td>ORIGINAL PADAFO</td>
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<td>NAVITSKY</td>
<td>W-B SITE VISIT</td>
<td>AMLF 1</td>
</tr>
<tr>
<td>HYRB/WILLIAMSON</td>
<td>W-B SITE VISIT</td>
<td>AMLF 1</td>
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<td>WILLIAMSON</td>
<td>W-B SITE VISIT</td>
<td>AMLF #1</td>
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<tr>
<td>MR. PECILE</td>
<td>INTERVIEW</td>
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<tr>
<td>WILLIAMSON</td>
<td>W-B SITE VISIT</td>
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<td>MR CALELLO</td>
<td>INTERVIEW</td>
<td>AMLF#2,3,4</td>
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<tr>
<td>WILLIAMSON</td>
<td>W-B SITE VISIT</td>
<td>AMLF #4</td>
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General Description:
A subsidence prone area is located off route 940 south of Freeland, PA. It is a residential
area with 15 homes built within the last 10 years. An 85' deep hole developed on the
Pecile Property in 2/79. The John Warner home has suffered extensive damage. Floors
and walls have cracked, shifted, and buckled. The Warner Family has experienced much
emotional stress. According to Mr. Fost, a tunnel runs beneath the neighborhood.
Sewage from 8 homes may drain directly into the mine workings at a point in the Warner
Backyard.

Current Mining near Problem Area:
Pagnotti Enterprises Inc. – Highland 2 S Mine [Site ID 446162, Facility ID 471392] –
Active surface mine and refuse reprocessing operation in compliance about 6,000 ft to the
east.

Reclaimed High Priority Problem (1 of 4):
AMLF #1 (S): In 2/79, the ground collapsed to form a hole 20' wide, 80' long, and 85'
deep on the Pecile Property. The Peciles' back porch is now tilted down and away from
the house. Their next door neighbors, the Fesoules, had their entire home moved at a cost
of over $25,000. The hole is less than 30' from the Peciles' home. Two hundred feet away the Warner home began showing the following signs of subsidence: the cinder floor foundation developed major cracks. The cement slab garage floor dropped several inches in places, both the front and back porches have cracked and dropped away from the house. The plaster interior walls have cracked and buckled. Trim has pulled from the wall and the entire house is bending and cracking due to stresses induced by the earth collapsing beneath it. The Warners have experienced a great deal of emotional stress during their two-year ordeal. Their sense of security is shattered. They don't know if their home or children may go next. The two Warner children, age 7 and 11, have been shaken from their beds by the "terrible rumbling" of their house settling. They are afraid of their house and afraid to play in their yard. The children have developed disorders which the doctor has diagnosed as stress induced and include chronic asthma and other illnesses. The constant and ongoing medical bills are exorbitant. The cost of the constant maintenance on their property is high. They are financially trapped in an unmarketable house. Other homes in the community have also been damaged.

Drill holes by DER show that, a tunnel runs beneath the surface from Mr. Fost's property, through the Warner Property, to the Pecile Property. Under the Warner Home, it lies 12' beneath the surface. Also, there is evidence that sewage from 8 residences drain directly into the mine at a place behind the Warner Home. When the subsidence incident of 2/79 occurred, the smell of raw sewage was strong. Voids were flushed under the Warner Home.

On 03/22/01 during a preliminary investigation of AMLF #1, a brief interview with Mr. Pecile at his home revealed a statement. He stated that he had had no problems with subsidence in 10 or 12 years. He also said he had not heard of any problems of subsidence within the development what so ever.

Unreclaimed High Priority Problems (2 of 4):
AMLF #2 (DH): This abandoned stripping pit is located 400' east of Calello's Service Station, Drifton, PA. Calello's is off SR 940 in the small town of Youngstown. The problem area 1381 and its boundaries have been expanded to include new features. The highly dangerous stripping pit measures 800' by 60' by 55' deep. Both north and south highwalls have 80 degree slopes to the bottom of the pit. Total accountable highwall along both of the north and south sides is 1600' by 55' deep. The south highwall consists of unconsolidated material with spoil cast mounds strewn intermittedly along the edge. The south wall slopes range from 70 to 85 degrees. A well traveled haul road, which is accessible from SR 940, is 15' from the highwall with two areas of garbage dumping. The northern highwall also consists of mostly unconsolidated material with some sections of solid rock. Spoil casting mounds associated with the pit area along the north highwall rim, enhancing the height of the highwall. There is no road along the north highwall, however, there is a well imbedded ATV or footpath. The slopes of the northern highwall range from 70 to 85 degrees to the bottom. Vegetation is sparse along both the north and south sides. Fire rings, light dumping, soda and beer cans suggest the area of the highwalls is frequented often. If someone drives or falls off of the highwall, they may not be found for days. This could result in serious injury or death. See justification note.

AMLF #3 (HEF): This abandoned mine building is located 75' east off of SR 940 in Youngstown. It is highly visible to motorists traveling SR 940. The dilapidated building
was the motor repair shop for the Lehigh Valley Colliery Coal Company. The building measures 300' long by 100' wide and 35' high. It consists of rusted sheet iron walls with I-beams supporting the sheet iron roof. The abandoned mine building is completely stripped inside with just a chain winch hanging from a roof beam. The doors have been robbed or scraped and all of the windows are broken. The floor consists of dirt with some areas of concrete. The building is accessible from 4 different openings. ATV trails are visible on the inside dirt floor. There are fire rings, old mattresses, make-shift chairs inside the building. It appears kids gather in this building. Graffiti is everywhere on the building. Cans, cigarettes, shell casings, plastic cups are all present signs of visitation. The beams supporting the very loose sheet iron roof are rusted and the whole roof was flapping due to heavy wind on day of investigation. This building is an eyesore to the area and a danger to anyone who enters it. It could collapse.

Estimated High Priority Costs:
Estimate # PA 1381-A including AMLF #2(DH), #3(HEF):

<table>
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<tr>
<th>ITEM</th>
<th>QUANTITY</th>
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Unreclaimed Lower Priority Problems (1 of 4):
AMLF #4 (WA) This feature is an abandoned mine water problem that is located 300' southeast of AMLF #3. The water problem is the result of relatively fresh water infiltrating underground. The small stream resurfaces 200' southeast of its origin point where it flows along an abandoned railroad bed for 200' then enters into AMLF #2, an abandoned stripping pit with dangerous highwalls. From the bottom of this pit the small stream vanishes into the underground mines. There are two origin sources of this stream, which confluences 100' from infiltration point. “Source a” is from the south ridge of Buck Mountain west of SR 942 stream flow during spring conditions is 15 to 20 gallons per minute. Flow is slowed by a two acre wetland area that is visible 20' east of SR 940. From there it meanders across coal refuse material and connects with “Source b.” “Source b” resembles a typical natural water spring aquifer. A bubbling steady flow of water 9.6 gallons per minute has formed a stream bed trough where it confluences with the form one stream. This one stream is now 25 gallons per minute before it is lost. A new mine related water problem simulating a natural spring aquifer was shown to investigator on 4/3/01. Mr. Calello believed that it was not mine related and that people have been known to drink from it. The big problem with the water is that it infiltrates the deep mines in the bottom of AMLF #2 (DH).
**Southwest Freeland [2118]**

**Summary:**
Municipality: Hazle and Butler
Townships
Sub-Watershed: Black Creek
Mine Pool Basin: Woodside Basin

Problem Area Size: 74.16 acres
Reclamation Status: 0 of 4 = 0%
Map Scale: 1:10,000

USGS Reported Discharge: Woodside Mine [0.1 cfs] – surface strip pool overflow that drains to Black Creek

**Narrative:**

Update History:

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Unreclaimed Higher Priority Problems (3 of 4):

AMLF #1 (VO): A series of 17 water filled subsidences of unknown depth. The Hazleton Archery Club occupies part of the eastern portion of this area. Subsidences range from 100' x 100-250' x 100'. This was justified in the standardized data.

AMLF #2 (VO): This was justified in the standardized data. The vertical opening location is reported but cannot actually be seen because the site and deep mine workings in this area are flooded.

AMLF #4 (S): A series of 17 surface subsidence holes have impounded water. The holes are in a relatively low area and cannot be completely drained. Samples were taken from 2 separate water bodies where subsidence has reportedly occurred. The pH of the large westernmost water body was 4.5 with no iron. The easternmost water body had a pH of 5.5 and an iron content of 2 mg/l. The holes should be filled with any available materials. This area is accessible since many trees have been harvested here. Flushing the voids will preclude additional subsidence.

Estimated High Priority Costs:

Estimate # PA2118-A including AMLF #1 (VO), #2 (VO):

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Unreclaimed Lower Priority Problems (1 of 4):

AMLF #3 (WA): Water flows from AMLF #2 under a culvert in a roadway and eventually out of the problem area at a rate of about 50 gpm. USGS data show a
discharge of 45 gpm with a pH to be 5.1 with an iron concentration of 1 mg/l from the flooded subsidence ponds. The discharge eventually flows into Black Creek.
North Drifton [2109]

Summary:
Municipality: Hazle Township
Sub-Watershed: Black Creek
Mine Pool Basin: Cross Creek Basin

Problem Area Size: 302.93 acres
Reclamation Status: .5 of 8 = 6%
Map Scale: 1:10,000

Infiltration Points Identified by the SRBC: This problem area contains Black Creek #9 and most likely refers to AMLF #02 (SRBC Pub. #204 pp 96).


Narrative:
Update History:

| ORIGINAL PADAFO | FILE | AMLF #1 - 8 | 04/81 |
| WALSH, ROCCOGRANDI | W-B SITE VISIT | AMLF #1 - 8 | 04/01/85 |
| WOLFE/AIELLO | W-B SITE VISIT | AMLF #1 - 8 | 09/19/86 |
| HEWITT | EPCAMR AERIAL | AMLF #2 | 09/06 |

Current Mining in Problem Area:
Brook Contracting Corp.– Drifton West Mine [Site ID 264674, Facility ID 284490] an inactive surface mine reclamation complete. Operation looks to have reclaimed part of AMLF #2.

Unreclaimed High Priority Problems (1.5 of 8):
AMLF #1, 2 (DH, PI): 2 pits are located parallel to 1st Avenue in Drifton and are less than 10% revegetated. Each pit has a 100' vertical wall located 300' north of homes off 1st Avenue. The back yards of several of these homes extend to within 50-100' of the 2 pits. The east end of the eastern highwall is 30' west of route 940. A foot or bike path extends from Route 940 along the south edge of the highwall approximately 2-4' from the edge and enters the back yards of several of the homes. Mrs. Benyo said she has already seen children riding bikes on the path. She and Mr. Balas both stated that as kids they were always playing around the pit area as the kids today are still doing and still feel it is a hazard. A resident stated there were about 25-30 children in the immediate vicinity of the highwall. Target practice is done about 50-75' from the south edge of the highwall. People are using the pit to dispose of their garbage, and raw sewage is being run into the eastern pit from a 6" pipe located at the southeast corner of the highwall.

Estimated High Priority Cost:
Estimate # PA2109-A including AMLF #1 (DH), #2 (DH)

<table>
<thead>
<tr>
<th>ITEM</th>
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Unreclaimed Lower Priority Problems (6.5 of 8):
AMLF #3, 4 (PI): 2 pits separated by AMLF #5, a spoil pile. #3 is 30' deep and 1600' in length. #4 is 20' deep and 1100' in length. Both pits are less than 10% revegetated.

AMLF #5-8 (SA): Spoil piles 5-8 are approximately 30% revegetated. AMLF #5 is 50' high, #6 is 20' high, #7 is 60' high and #8 is 40' high. Pits and spoil piles are stable with no evidence of slides or erosion.

Estimated Lower Priority Cost:
Estimate # PA2109-A including AMLF #3 (PI), #4 (PI), #5 (SA), #6 (SA), #7 (SA), #8(SA):

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**Hells Kitchen [3223]**

**Summary:**
- Municipality: Butler Township
- Problem Area Size: 474.55 acres
- Sub-Watershed: Nescopeck Creek
- Reclamation Status: 21 of 24 = 88%
- Mine Pool Basin: Upper Lehigh Basin
- Map Scale: 1:12,000


**Narrative:**

Update History:

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<td>JOHN PONIDA</td>
<td>#16, 17, 19</td>
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<td>MICHAEL BUTCHKO</td>
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Reclaimed High Priority Problems (8 of 24):
- AMLF #2 (DH), #9 (DH), #13 (DH), #16 (HWB), #17 (HWB), #19 (P), #20 (DH), #21 (DH). These features have been reclaimed as a result of the following project funded under the OSM 1998 AML program grant:
  - OSM 40(3223)101.1
  - Backfilling strip pits
  - Hells Kitchen - Butler Township, Luzerne County, PA
  - The work was completed by James T. O'Hara, Inc. at a cost of $1,594,287.63 and affected 241.4 acres including 24.5 acres of constructed wetland. The final inspection was held on July 13, 2000.

AMLF #2 (DH): this 1200' long pit was 50' wide and 35' deep with near vertical highwall along the northern side in the western end measuring approximately 400' in length with a 55 degree slope, and along the northern and southern sides in the eastern end approximately 800' in length with a 70 degree slope. The pit has been backfilled.

AMLF #9 (DH): This pit was 1400' long, 120' wide, and 30' deep with 60 degree slopes. The highwall measured 1250' long by 30' deep with well traveled haul roads along the north and west sides of the pit allowing for easy access to the edge of the highwall.
These roads enabled people to easily dump garbage over the highwall. The pit has been backfilled.

AMLF #13 (DH): This pit was approximately 500' x 300' x 60' deep with 500' of near vertical loose unconsolidated rock along all sides with a slope of 65 degrees. Garbage was dumped at the eastern and northern sides where a haul road paralleled the eastern and northern edges. The pit has been backfilled.

AMLF #16 (HWB): This water filled pit was approximately 900' long, 120' wide, and 30-50' deep. The power line and a haul road from the east provided access to the pit which was used as a swimming hole. A vertical section of the highwall, approximately 1200' long and 50' high was used for diving and graffiti was painted on the highwall. The pit has been backfilled.

AMLF #17 (HWB): This pit was easily accessible from a well-worn haul road from the east. The flooded pit was 800' long, 200' wide, and 10' to the water surface and the water depth was unknown. The 200' long, 100' wide east end of the pit was separated from the main pit by a haul road. About 600 cubic yards of garbage was dumped in this area and along the pit's north side. The pit was paralleled by an access road on the north. The pit has been backfilled.

AMLF #19 (P): This 15' wide, 12' high opening is within 50' of the access road and is highly visible. The opening dips 45 degrees to the north and extends an unknown distance. The first 40' of the opening consisted of 10' high stone sidewalls placed on the bedrock. The sidewalls were topped by a 12' mortar-less stone arch which was within 2' of the ground surface. The portal has been closed with the installation of a bat gate constructed of corrugated metal pipe and reinforcing bars.

AMLF #20 (HWB): This priority 1 water filled pit was approximately 1400' long x 75' wide and 30-50' deep. The pit was sampled and found to have a ph of 4.0 and an iron concentration of 1.5 mg/l. The pit was being used as a swimming hole by local youths. A dock and sand in the water extended 5' out, and then there was a sharp drop off to an unknown depth. A young Hazleton woman drowned in the pit on 8/16/89 after falling into the water filled stripping hole in the attempt to save her boyfriend. The pit has been backfilled under Project No. OSM 40(3223)101.1.

AMLF #21 (DH): this feature was located 200' west of prospect road, 500' northwest of AMLF #7. This intermittent pit measured approximately 1300' long, 60' wide and ranged from 30'-40' in depth. There was approximately 2000' by 30'-40' deep of nearly vertical highwall along the northern side of the pit. The highwall was made up of loose unconsolidated rock with a 70 degree slope. Access to this feature was by a well traveled haul road that ran within 50' of the highwall. The pit has been backfilled.

Reclaimed Lower Priority Problems (13 of 24):
AMLF #1 (P1): The pit was approximately 1200' x 90' x 20' and 85-95% vegetated. A previously reclaimed area approximately 10-15 acres in size is to the southwest of this pit. The pit has been backfilled under Project No. OSM 40(3223)101.1.
AMLF #3 (PI): The long narrow pit was 1500' x 90' x 25' and heavily vegetated with an access road paralleling the pit. The pit has been backfilled under Project No. OSM 40(3223)101.1.

AMLF #4 (SL): The silt basin area (4 acres) was 15% vegetated and covered in coal silt. Most of the silt appeared to have been removed and one pile of material remained. A very small amount of water was lying in a low area. The basin was within the grading limits and has been eliminated under Project No. OSM 40(3223)101.1.

AMLF #5 (PI): The pit was 2000' x 120' x 25' and heavily vegetated. A 1-2 acre area along the south of the pit and at the north end of AMLF #14 was graded. It was within the grading limits and has been eliminated under Project No. OSM 40(3223)101.1.

AMLF #6 (PI), 7 (PI): Both pits were approximately 200' x 120' x 25' with an access road is located 120' to the east of the pits. The pits were 70% vegetated with some dumping in #7 from the access road. They have been backfilled under Project No. OSM 40(3223)101.1.

AMLF #8 (PI): The pit was 600' x 120' x 25' and is 95% vegetated except for the western end. An access road was within 10' of the pit at the west end where some garbage was dumped. The pit has been backfilled under Project No. OSM 40(3223)101.1.

AMLF #10 (PI): The pit branched at the middle with the legs extending to within 150' of a public road to the east. The pit was used for dumping until access to the east ends was blocked. It has been backfilled under Project No. OSM 40(3223)101.1.

AMLF #11 (PI), 12 (PI): The access road along these pits lead to swimming hole (AMLF #16). Boulder like spoil around these pits and within them was heavily vegetated. The pits were approximately 300' x 150' x 30' and have been backfilled under Project No. OSM 40(3223)101.1.

AMLF #14 (PI): This long narrow pit was 350' x 90' x 25' and 95% vegetated. It has been backfilled under Project No. OSM 40(3223)101.1.

AMLF #15 (PI): This pit was approximately 900' long, 150' wide, and 25-35' deep. It has been backfilled under Project No. OSM 40(3223)101.1.

AMLF #18 (SA): This area of about 165 acres was spoil associated with the pits and water bodies in this problem area. The material has been utilized in backfilling and regrading the pits under Project No. OSM 40(3223)101.1.

Unreclaimed High Priority Problems (3 of 24):
AMLF #22 (VO): This vertical opening is located 800' west of the intersection of Main Street and township road 426 in the town of Upper Lehigh and is also located 10' off of a well traveled haul road. This feature measures 4' x 4' x unknown depth. A rock was dropped into the opening and it fell for several seconds before it was heard hitting the bottom. This feature is dangerous because someone could fall into the opening and
become injured or killed. Evidence of site visitation is by the presence of beer and soda cans within the area.

AMLF #23 (P): This slope is located 1,200' west of the intersection of Main Street and township road 426 in the town of Upper Lehigh and is also located 150' off of a well traveled haul road. This feature measures 10' x 7' x unknown depth. The roof of this feature appears to be made up of fractured bedrock and some of the rock has fallen into the slope. Timbers are visible within the opening. This feature poses a hazard because someone could walk into this feature and become lost within the mine workings or they could be crushed by a roof fall. Evidence of site visitation can be seen by the presence of well worn footpaths in the area leading to the feature.

AMLF #24 (P): This slope is located 1,300' west of the intersection of Main Street and township road 426 in the town of Upper Lehigh and is also located 250' off of a well traveled haul road. This feature measures 5' x 3' at the opening and is chocked down to a 2' x 2' unknown opening 5' into the slope. A roof fall has caused the opening to diminish in size. This feature poses a hazard because someone could access it and become lost within the mine workings or they could be crushed by a roof fall. Evidence of site visitation can be seen by the presence of well worn footpaths in the area leading to the feature.

Estimated High Priority Costs:
Estimate # PA3223-B including AMLF #22 (VO), #23 (P), #24 (P):

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</tr>
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<tbody>
<tr>
<td>BACKFILL OPENINGS</td>
<td>3</td>
<td>EA</td>
<td>4,000</td>
<td>$ 12,000</td>
</tr>
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</table>
**Oakdale North [3221]**

**Summary:**
- Municipality: Hazle & Butler Townships
- Problem Area Size: 245.73 acres
- Sub-Watershed: Black Creek
- Reclamation Status: 1 of 10 = 10%
- Mine Pool Basin: Little Black Creek and Cross Creek Basins
- Map Scale: 1:10,000


**Narrative:**

**Update History:**

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<th>Update History</th>
<th>AMLF Number</th>
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<td>HYRB/WILLIAMSON W-B SITE VISIT AMLF #1-9</td>
<td>05/86</td>
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<td>FRANK TEDESCO INTERVIEW AMLF #6,7,9,10</td>
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<td>JOE SITOSKI INTERVIEW AMLF #6,7,9,10</td>
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<td>R.STEPANSKI W-B SITE VISIT AMLF #6,7,9,10</td>
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<tr>
<td>HEWITT EPCAMR AERIAL AMLF #1</td>
<td>09/06</td>
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**General Description:**

The lands surrounding this problem area are all forested. The spoil areas are partially vegetated. The flooded areas appear to be high in suspended sediment, indicating erosion from the nearby spoil piles.

**Recent Mining in/near the Problem Area:**

On 2/23/93 field review it was found:

Diamond Coal Co.
Route 309 North Box Q
Milnesville, PA 18239

Permit #202647-40910201-01 & ID #36-04383

Had an active strip mining operation located 1000' west of AMLF #9 out of the problem area and in the problem area at the east end of AMLF #2.

Mine Drainage Permit Application No.'s which intersect a boundary or are within 1,000':

- 40930102 - dated 3/4/93, submitted by Coal Factors, Inc.
- 49960101 - dated 12/1/95, submitted by Mak Enterprises.

**Reclaimed Lower Priority Problem (1 of 10):**

AMLF #1 (PI): The long narrow pit was 1100' x 65' x 20'. The south side contained a vertical highwall and the north side sloped steeply. Drainage from Problem Area 3218 to the north enters the pit's west end and percolates into the mine workings. It appears that #1 is partially reclaimed by nearby remining (See Pardeesville [3218] and Lattimer [3212]).
Unreclaimed High Priority Problems (4 of 10):

AMLF #6 (HWB): The flooded pit is approximately 1200' long, 140' wide, and 5-20' deep to the water surface. Water depth is unknown, but appears to be in excess of 20'. An access road from the Lattimer Problem Area bounds the south side. Another access road is located along the pit's northern side. It leads to a camping area along the pit's edge. The well-worn access roads, litter, fishing line, and camping area indicate heavy site visitation. The pit is used for swimming and fishing. See justification note:

On 2/23/93 a field review of this feature found a trench approximately 15 ft. deep connecting to AMLF #7 and used to drain this pit.

AMLF #7 (HWB): The flooded pit is approximately 800' long and 120' wide. The pit's northern and western sides are bounded by access roads and drop 10-15' to the water surface. Water depth appears to be in excess of 20'. Three youths were seen swimming in the pit at the time of investigation. Although they would not reveal their names or where they lived, they did tell the investigator that they swim and fish here regularly in the summer. They said they also swim in AMLF #6 and the flooded pits to the north of Problem Area 3218. When asked about the open slope to the north (AMLF #10), they said they had explored it and that many people enter this mine opening.

On 2/23/93, field review AMLF #7 water level appeared to be 5 to 6' below normal elevation as evidenced by the dish appearance of the pond's ice. Located along the west end was a gasoline driven pump and connecting lines to a borehole casing pipe. It appears this pump is dewatering the pond into the deep mines.

See justification note.

AMLF #9 (DH): The pit is approximately 2200' long, 700' wide, and 80-170' deep. It is part of a large stripped area, which extends to the east and west into adjoining problem areas. The north side of the pit contains a nearly vertical, smooth rock highwall which is accessible by foot. The highwall drops 100-170' to the pit's bottom and is approximately 1800' in length. A tire swing was found within 25' of this highwall. Loose, unconsolidated spoil material is within and around the remainder of the pit. A cone shaped area 500' in diameter is located at the bottom of the west end of the pit. The spoil side walls of this area have been severely eroded making them very steep and slide prone. This area is accessible by vehicle. See justification note.

AMLF #10 (P): The slope is approximately 6' high and 12' wide. It is concrete lined and extends downward to the south an unknown distance. An access road from AMLF #6 is within 20' of the opening. Building remnants are located to the north. Large amounts of garbage dumped in the void indicate people enter the slope. Water could be heard running in the slope. This opening is extremely hazardous to anyone who should enter. Three children seen near here at the time of the investigation said they had explored the slope and that others also enter the opening. See justification note.

Justification note: Frank Tedesco of Kelly Investments, Inc., Main Street, Pardeesville, PA, feels the pits and opening are a hazard to the numerous people who frequent this problem area. Mr. Tedesco cited use of the area by dumpers, hunters, hikers, local youths, and ATV’s. He fears someone will drive off or fall from one of the highwalls. He also stated that the area is a favorite swimming hole for local children. He fears a drowning will occur.
Justification note: Joe Sitoski, 241 Main Street, Pardeesville, PA, fears someone will be seriously or fatally injured by falling from a highwall or drowning in a flooded pit. He stated that when he discovered his son had been swimming in a flooded pit, he forbade him to play in the area. He said people are always in this area swimming, dumping, and riding atv's.

Estimated High Priority Costs:
Estimate # PA3221-A including AMLF #6 (HWB), #7 (HWB), #9 (DH), #10 (P):

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<tr>
<th>ITEM</th>
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<th>UNIT</th>
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<td>BACKFILL &amp; DRAIN (2.2 A-40')</td>
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<td>A-FT</td>
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<tr>
<td>SAY</td>
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Unreclaimed Lower Priority Problems (5 of 10):
AMLF #2 (PI): The pit is 1300' x 70' x 20'. It is approximately 40% vegetated. The west central portion has been backfilled where an access road is located.

AMLF #3 (PI): The "L" shaped pit is 900' x 120' x 30-40'. The western portion is the deepest being 40' deep. Pit is 40% vegetated

AMLF #4 (SA): Spoil piles from AMLF #2 are 10-15' in height and 45% vegetated.

AMLF #5 (SA): Spoil piles are 20-40' in height and 25% vegetated.

AMLF #8 (PI): The long narrow pit is 1200' x 60' x 15' and re-forested. Highwalls are collapsed.
Pardeesville [3218]

Summary:
Municipality: Butler & Hazle Townships
Sub-Watershed: Black Creek
Mine Pool Basin: Woodside Basin

Problem Area Size: 362.399 acres
Reclamation Status: 8 of 18 = 44%
Map Scale: 1:10,000

Infiltration Points Identified by the SRBC: Little Black Creek #2 & #3 (SRBC Pub. #204 pp 101,102) are contained within this problem area. Little Black Creek #2 was reclaimed by remining. Little Black Creek #3 remains unreclaimed based on description below and through aerial photo analysis. BAMR's reclamation work looks to have been done between them.


Narrative:

Current Mining in Problem Area:
Kelly Investors Inc. – Kelly 1 Mine [Site ID 445826, Facility ID 470996] an inactive surface mine, reclamation complete. See also Oakdale North [3221] and Lattimer [3212]

Reclaimed High Priority Problems (8 of 18):
AMLF #1 (HWB), #2 (DH, HWB), #5 (HWB): These features have been reclaimed as a result of the following project funded under the OSM 1996 program grant:
- OSM 40(3218)101.1
- Backfilling strip pits
- Pardeesville - Butler Township, Luzerne County
- The work was completed by D. A. Kessler Construction Co., Inc., at a cost of $232,957.73. Project work affected 29.3 acres, including reestablishing 2,050 linear feet of stream channel and the creation of a 1.5 acre wetland. The date of the final inspection was December 30, 1998.

AMLF #1 (HWB): This water-filled pit was located 1,500' east of Pardeesville. It measured 600' long x 75-250' wide with an average depth of about 15 feet and was used as a swimming hole by local youths. It has been eliminated by backfilling.
AMFL #2 (DH, HWB): This water-filled pit was located 100 feet to the east of AMLF #1. This "L" shaped pit measured about 1,200' long x 100-250' wide with a total of 2,000 feet of highwall having a slope 45 degrees to vertical. The highwall ranged from 10-30' high to the water body, which had a maximum depth of about 50 feet. It has been reclaimed by backfilling.

AMLF #5 (HWB): This pit was situated 150' southeast of AMLF #2 and 2,300' southeast of residences in Pardeesville. This water-filled pit, which measured about 800' x 50-100' wide with a depth of 10-20', has been partially backfilled.

AMLF #6 (SA): This spoil pile was approximately 30-60' in height and was along the north side and also separated amlf #1 and #2. The material was utilized in backfilling these pits under Project No. OSM 40(3218)101.1.

AMLF #13, 14, 15 (PI): These 3 pits have been reclaimed as a result of remining and reclamation by the property owner. See note.

AMLF #18 (DH): This water-filled pit was situated to the west and adjacent to a strip cut further identified as AMLF #16. The pit measured about 150' x 200' x 50' deep to a shallow water body of unknown depth. Sidewall slopes ranged from 30-80 degrees, with a highwall totaling 300 feet along the north and west sides. A major haul road passes within 15 feet of the north side, where a large amount of household and commercial refuse has been dumped over the highwall. A haul road extended along the west and south sides. A pump house was located near the south side. It is our understanding that an active mining operation pumps water from the deep mines and utilizes the water at its nearby coal processing facility. A person walking near the dangerous highwall could fall and sustain a serious injury or possibly drown.

Note: Located to the east side of Pardeesville is a silt basin as part of Kelly Inv. Inc. premium coal processing plant. The impoundment measured 50' x 50' with a very soft, silty bottom. On Saturday, March 30, 1991, a 10-year-old boy, James Edward Caskey, became trapped in this material when he fell into the wet silt dirt and began to sink into it. Companions tried but failed to pull him out. They then sought the assistance of two adult males who succeeded after 45 minutes of effort. The youth was treated and released from Hazleton Saint Joseph Medical Center. This feature was reclaimed by the coal company after they ceased operations.

Unreclaimed High Priority Problems (2 of 18):
AMLF #3 (DH): This feature is located about one mile east of Pardeesville at the eastern end of a strip cut which is AMLF #17. The pit measures about 500' x 200' x 50' deep. A water body about 200' x 150' at the eastern end is fed by a stream at the southeast corner. Dangerous unconsolidated highwall totaling 400' in length and having a slope of 50-80 degrees is along the north side. A haul road is within 15' of the highwall, where garbage dumping has occurred. Vegetation is sparse. A person walking near the dangerous highwall could fall and sustain serious injury or possibly drown.

AMLF #4 (HWB): This flooded pit covers an area of about 10 acres and is situated 150' to the northeast of AMLF #3. This 2-section pit measures about 2000' x 75-425' wide
and is separated by a narrow strip of castings through which water flows in a narrow channel. The average depth is estimated to be about 40 feet. Various haul roads throughout the problem area and along a power line at the west end make this site easily accessible. The haul road extends to the water's edge at the south side, where tire tracks, shells, wrappers and burnt tire debris show evidence of extensive visitation. Hundreds of discarded tires are floating in the eastern section of the pit. The western end shows a fire ring, fishing tackle wrappers and other debris. Water outflows the western end through corrugated metal pipes under the haul road, and then apparently disappears to the subsurface a short distance downstream. Large spoil piles which are AMLF #9 and #10 are along the north and south sides respectively. A person exploring this area could fall into the hazardous water body and possibly drown or sustain a serious injury.

Estimated High Priority Costs:
Estimate # PA 3218-B including AMLF #3 (DH), #4 (HWB), #18 (DH):

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<th>UNIT COST</th>
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<tr>
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<td>ELIMINATE HIGHWALLS (400 X 50) + (300 X 50)</td>
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<td>C.Y.</td>
<td>$1</td>
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<td>TOTAL</td>
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Unreclaimed Lower Priority Problems (8 of 18):
AMLF #7 (SA): This spoil pile is 20-60' in height and lies 75-150' to the north of AMLF #16. A creek flows around the north side of the pile, and a major haul road runs between the pit and the spoil. The spoil is moderately vegetated with small trees.

AMLF #8 (SA): The spoil piles are 10-40' in height and 75% vegetated. They are associated with and lie between AMLF #5 and AMLF #16.

AMLF #9 (SA): This spoil pile is 30-70' in height and lies along the north side of AMLF #4. It isolates AMLF #4 from a stream to the north. Piles consist of loose, unconsolidated, weathered conglomerate and are sparsely vegetated.

AMLF #10 (SA): Piles range from 10-70' in height and consist of loose, unconsolidated, weathered conglomerate and are sparsely vegetated. The spoil is associated with and lies along the south side of AMLF #4 and the east side of AMLF #3.

AMLF #11 (PI): This is located about 1500' southeast of Pardeesville. The pit measures about 300' x 200' x 40' deep with sidewall slopes of about 45-60 degrees. The area within and about the pit is very heavily vegetated with trees and small brush.

AMLF #12 (PI): This flooded area is adjacent to and fed by AMLF #11. Two discharges are located at the south side. One discharge at the southeastern section consists of CMP's. The discharge flows into a long, narrow pit (AMLF #1 of problem area 3221), where it enters the mines via a 3' diameter cropfall. The other discharge is at the southwestern section. It is a 4' diameter, vertical, concrete stand pipe and appears to discharge into a buried pipeline leading to the west. Work done to repair these discharge points and earthen dams located here appeared to be fairly recent.
AMLF #16 (PI): This highly irregular pit measures about 1600' long x 120' wide x 20-60' deep. The western end of this strip cut is water-filled and further identified as AMLF #18. Large erosion gullies are evident throughout the pit, which is moderately vegetated. A haul road runs along the entire north side and passes within 15' of the pit's edge at the eastern end. Some garbage dumping is evident.

AMLF #17 (PI): This pit abuts reclaimed feature AMLF #5 (HWB) at the western end, and AMLF #3 (DH) at the eastern end. The pit measures about 1600' x 90' x 20-30' deep and is heavily vegetated.

Estimated Lower Priority Costs:
Estimate # PA 3218-C including AMLF #11 (PI), #16 (PI):

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<tr>
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<td>$373,333</td>
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<td>(1600 X 120 X 40)</td>
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<td>TOTAL</td>
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</table>
**Ebervale [0265]**

**Summary:**

Municipality: Hazle Township  
Problem Area Size: 186.963 acres  
Sub-Watershed: Black Creek  
Reclamation Status: 2 of 4 = 50%  
Mine Pool Basin: Big Black Creek Basin  
Map Scale: 1:24,000

Infiltration Points Identified by the SRBC: Black Creek #1 & #3 (SRBC Pub. #204 pp 88, 90) are associated with this problem area. #1 is not actually contained within this problem area, it is closer to the Jeddo 7 and Jeddo 2 Mines respectively. (See also the Lattimer Problem Area Map)

**Narrative:**

Update History:

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<th>Activity</th>
<th>AMLF #1-4</th>
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<td>LOCAL RESIDENTS</td>
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<td>AMLF #1-4</td>
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Recent Mining in/near Problem Area:

Mine Drainage Permit No. 40930301 - dated 8/13/93, submitted by JA & WA Hess, Inc. This permit is 1,000' to 15,000' southeast of the problem area.

Current Mining in/near Problem Area:

Jeddo Highland Coal Co. – Pagnotti Jeddo Basin E Mine [Site ID 446159, Facility ID 470574] – an active surface mine, operative but not producing and in compliance. Located approximately 2,500' northeast of the problem area.

Pacton Corp. – Pacton Jeddo Area 2 Mine [Site ID 447295, Facility ID 551921] – an active refuse reprocessing and surface mine in compliance. Located approximately 850' south of the problem area.

Pacton Corp. – Pacton Jeddo Area 1 Mine [Site ID 447611, Facility ID 553488] – an active refuse reprocessing, surface mine and mineral preparation plant in compliance. Located approximately 4,000' south of the problem area.

Jeddo Highland Coal Co. – Jeddo 7 Mine [Site ID 445510, Facility ID 470581] – an active refuse reprocessing and surface mine in compliance. Located approximately 5,500' southwest of the problem area.

Reclaimed Lower Priority Problems (2 of 4):

AMLF #1 (VO): This feature was located approximately 3000' east of the village of Ebervale, and just 50' south off route 940. It consisted of a vertical shaft opening measuring approximately 15' x 20' with depth unknown, surrounded by a mesh shaker screen (fence). Several openings existed along its base. This shaft has been backfilled by
Pitreal Coal Co. sometime prior to 11/8/91. The existence of the shaft is evidenced by an approximately 10' x 15' x 1' deep settlement of the backfill material. The vegetation around the shaft area is light weeds.

AMLF #3 (HEF): This tipple building was located just 200' northeast of AMLF #2 and 200' south of route 940. Made of sheet metal and wood, it is 50' long x 20' wide and 60' high and in a deteriorating condition. Rail tracks run to the north of the building and into AMLF #2. The tipple building is also located directly adjacent to the Pagnotti mining office. Access is via a haul road to the feature's southern perimeter. At the site visit on 7/16/98, it was discovered that this tipple has been raised by Pagnotti Enterprise. After an investigation on 2/16/98, and speaking with Pagnotti's foreman, the tipple no longer stands.

Unreclaimed High Priority Problems (2 of 4):
AMLF #2 (VO): This slope is located 1300' southeast of AMLF #1 and approximately 275' south of route 940. The vertical opening measures 30' x 10' with an undeterminable depth. Pagnotti mining office is located adjacent to and 300' northeast of the vertical opening. Vegetation is approximately 20%. Access is via an active haul road and numerous footpaths. (see AMLF #3 (HEF)). During a site visit on 7/16/98, it was discovered that the tipple, which was only 300' southwest of the vertical opening, no longer exists. However, the vertical opening has a 24” pipe, which is screened off and has a tarp at the entrance, is still being used by Pagnotti and they said not to do anything with it at this time.

AMLF #4 (VO): This feature consists of a 20' x 10' x 10' high brick building secured by a heavy steel door and padlocked. It is part of an air shaft ventilation system. The air shaft housing is surrounded by a 4' high mesh fence. A 3' x 1/2' opening of undeterminable depth has developed at the southeastern corner of the foundation wall. This feature is located approximately 1600' southeast of Ebervale and 200' south of route 940. Vegetation is very heavy in the area. Access is via numerous footpaths and by a railbed located at its southern perimeter. To properly reclaim this vertical opening, it is assumed that the fan house must be razed.

Note: Visitation throughout the above problem area was evidenced by the presence of beer bottles, chip bags and other assorted debris. Also, numerous tracks left by dirt bikers, four wheelers and hikers were present throughout the trails. Numerous residents were questioned concerning these sites and all expressed great concern and stated that they felt backfilling would greatly add to the safety of their children and others who frequent these areas. They stated their concern that someone could wander upon these sites and fall in and be seriously injured, if not killed and also their fear of someone getting hurt while exploring the tipple.

Estimated High Priority Costs:
Estimate # PA0265-A including AMLF #2 (VO), #4 (VO):

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<th>TOTAL COST</th>
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</thead>
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<td>L.S.</td>
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<td>TOTAL</td>
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36 of 104
**Lattimer [3212]**

**Summary:**
- Municipality: Hazle Township
- Sub-Watershed: Black Creek
- Mine Pool Basin: Little Black Creek Basin & Big Black Creek Basin
- Problem Area Size: 875.476 acres
- Reclamation Status: 2 of 20 = 10%
- Map Scale: 1:24,000

Infiltration Points Identified by the SRBC: Little Black Creek #1 (SRBC Pub. #204 pp 100) is contained within this problem area.

**Narrative:**

**Update History:**

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<tr>
<th>Event</th>
<th>Details</th>
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<tbody>
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<tr>
<td>HYRB/WILLIAMSON</td>
<td>W-B SITE VISIT AMLF #2, 15</td>
</tr>
<tr>
<td>FRANK TEDESCO</td>
<td>INTERVIEW AMLF #2, 15</td>
</tr>
<tr>
<td>JOE SITOSKI</td>
<td>INTERVIEW AMLF #2, 15</td>
</tr>
<tr>
<td>WALSH</td>
<td>W-B SITE VISIT AMLF #1, 3-7, 11, 14, 18-19</td>
</tr>
<tr>
<td>GHOWERI</td>
<td>FILE REVIEW AMLF #20</td>
</tr>
<tr>
<td>INQ. NO. 85-11-491WB</td>
<td>SOURCE DATA AMLF #20</td>
</tr>
<tr>
<td>WIGHTMAN</td>
<td>SOURCE DATA AMLF #1, 10</td>
</tr>
<tr>
<td>HEWITT</td>
<td>EPCAMR AERIAL AMLF #1, 10, 12-13</td>
</tr>
</tbody>
</table>

Recent Mining in/near Problem Area:

Mine drainage permits that may have affected this problem area:
- No. 40870202 - dated 12/3/87, submitted by Continental Energy Associated, Ltd.
- No. 40930202 – dated 8/93, submitted by Continental Energy Associated.

Current Mining in/near Problem Area:
- Rossi Excavating Co. – Mammoth Anthracite Lattimer Basin Continental Mine [Site ID 259641, Facility ID 252987] an inactive surface mine and refuse reprocessing operation, reclamation complete. Looks to have reclaimed the eastern 1/4 of AMLF #2.
- Diamond Coal Co. Inc. – Mammoth Anthracite Lattimer Basin Center Mine [Site ID 250506, Facility ID- 250229] an inactive refuse reprocessing operation, reclamation complete. Near AMLF #11 looks to have reclaimed AMLF #10.


Rossi Excavating Co. - Pennys Mine [Site ID 259641, Facility ID 275017] an active refuse reprocessing operation, in the process of being reclaimed (stage 2 eligible). Near AMLF #'s 03, 04 & 05.

Reclaimed Lower Priority Problems (2 of 20):
AMLF #1 (PI): A large pit partially filled and graded in eastern end. The highwall is stable. Vegetation cover is about 50-60%. The Problem area looks to have been reclaimed by Diamond Coal Co. Inc. See Recent Mining and Current Mining sections.

AMLF #10 (SA): A spoil area that is about 60% vegetated. It looks to be partially reclaimed. See Recent Mining and Current Mining sections.

Unreclaimed High Priority Problems (3 of 20):
AMLF #2 (DH): the highwall is located approximately 600' south of pardeesville. Approximately 3000' of vertical to nearly vertical highwall 60-80' high exists here. The area is easily accessible by foot. It is also accessible to vehicles via numerous access roads throughout the problem area. See justification note.

AMLF #15 (DH): The pit is located 1000' east of Pardeesville. The pit is the site of illegal dumping. An access road from Lattimer is parallel to the pit's eastern side. The pit is 500' long x 200' wide and 80' deep. Approximately 450' of dangerous highwall exists along the eastern and southern sides of the pit. The entire eastern side is accessible by foot or vehicle and the southern side is accessible by foot. See justification note.

AMLF #20 (S): This mine related subsidence occurred at EZ Wienches Motors, 27th St. and North Church St., Hazle Twp. DER and OSM investigators conducted inquiry investigation 85-11-491 WB and found a void beneath the concrete floor of the building approximately 4' deep and 20' in diameter. According to Mr. Wienches, the owner, the void was discovered when a sewer line which runs beneath the floor adjacent to the inquiry area became inoperable. The sewer line had collapsed into the void and was also affecting two surface drainage pipes in the garage. This area was previously affected by subsidence, Inquiry No. 82-01-03 WB and OSM-etc completed an emergency drilling and backfilling project in the area in 1982. There is 31' separating the surface and the first underlying coal seam, the buck mountain bed, which outcrops in this area. Mine subsidence insurance paid the claim for the sewer line repair, the void backfilled and the concrete floor restored. See justification note #2.
Justification note #1: Mr. Frank Tedesko of Kelly Investments, Inc. Main Street, Pardeesville, PA, feels the highwalls are dangerous due to the close proximity to town and heavy use of the area by illegal dumpers, local children, ATV's and four-wheel drive vehicles. He favors reclamation of the entire problem area. Mr. Joe Sitoski, 241 Main Street, Pardeesville, PA, fears a serious or fatal injury will occur in one of these pits. He fears for his son and other local children who play in these areas. He also said ATV’s, motorcycles, and dumpers frequently drive in this area.

Justification note #2: Mr. Edmund Wienches, owner of EZ Wienches Motors, reported the mine subsidence at his business. He expressed concern for this incident and also the possibility of continued mine subsidesnces in this area.

Estimated High Priority Costs:
Estimate # PA3212-A including AMLF #2 (DH), #15 (DH), #20 (S):

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>TOTAL COST</th>
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<td>SUBSIDENCE CONTROL</td>
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<td>A</td>
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<td>$50,000</td>
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<td>TOTAL</td>
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<td></td>
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<td>$1,280,000</td>
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<tr>
<td>SAY</td>
<td></td>
<td></td>
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<td>$1,300,000</td>
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Unreclaimed Lower Priority Problems (15 of 20):
AMLF #2 (PI): A large pit that is 60-70% filled and graded. The highwall was not eliminated in the partial reclamation activity. Vegetation is about 70%. See Recent Mining section.

AMLF #3-5 (PI): These small pits are approximately 60-70% forested.

AMLF #6-7 & 19 (PI): Three are pits located within large area of spoil. Vegetative cover of the pits is about 30%.

AMLF #8 (SA): A large spoil area comprised of numerous piles and mounds ranging up to 75' in height. Vegetative cover is about 20-40%. See Recent Mining and Current Mining sections.

AMLF #9 (EP): A large slope of mine related disturbed land upslope from spoil area #8 appears to be erosion prone.

AMLF #11 & 14 (DH): These are stable highwalls, 70% vegetated with shrubs and ground cover.

AMLF #12-13 (SA): These spoil areas appear to be partially graded and 60% vegetated by Diamond Coal Co. Inc. See Recent Mining Section.

AMLF #15-16 (DH): These are relatively steep highwalls, 20% vegetated.

AMLF #17 (SA): A partially graded spoil, 60% vegetated.
Mount Laurel [1383]

Summary:
Municipality: Hazleton City  Problem Area Size: 57.194 acres
Sub-Watershed: Cranberry Creek  Reclamation Status: 0 of 2 = 0%
Mine Pool Basin: Jeansville Basin  Map Scale: 1:10,000

Narrative:

Update History:

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<tr>
<th>Contractor</th>
<th>Task</th>
<th>AMLF #1-2</th>
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<tr>
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<td>W-B SITE VISIT</td>
<td>AMLF #1-2</td>
<td>02/28/92</td>
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<tr>
<td>MR. RAFFALLIA</td>
<td>INTERVIEW</td>
<td>AMLF #2</td>
<td>02/28/92</td>
</tr>
<tr>
<td>S. GHOWERI</td>
<td>FILE REVISION</td>
<td>AMLF #1-2</td>
<td>03/30/95</td>
</tr>
</tbody>
</table>

Unreclaimed High Priority Problems (2 of 2):

AMLF #1 (CSL): This is an approximately 4-acre silt basin located about 0.3 miles south of Hazleton Heights. It is situated southwest of the intersection of the Hazleton Beltway (SR 3032) and Poplar Street (SR 3017), 200' south of the beltway and 1000' west of Poplar Street. There is no vegetation within the basin. On the north side of the impounding embankment is a "v" shaped breach which is about 15' wide at the top and about 3' wide at the bottom. During periods of heavy precipitation, water collected within the basin overflows the breach, carrying fines from this area and depositing them in a watercourse which is AMLF #2 (CS). Gullies 3-8' deep within the basin evidence the erosion of the material from this site. Note: This feature was to be reclaimed in reclamation Project No. OSM 40 (1383)101.1, but this information was not verified.

AMLF #2 (CS): This watercourse is a ditch which is 20' off the south side of eastbound lane of the Hazleton Beltway. The ditch is 10-15' wide and parallels the roadway in an easterly direction for about 1000' to a storm drain catch basin at the intersection with Poplar Street. The sediment from AMLF #1 (CSL) is deposited within the ditch and has caused a blockage of three catch basins along the waterway. During periods of heavy rainfall, sediment is carried along this waterway, overflows the intersection, and deposits material on the roadway. According to Mr. Raffallia of the Pennsylvania Department of Transportation, after a significant rainfall, up to 4" of mine-related spoil and sediment is deposited on the intersection. He is concerned that a serious accident may result, and expressed hope that the sedimentation problem can be corrected. Note: an agreement with DER. and PA DOT stated that the clogged stream channel, AMLF #2, which is on PA DOT property, will be cleaned out (reclaimed) by PA DOT after AMLF #1 is reclaimed.

Estimated Priority 2 Costs:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>UNIT COST</th>
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<td>OFFICE FACILITIES</td>
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<td>JOB</td>
<td>L.S.</td>
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<tr>
<td>EROSION &amp; SEDIMENTATION</td>
<td>JOB</td>
<td>JOB</td>
<td>L.S.</td>
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<td>Description</td>
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<td>Unit</td>
<td>Cost per Unit</td>
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<td>-----------------------------------</td>
<td>----------</td>
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<td>------------</td>
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<tr>
<td>Clearing and grubbing</td>
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<td>A) Impervious material</td>
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<td>ACRES</td>
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<td><strong>TOTAL ESTIMATED COST</strong></td>
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<td></td>
<td><strong>$196,130.00</strong></td>
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</tbody>
</table>
**Hazleton S.C. West [1365]**

**Summary**
- Municipality: Hazleton City & Hazle Township
- Sub-Watershed: Cranberry Creek
- Mine Pool Basin: Hazleton Basin
- Problem Area Size: 151.609 acres
- Reclamation Status: 0 of 7 = 0%
- Map Scale: 1:10,000

**Narrative:**

**Update History:**

<table>
<thead>
<tr>
<th>Update Description</th>
<th>AMLF #</th>
<th>Date</th>
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<tbody>
<tr>
<td>ORIGINAL PADAFO FILE</td>
<td>AMLF #1-7</td>
<td>04/1981</td>
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<tr>
<td>NAVITSKY/KISH W-B SITE VISIT</td>
<td>AMLF #1-7</td>
<td>12/03/1984</td>
</tr>
<tr>
<td>MRS. BRASKEY INTERVIEW</td>
<td>AMLF #7</td>
<td>12/03/1984</td>
</tr>
<tr>
<td>KELLY/WILGUS W-B SITE VISIT</td>
<td>AMLF #1-7</td>
<td>02/19/1986</td>
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<tr>
<td>MICHAEL PETRILLA INTERVIEW</td>
<td>AMLF #3</td>
<td>02/19/1986</td>
</tr>
<tr>
<td>GERALD CASA INTERVIEW</td>
<td>AMLF #3</td>
<td>02/19/1986</td>
</tr>
<tr>
<td>ROBERT WARD INTERVIEW</td>
<td>AMLF #3</td>
<td>02/19/1986</td>
</tr>
<tr>
<td>KELLY/GILLEN W-B SITE VISIT</td>
<td>AMLF #1-7</td>
<td>06/03/1986</td>
</tr>
<tr>
<td>RICHARD AGUE INTERVIEW</td>
<td>AMLF #7</td>
<td>06/03/1986</td>
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<tr>
<td>KELLY/GILLEN W-B SITE VISIT</td>
<td>AMLF #7</td>
<td>07/28/1986</td>
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<td>WALSH W-B SITE VISIT</td>
<td>AMLF #7</td>
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<tr>
<td>ROCCOGRANDI W-B SITE VISIT</td>
<td>AMFL #1-7</td>
<td>03/13/2000</td>
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</tbody>
</table>

**General Description:**
Two abandoned strip pits are located within 30-50' of shopping center parking lot in west Hazleton. Each measures 300' x 300' x 120' deep. At least once, children got in and could not get out. Subsidence has occurred along back edge of the parking lot (10' wide but once 40' deep). Another subsidence area lies off the western edge of parking lot and is 10' x 100'. Both areas require periodic filling. Recommendations are to backfill and regrade pits using nearby spoil material, then flush subsidence.

**Unreclaimed High Priority Problems (5 of 7):**

**AMLF #1 (DH):** AMLF #1 is located directly west and separated from pit #2 by the above mentioned haul road. It also measures 500' x 300' x 120' deep with dangerous highwalls making up three sides. The total length of the highwall is approximately 900 feet. Beside the haul road running along the eastern highwall of this pit from K-Mart, there is a dirt road which runs along the southern and western highwall. Evidence of visitation is from the presence of a great deal of trash thrown into the pits and the well-worn foot paths next to them. This feature was scheduled to be reclaimed under OSM 40(1365)101.1, but this information was not verified.

**AMLF #2 (DH):** AMLF #2 is a pit with similar characteristics as AMLF #1. It is a pit located 600' from K-Mart on Route 93 in Hazleton. The pit measures 500' X 300' X 120' deet with dangerous highwalls on three sides. The total length of the highwall is approximately 900 feet. The highwalls are near vertical to vertical with large sections of rock fracturing away. There is a haul road leading from the parking lot of K-Mart that passes adjacent to the western highwall of this pit. A footpath from this haul road runs...
along the top of the southern and eastern highwalls. The north side of this pit is steeply
sloped spoil with a 30-40' spoil pile, 60-80% revegetated with pines on the top of it.
This feature was scheduled to be reclaimed under OSM 40(1365)101.1, but this
information was not verified.

AMLF #3 (DH): The pit is located 500-600' southwest of K-Mart on Route 93. It
measures 1000' x 175' x 60' deep with steep spoil on most sides. The highwalls have 40-
50 degree slopes with a total length of 2000'. It also has very well traveled haul roads on
the northern and southern sides. Evidence of visitation is by the several hundred cubic
yards of garbage dumpen into the pit from the northern wall. This feature was scheduled
to be reclaimed under OSM 40(1365)101.1, but this information was not verified.

AMLF #4 (DH): This is a pit located 750' southwest of pit #1. The pit measures 350' x
250' x 100' deep with dangerous highwalls making up the south and west sides. The total
length of the highwall is approximately 600 feet. The highwalls are near vertical to
vertical with large sections of rock fracturing away. There is a footpath leading to this pit
from the railroad tracks located 300-400' to the south. At the time of the investigation,
there were fresh footprints surrounding the pit and evidence of someone pushing and
rolling large rocks over the highwalls. The area around the pit is graded and 50-60%
revegetated. This feature was scheduled to be reclaimed under OSM 40(1365)101.1, but
this information was not verified.

AMLF #5 (DH): This pit is located 300' southwest of AMLF #4, adjacent to an active
railroad line. The pit measures 650' X 200' X 65' deep with the dangerous highwall along
the railroad tracks. The total length of highwall is approximately 600 feet with 40-50
degree slopes. This highwall is steeply sloped, unconsolidated spoil with small
protruding 20' high rock cliffs. There is a narrow line of small trees and brush on top of
the highwall. The other three sides of the pit are more moderately sloped spoil.
Although the highwall associated with this pit is not as dramatic as the other three pits in
the area, the railroad tracks next to the highwall are used heavily as a short cut to the K-
Mart shopping mall. Someone walking these tracks could fall from the top of the
highwall and be seriously injured or killed. This feature is scheduled to be reclaimed
under OSM 40(1365)101.1.

Justification note: Michael Petrilla, Police Chief of Hazleton, Gerald Casa, Fire Chief of
Hazleton, and Robert Ward, Fire Chief of West Hazleton, all stated the same concern for
the problem area. They all fear someone may be seriously injured if they should fall off
the dangerous highwalls. According to the general description at least one incident has
occurred where young children have climbed down into the pit and could not get out.
Chief Petrilla could not confirm this, but stated that the area is frequented by area youths
riding bicycles, motorcycles or just as a short cut to and from the shopping mall.

Unreclaimed Lower Priority Problems (2 of 7):
AMLF #6 (SA): Spoil banks surround pits 1 through 5 and all adjacent areas. While
spoil around pit 3 is devoid of any vegetation, all other spoil areas have dense pine
overgrowth on the very top. The piles range from 30' TO 150' in height. This feature is
scheduled to be reclaimed under OSM 40(1365)101.1, but this information was not
verified.
AMLF #7 (S): As of March 2000, there has not been any recently reported subsidence activity in this area. In the 1980's this feature was previously described as follows: The subsidence area is located around and behind K-Mart. According to Mrs. Braskey, assistant manager at K-Mart, 12 cracks in the walls of their building have been increasing in size since she has worked here. Richard Ague, manager of Weis Market, revealed six cracks within the market. A subsidence at rear of K-Mart's lot has been filled three times. It continues to settle and vents vapor in cool weather. This subsidence was not venting at time of investigation and there have not been any reported reoccurrences in the past year. However, both managers are concerned more property damage or injury may occur if subsidences reoccur.

Estimated High and Lower Priority Costs:
Estimate #PA1365-A including AMLF #1 (DH), #2 (DH), #3 (DH), #4 (DH), #5 (DH), and Priority 3 - #6(SA):
Prepared by: Dan Werner, PE Date: 8/12/04 Contract No. OSM 40(1365)101.1

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<th>ITEM NO.DESCRIPTION</th>
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45 of 104
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**Hazleton Airport [3211]**

**Summary:**
- **Municipality:** Hazle Township
- **Sub-Watershed:** Black Creek
- **Mine Pool Basin:** Little Black Creek Basin
- **Problem Area Size:** 178.497 acres
- **Reclamation Status:** 4 of 9 = 44%
- **Map Scale:** 1:10,000

**Narrative:**

**Update History:**

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<td>Epcamr Aerial</td>
<td>AMLF #3-6, 8</td>
<td>10/04/06</td>
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**General Description:**

This problem area is located just north of the Hazleton Airport, and adjacent to route 309. Access to the area is excellent. A road appears to have been constructed across the problem area, truncating 2 large pits into 4 pits labeled 1, 2, 3, and 4.

**Current Mining in the Problems Area:**

- **JMW Enterprises Inc.– Milnesville 7 Mine [Site ID 488241, Facility ID 516745]–** Active surface mine in compliance. Working within the eastern portion of AMLF #01.

- **Lonzetta Trucking & Excavating Co. - Milnesville Mine [Site ID 264042, Facility ID 283597] –** Active refuse reprocessing operation, in compliance. Looks to have reclaimed AMLF #03, AMLF #08 and partially reclaimed AMLF #04. They may still be working on AMLF #7.

**Recent Mining in the Problem Area:**

Mine drainage permits that may have affected this problem area:


**Reclaimed Lower Priority Problems (4 of 9):**

- **AMLF #3 (PI):** The pit was located approximately 400' southeast of JA & WA Hess Inc., Concrete. The west end adjacent to the road was partially graded in the bottom. It was separated from the west end by spoil material. Total length was 500' and depth ranged from 25' to 30'.

- **AMLF #5 & 6 (PI):** These areas were being reworked by Pagnotti Enterprises and look to have been reclaimed during or prior to the construction of the Airport Road (a.k.a. the Hazleton Bypass).
AMLF #8 (PI): This area seems to have been reclaimed by Lonzetta Trucking and Excavating Co.

Unreclaimed High Priority Problems (4 of 9):
AMLF #1 (DH): This pit once measured 2800' long, but 1500' of the pit starting from the west end going east has since been reclaimed. Approximately 1300' is still open, with a 40' x 60' high steeply dipping highwall on the north side, and on the south side there is an approximately 150' x 50' deep highwall with terrace cuts within the pit. The pit is 80% vegetated on the south side and runs along the Hazleton Bypass. The north side has reclamation done with no vegetation. The east side runs along Route 309. The pit is visible from all sides and tire tracks run all around the pit. See justification note No. 2.

AMLF #2 (DH): This pit is located just south of the Airport Road and west of JA & WA Hess Inc., Concrete. The pit is approximately 1300' long, 400' wide, and 90-140' deep. Large spoil piles are located along the south side and western portion of the pit. The concrete plant yard abuts a portion of the south side. Approximately 450' of dangerous highwall exists in this area. Fill material dumped along the highwall from the concrete yard is steep and unstable. The area is accessible by vehicles and also on foot. Graffiti painted on the highwall indicated site visitation. See justification note No. 1

AMLF #4 (DPE): The spoil is located 400' north of Main Street, Milnesville, and is abutted by the Airport Road on the north. Loose unconsolidated spoil material is steeply stacked along the south side of a pit partially filled by the beltway. The material is boulder sized. The spoil area measures 600' long, 350' wide, and 90' high. A well worn path leads to this area from Milnesville. A bunkhouse built by local youths is located along the spoil area's northern corner. Due to the close proximity of Milnesville and the evidence of visitation by local youths, this area is a serious hazard. See justification note No. 1

AMLF #9 (VO): This 3' x 15' "cropfall" type opening is located approximately .9 miles west of Route 309 on the Airport Road and 240' south of the road. The opening dips steeply to the north and extends to an unknown depth. It is a hazard to anyone entering this area. A number of paths were noted in this area. See justification note No. 1

Justification note No. 1: Mrs. McAffee, 81 Main Street, Milnesville, PA 19239, believes that AMLF #'s 2, 4, and 9 are very hazardous. She cited use of the area by local youths on foot, bicycles, and ATV's. She fears her children, or other local children, will be injured seriously by falling into one of these pits or the mine opening. She stated that she is always watching her children to prevent them from wandering into these areas.

Justification note No. 2: Mr. Michael Vukson who works for Bulter Enterprises at Northeastern Bank Building, Room 305, Broad Street, Hazleton, PA, stated he has seen many people riding all around the pit and has chased them in fear that one may fall or drive into the pit and kill themselves.

Estimated High Priority Costs:
Estimate # PA3211-A including AMLF #1 (DH), #2 (DH), #4 (DPE), #9 (VO):
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<th>ITEM</th>
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Unreclaimed Lower Priority Problems (1 of 9):
AMLF #7 (SA): This spoil pile was 250' wide and 15' deep and was located about 100' south of AMLF #3. It is 50-60% vegetated. It is receiving runoff drainage from an erosion channel to the south. This problem may be reclaimed, but could not be verified in aerial photo analysis.
Cranberry Ridge [3213]

Summary:
Municipality: Hazle Township & Hazleton City
Sub-Watershed: Cranberry Creek
Mine Pool Basin: Hazleton Basin

Problem Area Size: 501.025 acres
Reclamation Status: 14 of 20 = 70%
Map Scale: 1:12,000

Impaired Waters on the 303 (d) List: Cranberry Creek flows through site, but is affected by Flow Alterations and was listed in 2002.

Infiltration Points Identified by the SRBC: This problem area contains Cranberry Creek #2, #4, #7 (SRBC Pub. #204 pp 77,79,82). Cranberry Creek #2 refers to AMLF# 06, #4 refers to AMLF# 17 and #7 refers to AMLF# 12. All look to be unreclaimed.


Narrative:
Update History:

| ORIGINAL PADAFO | FILE | AMLF #1-18 | 06/1981 |
| NAVITSKY/KISH | W-B SITE VISIT | AMLF #1-19 | 06/1985 |
| HYRB/PRUTZMAN | W-B SITE VISIT | AMLF #5, 7-10,13-18 | 04/04/1986 |
| HYRB/PRUTZMAN | W-B SITE VISIT | AMLF #2,6,12,19 | 04/11/1986 |
| JIM BOYLE | INTERVIEW | AMLF #12, 19 | 04/11/1986 |
| MIKE FERKO | W-B SITE VISIT | AMLF #2, 6 | 04/11/1986 |
| BOWLBY/ROCCOGRANDI | W-B SITE VISIT | AMLF #4 | 03/19/1987 |
| WILLIAMSON | W-B SITE VISIT | AMLF #1-19 | 03/16/2000 |
| WILLIAM GENTILESCO | INTERVIEW | AMLF #1-19 | 03/16/2000 |
| JIM BUNK | INTERVIEW | AMLF #1-19 | 03/17/2000 |
| HEWITT | EPCAMR SITE VISIT | AMLF #1-4, 7-10, 13-16 | 07/2005 |
| HEWITT | EPCAMR AERIAL | AMLF #11, 12 | 10/04/2006 |

General Description:
This problem area is currently under reclamation by PA DEP BAMR and a majority of the problems are scheduled to be reclaimed. The 2004 aerial photos do not show this reclamation, but are being marked as reclaimed since EPCAMR has been to the site recently and can confirm the problems that are being worked on. The surrounding problem areas of Hollars Hill, Hollars Hill South, Grape Run Reservoir and Hazleton S.C. West may also have some problems reclaimed in the process.

Reclaimed High Priority Problems (1 of 20):
AMLF #2 (DH): This abandoned strip pit is located 200' east of township road 455. This road is the main artery into Cranberry Ridge. The pit, which is irregularly shaped, features 1,100' of highwall covering the entire pit. Total accountable highwall is 1,100' x 65' deep. Vertical highwall runs along the entire north side, while the remaining southern
side is nearly vertical with 75 degree slopes. The highwalls consist of intermittent bottom rock and loose, unconsolidated spoil material. The pit and the associated highwalls are extremely accessible to any motorized vehicle. Haul roads encompass the pit and the highwalls and are right to the edge. Garbage has been dumped throughout the area. Anyone falling or driving off this highwall would be severely injured or killed. The area receives a tremendous amount of visitation in the form of ATV’s. See justification note 2. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

Reclaimed Lower Priority Problems (13 of 20):
AMLF #1 (SA): Spoil piles abut AMLF #2 and road to Cranberry Ridge. They consist of large, unconsolidated material. Tops are heavily vegetated with pine and birch. Sides approximately 60-70% vegetated. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #3 (SA): Spoil piles range from 10' to 60' in height and are 50-60% vegetated. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #4 (DH): This abandoned strip pit is located 350' south of Cranberry Ridge. The pit, which is circular in shape, features dangerous highwall along the entire rim. Total accountable highwall is 1,700' x 60' deep. AMLF #3, which is the spoil material that surrounds the pit, elevates this highwall to 85' deep along the southern rim. The highwall slopes average 75 degrees to vertical. The highwalls consist of loose, unconsolidated overburden and loose, fractured rock. The pit is accessible from many haul roads that enter the problem area. You can drive right up to the entire northeastern and western rims of the pit. Visitation in the form of dumping and ATV enthusiasts is highly visible. If a person were to fall from any area along the highwall, he or she could be seriously injured or killed. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #5 (PI): This pit, located 500' east of AMLF #4, is reclaimed and is 100% vegetated with grasses.

AMLF #7 (PI): This pit is 250' x 65' x 20' and is located 250' east/northeast of AMLF #5. The eastern portion was reclaimed previously. The pit is flooded with stagnant water and is 20% vegetated. An 8 acre area south and southwest of pit appears to have been graded recently. The pit is lined on north by spoil pile (AMLF #8). This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #8 (SA): Spoil pile 150' long and 30' high located 100' north of AMLF #7. The pile is 50-60% vegetated with ground cover. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #9 (SA): The large spoil pile is 65% vegetated and located 500' south/southeast of AMLF #8. The northeast corner is graded and red dog indicates previous fire. Spoil is 90' high. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.
AMLF #10 (SA): Located 600' east of AMLF #8, this spoil pile is 70' high and has garbage dumped all along it and access road abutting piles' north side. Red dog at northwest corner indicates previous fire. The pile is 65% vegetated. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #13 (DH): This abandoned strip pit is located 1,000' southwest of Hazleton. The pit is also less than 800' from route 309 and many commercial businesses are along this highway. The strip pit measures 2,900' long x 80-120' wide x 150' deep. The highwall is located along the south side for a distance of 1,000' long x 150' deep. The southern highwall features intermittent sections of bottom rock and loose, broken rock with an average slope of 70 degrees. No vegetation is along this section of highwall. A haul road runs along the rim of the highwall. It appears vehicular usage is moderate to heavy judging by the surface of the haul road. Garbage has been dumped in the pit, as well as throughout the highwall. The north side of the pit basically consists of strewn overburden with gradual slopes of 30 degrees. A haul road leading to the pole line is used by ATV's only. If anyone falls or drives off this highwall, they could be seriously injured or killed. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #14 (SA): Located 250' south of western tip of AMLF #16. The refuse piles are 25' high and is 75% vegetated. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #15 (SA): Located 100' north of eastern tip of AMLF #16. The refuse piles are 25' high and is 90% vegetated. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #16 (PI): Located 400' south of AMLF #13, pit is 35' deep and 1100' long. The strip pit is about 80% forested with refuse piles on north side. This feature is scheduled to be reclaimed under project number OSM 40(3213)101.1.

AMLF #20 (UMF): The U.S. Bureau of Mines excavated the Hazleton mine fire in 1969 (see Appalachian Mine Fire Control Project #35). According to the list of status of projects approved by Appalachian Regional Commission, the total cost for this project was $1,676,898.09. -entered by K. Watt on 1/9/01.

Unreclaimed High Priority Problems (4 of 20):
AMLF #6 (DH, HWB): This abandoned stripping pit is located 250' south of Cranberry Ridge. The pit measures 2,500' long x 600' wide x 180' deep. A dangerous highwall exists along both the north and south sides. Total accountable highwall is 5,000' long x 600' wide x 180' deep. Within the pit's eastern end there is a 900' long x 90' wide hazardous water body of unknown depth. Along this 900' of impounded water is a 400' long section of extremely dangerous vertical highwall measuring 40' high. Within the pit's western end is another 200' long x 40' wide section of impounded water of unknown depth. Both water bodies within this pit have established campfire areas with graffiti painted on the highwalls and remnants of party paraphernalia. The north highwall consists of intermittent sections of bottom rock and loose, unconsolidated rock, all of which is slide prone and collapsing from erosion. Several areas along the pit's northern
rim contain garbage piles strewn down the highwalls. These garbage piles have definitely come from the abutting backyards of the homes in Cranberry Ridge. This north highwall dips approximately 50 degrees and is within 150' of the homes in this town of Cranberry Ridge. The south highwall consists of mostly spoil material and unconsolidated rock with a 60 degree slope and 20% vegetation. Hazle Auto Parts, which is a very large automobile junkyard, is within 150' of the entire south highwall. Access is in fact uncontested to any motorized vehicle. There are several areas along South Church Street in Hazleton where anyone can drive to the northern or southern highwall. Haul roads within the problem area lead to the water body. Graffiti is painted on the highwalls above the water bodies. Garbage is being dumped in the pits and throughout the entire problem area. ATV enthusiasts were seen four wheeling in the problem area. Many residents of Cranberry Ridge were very inquisitive as to what DEP was doing in the area. They were very friendly and extremely eager to see the pits reclaimed. If anyone drives or falls from the highwall, he or she could drown or be seriously injured. See justification note 2.

AMLF #11 & 12 (DH): The pits are located 200' west of Church Street behind Double L Auto Sales. The Beech Street playground lies 150' north of the pit and is separated from the pit by railroad tracks. Approximately 150' x 45' of vertical fractured, dangerous highwall exists along the northern side of each pit. Large quantities of garbage have been dumped into AMLF #12 from its eastern side. Drainage from a large concrete pipe at the southern corner of AMLF #12 drains into the pit and percolates into the mines at the pit's northern side. Well worn trails, graffiti and the highwall, and the large amount of garbage in the pit indicate heavy use of this area. See justification note 1.

AMLF #19 (VO): The 6' x 8' opening is located along the northern side of AMLF #12. The opening dips steeply downward an unknown distance. Graffiti and litter within the opening indicated site visitation. See justification note 1.

Justification note 1: Jim Boyle, of the Greater Hazleton Chamber of Commerce, feels the pit and mine opening are very hazardous. He cites heavy use of this area by children and dumpers, and the proximity of the beech street playground. His worst fear is that a child will fall into one of these hazards and be seriously or fatally injured.

Justification note 2: Local residents that were interviewed in this area were not aware of the dangers associated with these pits (AMLF #6 and #2). This is a problem because people will not be cautious in these areas and will continue to frequent them. Based on the available facts, and in the interest of public health and safety, Mr. M. R. Ferko, district engineer, PA DEP, certifies that the two (2) aforementioned AML features should be reclaimed as priority 2 problems.

Justification note 3: William Gentilesco, chief engineer of the City of Hazleton, was interviewed regarding the environmental and safety problems related to this problem area. He expressed knowledge of property owner cooperation over reclaiming these very dangerous abandoned mine features. He also stated his concern over the dumping of garbage in the pits, as well as someone drowning or falling from the highwall.

Estimated High Priority Costs:
Estimate # PA3213-A including AMLF #2 (DH), #4 (DH), #6 (DH, HWB), #12 (DH), #13 (DH), #19 (VO):

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Unreclaimed Lower Priority Problems (2 of 20):
AMLF #17 (PI): Located 500' west of AMLF #14, pit is 30' deep, 100' long and is 90% vegetated. A small stream enters pit from south and runs into collapsed highwall on north side.

AMLF #18 (PI): Located 100' west/southwest of AMLF #17. Pit is 15' deep, 100' long and is 70% forested.
**Kis-Lyn West [4120]**

**Summary:**
- Municipality: Butler Township
- Sub-Watershed: Little Nescopeck Creek
- Mine Pool Basin: Jeddo Complex
- Problem Area Size: 19.212 acres
- Reclamation Status: 0 of 2 = 0%
- Map Scale: 1:10,000

USGS Reported Discharge and Impaired Waters on the 303 (d) List: Jeddo Mine Complex [65 cfs] – a mine drain constructed to dewater underground mines which drains to Tributary 28147 to Little Nescopeck Creek impairing 5.91 miles of the Little Nescopeck Creek with Abandoned Mine Drainage metals (1998) and pH (1996). The Little Nescopeck Creek joins with the Nescopeck Creek and continues to be the sole contributor to abandoned mine drainage pollution (2002) to 8.76 miles of the Nescopeck Creek until the confluence with Black Creek where other sources combine to continue to pollute an additional 8.92 miles of the Nescopeck Creek to the confluence with the Susquehanna River.

**Narrative:**

**Update History:**

| ORIGINAL PADAFO | FILE | AMLF #1-2 | 03/1982 |
| AIELLO/WOLFE | W-B SITE VISIT | AMLF #1-2 | 09/16/1986 |
| HEWITT | EPCAMR AERIAL | AMLF #1-2 | 10/05/2006 |

Unreclaimed Lower Priority Problems (2 of 2):

AMLF #1 (P): This portal is known as the Jeddo Mine Tunnel and is located in Drums, PA. It was an engineering marvel of its time which drained ~11 sq. mi of underground deep mines in 4 different basins. The opening is approximately 800' northeast of Short Street. Access is via either Short Street or via the old abandoned Wilkes-Barre / Hazleton railroad bed which is located at the intersection of the Kis-Lyn Road and Dean Street. This feature measures approximately 8' x 6' to water level. The opening is protected by a steel bar gate covering it's entire face. Vegetation around the opening is 80-90%.

AMLF #2 (WA): This AMD discharge originates from the Jeddo Mine Tunnel (AMLF #1). USGS reports a water discharge from the Jeddo Mine Tunnel with a flow of 29,000 gpm, a pH of 3.6 and an iron concentration of 6 mg/l. Water drains into Little Nescopeck Creek which flows to the Nescopeck Creek. At time of investigation, the approximate gpm was 29,000. There was also, at this time, a very high concentration of silt in water (85-90%) was present at the tunnel outlet and on the banks for approximately 150'. Further inspection down stream showed no further evidence of silt content. Water was clear. However, recent reports by the public show silt in the water as far downstream as the confluence of the Little Nescopeck Creek and the Nescopeck Creek.

Please refer to Appendix B: Water Treatment Scenarios from AMD Treat.
**Hollars Hill South [0493]**

**Summary:**
- Municipality: Hazle Township
- Sub-Watershed: Cranberry Creek
- Mine Pool Basin: Hazleton Basin
- Problem Area Size: 135.554 acres
- Reclamation Status: 0 of 7 = 0%
- Map Scale: 1:10,000

Impaired Waters on the 303 (d) List: Cranberry Creek flows through site, but is affected by Flow Alterations and was listed in 2002


**Narrative:**

**Update History:**

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Unreclaimed High Priority Problems (7 of 7):

AMLF #1 (DH): The pit is approximately 350' long, 400' wide and 180' deep. Loose, unconsolidated material slopes steeply to the vertical highwall along the northern side. The pit contains cars, tires and garbage which were dumped from the eastern and northern sides of the pit. An access road is located along the eastern and northern sides of the pit. The road is blocked but the area is still accessible to motorcycles and ATV's as indicated by numerous tire tracks. The pit contains 600' of dangerous highwall along the eastern and northern sides. See justification note.

AMLF #2 (DH): The pit is located 250' north of AMLF #1. The pit is 450' long, 200' wide and 100' deep. Loose, unconsolidated spoil material slopes to the vertical highwall along the northern side. The southern side is steep spoil material. An access road is located between this pit and AMLF #1. The pit consists of 800' dangerous highwall along the northern and southern sides. The well worn access road and litter about this area indicates site visitation. See justification note. This feature is scheduled to be reclaimed under OSM 40(0493)101.1, the project has not yet been awarded.

AMLF #3 (DH): The pit is 200' west of AMLF #1. The pit is 1000' long, 300' wide, and 150' deep. An access road is located along the northern side of the pit where 450' of dangerous highwall is accessible. The eastern end of the pit is accessible to vehicles and garbage dumped in the pit is noted here. Refuse material located north of the pit is being eroded into the pit. The dangerous highwall along the northern side of the pit consists of vertical highwalls and steep, unconsolidated refuse material. Motorcycle and ATV tracks were noted along the northern and eastern slopes of the pit. See justification note. This feature is scheduled to be reclaimed under OSM 40(0493)101.1, the project has not yet been awarded.
AMLF #4 (DH): The pit is 150' north of AMLF #3 as shown on the map. It is 300' long, 300' wide, and 100' deep. Refuse material around the pit is sliding into the pit. A small section of rock highwall is exposed along the southern side. An access road is located along the southern side of the pit. Numerous tire tracks and worn trails around the pit indicate the area is heavily traveled by motorcycles and ATV's. The pit should be backfilled to eliminate the dangerous sidewalls. Total length of highwall surrounding the pit is 1200' x 100' in depth. See justification note.

AMLF #5 (DH): The pit is 1000' long, 300' wide, and 110' deep. An access road within 30-60' of the southern side parallels the vertical to near vertical dangerous highwall. There is 900' of dangerous highwall. Garbage was noted in the pit's western end. A well worn path leads to the pit's bottom at the eastern end where a portion of the exposed coal seam is being bootlegged. Large piles of loose, unconsolidated spoil material slope into the pit along the northern side. Numerous ATV and motorcycle tracks were noted along the access road to the south of the pit.

Justification note: The local residents interviewed in this area were not aware of the hazards associated with these features. This is a problem since people will continue to frequent this area and will not exercise caution. Based on the available facts and information, and in the interest of public health and safety, Mr. M. R. Ferko, district engineer, DEP Bureau of Abandoned Mine Reclamation, certifies that the five (5) aforementioned AML features should be reclaimed as priority 2 problems.

AMLF #6 (DH): The pit is located approximately 250' south of the J. S. Hale garage in Hollars Hill. A road goes behind the building, through a small junkyard to the northern wall of the pit. The pit is also 1500' north of Cranberry Ridge. A haul road between the pit and Cranberry Ridge brings you into a network of haul roads that leads you into the south end of the pit. The dimensions are 600' x 300' x 50-70' deep, with bank material 30-40' high directly on top of the northern, western and northeastern walls. There is approximately 75' of dangerous highwall on the northeastern wall, 100' of dangerous highwall on the northern wall where people are dumping, and 100' of dangerous highwall on the western wall. All areas of highwall are highly fractured and near vertical. All areas without highwall are moderately dipped unconsolidated material. Visitation is evident by tires, old cars, trash within the pit, and gun shells, trash, and ATV tracks around the southern and western ends of the pit. This feature is scheduled to be reclaimed under OSM 40(0493)101.1, the project has not yet been awarded.

AMLF #7 (HEF): This feature appears to be a structure once used as a coal storage facility. It consists of one central wall approximately 20' in height with five bays, 16' in width, located in the middle of the structure. Both the east and west ends of this structure are extremely deteriorated ranging from completely missing portions to 50 percent
section loss of the concrete structure. It is located at the northmost edge of problem area along state route 654. This feature is scheduled to be reclaimed under OSM 40(0493)101.1, the project has not yet been awarded.

Estimated High Priority Costs:
Estimate # PA0493-A including AMLF #1 (DH), #2 (DH), #3 (DH), #4 (DH), #5 (DH), #6 (DH):

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<th>UNIT</th>
<th>UNIT COST</th>
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</tr>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>600X180+800X100+</td>
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<td>100X60+100X60</td>
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</tr>
<tr>
<td>SAY</td>
<td>$2,500,000</td>
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**Grape Run Reservoir [3724]**

**Summary:**
- Municipality: Hazle Township
- Sub-Watershed: Cranberry Creek
- Mine Pool Basin: Hazleton Basin
- Problem Area Size: 246.253 acres
- Reclamation Status: 0 of 6 = 0%
- Map Scale: 1:10,000

Impaired Waters on the 303 (d) List: Cranberry Creek flows through site, but is affected by Flow Alterations and was listed in 2002

**Narrative:**

Update History:

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<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>AMLF #</th>
<th>Notes</th>
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<tr>
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<td>ORIGINAL PADAFO FILE</td>
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<td>04/09/86</td>
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<td>04/09/86</td>
<td>HYRB/PRUTZMAN W-B SITE VISIT</td>
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<tr>
<td>04/24/89</td>
<td>ORLANDINI W-B SITE VISIT</td>
<td>#1-4</td>
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Recent Mining in / near the Problem Area:
Mine drainage permits that may have affected this problem area:
No. 40950201 - dated 9/28/95, submitted by Skytop Coal, Inc.

Unreclaimed Lower Priority Problems (6 of 6):
AMLF #1 (PI): A series of pits extending 4000' to the east from the adjacent Harwood problem area (2112). An access road from Harwood Mines gives easy access to this area. Area is 95% vegetated.

AMLF #2, 3, 4 (PI): The shallow pits are 600', 800', and 1000' long respectively, and 65% vegetated. Highly weathered spoil piles have eroded into pits leaving large deposits of fines within the pits’ bottoms.

AMLF #5 (SA): Spoil piles associated with pits are 40% vegetated and consist of loose, unconsolidated material which is erosion prone.

AMLF #6 (WA): This is an old silt basin approximately 250' x 200' that is unvegetated. Thick sludge-like fines line the basin which contains shallow water with unknown water quality.. There is an abundance of fines around the basin. An abandoned haul road lies to the east of this area. This area is easily accessible and used by dirt bikes, ATV’s, and target shooters. A graded unvegetated spoil area is located 500' east of AMLF #6.
**Hollars Hill [3725]**

**Summary:**
- Municipality: Hazle Township
- Sub-Watershed: Cranberry Creek
- Mine Pool Basin: Hazleton Basin
- Problem Area Size: 445.683 acres
- Reclamation Status: 1 of 16 = 6%
- Map Scale: 1:12,000

Impaired Waters on the 303 (d) List: Cranberry Creek flows through site, but is affected by Flow Alterations and was listed in 2002.

Infiltration Points Identified by the SRBC: This problem area contains Cranberry Creek #1 (SRBC Pub. #204 pp 76). Cranberry Creek #1 refers to AMLF #12 & #13 which look to be unclaimed.

**Narrative:**

**Update History:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Notes</th>
<th>Date</th>
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<tr>
<td>ORIGINAL PADAFO</td>
<td>FILE</td>
<td>AMLF #1-13</td>
</tr>
<tr>
<td>HYRB/WILLIAMSON/GILLEN</td>
<td>W-B SITE VISIT</td>
<td>AMLF #1-16</td>
</tr>
<tr>
<td>HYRB/WILLIAMSON/GILLEN</td>
<td>W-B SITE VISIT</td>
<td>AMLF #3, 14-16</td>
</tr>
<tr>
<td>DAVE YACHERA</td>
<td>INTERVIEW</td>
<td>AMLF #3, 14-16</td>
</tr>
<tr>
<td>PAT KELLY</td>
<td>INTERVIEW</td>
<td>AMLF #3, 14-16</td>
</tr>
<tr>
<td>WOLFE/LYNCH</td>
<td>W-B SITE VISIT</td>
<td>AMLF #1-13</td>
</tr>
<tr>
<td>STEPANSKI</td>
<td>W-B SITE VISIT</td>
<td>AMLF #3,14,15</td>
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<td>STEPANSKI</td>
<td>OWNERSHIP SEARCH</td>
<td>AMLF #3,14,15</td>
</tr>
<tr>
<td>HEWITT</td>
<td>EPCAMR SITE VISIT</td>
<td>AMLF #7-8, 11</td>
</tr>
</tbody>
</table>

Current Mining in the Problem Area:
Jeddo Highland Coal Co. – Cranberry Colliery Bank [Site ID 445323, Facility ID 470326] - an active refuse reprocessing operation. Looks to be located on AMLF #13; however it is actually across the road on AMLF #8.

Recent Mining in the Problem Area:
Mine drainage permits that may have affected this problem area:
No. 40940301 - dated 4/26/94, submitted by No. 1 Contracting Corp.

General Description:
The large spoil area varies in composition. The central part appears rocky and 40% vegetated, it consists of numerous small pits and banks. The west portion surrounding the strip mines appears most completely recovered by vegetation. Spoil site 8 has no vegetation. It may be utilized as fill in the strip mining activities immediately adjacent. All of the pits are 60-80% revegetated with forest cover and are surrounded by dense forest. AMLF #12 and #13 are settling basins that appear to have been dry at time of photo acquisition.

Reclaimed Lower Priority Problems (1 of 16):
AMLF #8 (SA): This spoil area and silt basin is under permit by Pagnotti. Upon EPCAMR site visit, spoil area had been partially reclaimed and the northern portion had
a rock lined channel to convey Cranberry Creek through the site and under Route 924. The southern portion was still under reclamation.

Unreclaimed High Priority Problems (4 of 16):
AMLF #3 (DH): This pit is 2000' southwest of West Hazleton. It is accessible via haul roads from west Hazleton and Route 924. The pit contains 300' of dangerous highwall at its west end. The highwall is along the pit's north side and is abutted by an access road. Dumping occurs here. The highwall slopes steeply to the pit's bottom 40' below. See justification notes 1 & 2.

AMLF #14 (VO): The subsidence opening is located 100' north of AMLF #3's west end along a well worn trail used by hikers and ATV's. The opening is 4' in diameter and drops vertically 20' at which point it dips to the southeast and continues an unknown distance. The void is not readily apparent due to the terrain and vegetation. See justification notes 1 & 2.

AMLF #15 (VO): The opening is located 35' east of AMLF #14 within a 30' diameter subsidence area. The opening is 2' high and 6' wide and extends downward to the south an unknown distance. A rope was leading into the opening. This area is frequented by hunters, hikers and ATV's. See justification notes 1 & 2.

AMLF #16 (P): The open portal is approximately 500' south of the Lehigh Valley Railroad along a power line. The 5' x 10' timbered opening dips to the north and extends an unknown distance. It is accessible via an access road from the railroad. Signs of site visitation included litter within the opening and numerous tracks on the access road. See justification notes 1 & 2.

Justification note 1 & 2: Dave Yachera (449 Ridge Ave., West Hazleton, PA) showed investigators the portal and vertical openings. According to Mr. Yachera, this area is heavily traveled by motorcyclists and local youths. Mr. Yachera would like to see this area reclaimed before someone is seriously hurt. Pat Kelly (340 East Kiefer Ave., Hazleton, PA) feels the pit and mine openings are very dangerous. She stated that this area is a popular place for motorcyles, ATV's, illegal dumpers and teenage parties. She fears someone will drive over the highwall or fall in one of the openings.

Estimated High Priority Costs:
Estimate # PA3725-A including AMLF #3 (DH), #14 (VO), #15 (VO), #16 (P):

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT</th>
<th>UNIT COST</th>
<th>TOTAL COST</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELIMINATE HIGHWALL (300 X 40)</td>
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<td>HLP</td>
<td>$5</td>
<td>$60,000</td>
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<tr>
<td>SEAL OPENING</td>
<td>3</td>
<td>EA</td>
<td>$4,000</td>
<td>$12,000</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
<td>$72,000</td>
</tr>
<tr>
<td>SAY</td>
<td></td>
<td></td>
<td></td>
<td>$70,000</td>
</tr>
</tbody>
</table>

Unreclaimed Lower Priority Problems (11 of 16):
AMLF #1 (SA): Several spoil piles scattered about the problem area are 10-30' in height and 20-70% vegetated.
AMLF #2 (PI): The pit is accessible via haul road from West Hazleton. The pit is actually a series of cuts 15-25' deep and 60-80% vegetated. Area is a dump site.

AMLF #4 & 5 (PI): The pits are 500' long, 90' wide, and 15-20' deep. They are heavily vegetated.

AMLF #6 (PI): Pit is 500' x 120' x 15-20' deep. It is 70% vegetated.

AMLF #7 (PI): Long, narrow pit is 1100' x 80' x 20'. It is 70% vegetated. There is a large pit between this pit and AMLF #6 and 11 that has not been delineated. Locals refer to it as the Old Hazleton Dump.

AMLF #9-10 (PI): The pits are approximately 250' x 90' x 15'. They are 75% vegetated.

AMLF #11 (PI): This pit is 400' x 160' x 25-30' deep. It is heavily vegetated. Access road along west end is well worn. The pit is an illegal dump site.

AMLF #12 & 13 (SB): The silt basins are approximately 13 and 2 acres, respectively. They are sparsely vegetated.
**Harwood [2112]**

**Summary:**
- Municipality: Hazle Township
- Sub-Watershed: Cranberry Creek
- Mine Pool Basin: Hazleton Basin
- Problem Area Size: 79.657 acres
- Reclamation Status: 0 of 4 = 0%
- Map Scale: 1:10,000

Infiltration Points Identified by the SRBC: This problem area contains Cranberry Creek #6 (SRBC Pub. #204 pp 81). Cranberry Creek #6 refers to AMLF #4 and remains unreclaimed.


**Narrative:**

Update History:

| ORIGINAL PADAFO FILE | AMLF #1-4 | 04/81 |
| NAVITSKY/CARRILL/ | |
| KISH/ROCCOGRANDI W-B SITE VISIT | AMLF #1-4 | 10/03/84 |
| ROCCOGRANDI/MACBLANE W-B SITE VISIT | AMLF #1, 2, 4 | 04/23/86 |
| BEN NAHAY INTERVIEW | AMLF #2 | 04/23/86 |

Recent Mining in the Problem Area:
Mine drainage permits that may have affected this problem area:
No. 40950201 - dated 9/28/95, submitted by Skytop Coal Inc.

Unreclaimed High Priority Problems (2 of 4):
AMLF #2 (DH): The dangerous highwall is located in a pit which measures 750' x 650' x 100' (more or less) deep, and is revegetated to 50%. It is located about 250' to the south of the Ben Nahay's residence, 23 Old Street, Harwood. The slopes are moderate to steep and unstable. Several small spoil piles about 30' high are located within the bottom of the pit. The southern edge of the pit is lined with spoil approximately 30' high and 50% vegetated. Approximately 200' west of the pit is a ball field. Easy access to pit permits residential garbage to be deposited in the western end and is visually estimated to contain about 3500 cubic yards of waste. Mr. Ben Nahay, 23 Old Road, stated that he had chased violators of dumping ordinances, as well as children from this feature for fear one of them may fall and hurt himself. The pit is immediately to the rear of his home and property. His concern is regarding the health and safety of individuals exposed to the industrial residual waste and that rats have been observed due to the attraction of garbage in the dump. Reclamation of the problem should include backfill, resurface, and establish vegetative cover using available spoil to reclaim the abandoned pit.

AMLF #4 (VO): This was previously justified in the standardized data. A vertical opening is located 1500' south of Harwood and is immediately adjacent to the town's baseball field. The opening measures 15' x 20' and slants to the northeast at 60 degrees. A stream flows into the opening. The opening's proximity to the town and ball field make it particularly hazardous. The opening goes down 15' (more or less) and continues
out of sight. A small stream flows into the opening which was diverted to this place by the construction of Route 81. There are small pools within 50' of the vertical opening. John Kuba expressed concern about the opening and reported additional openings under the pools which served as airways and manways. Most of the overflow water from the pools flows into the vertical opening described near AMLF# 1. Complete reclamation of the problem will need to include rechanneling the stream, sealing and backfilling the openings.

Estimated High Priority Costs:
Estimate # PA2112-A including AMLF #2 (IRW), #4 (VO):

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<tr>
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<td>CY</td>
<td>$10</td>
<td>$35,000</td>
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<td>SEAL OPENING</td>
<td>1</td>
<td>EA</td>
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<td>$5,000</td>
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<tr>
<td>TOTAL</td>
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<td></td>
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<td>$40,000</td>
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<tr>
<td>SAY</td>
<td></td>
<td></td>
<td></td>
<td>$40,000</td>
</tr>
</tbody>
</table>

Lower Priority Problems (2 of 4):
AMLF #1 (S): This was previously justified in the standardized data. The Benedict Nahay property has subsidence problems. Every year he adds cement to his collapsing sidewalk. During the winter months vapors issue forth at several spots in his backyard. Determine subsidence potential at Harwood by exploring subsurface by map and drilling.

AMLF #3 (SA): The spoil area near vertical opening has no vegetation and the 30' slopes are very loose. The area surrounding the pit varies in height and is 60% vegetated. 5 adjacent acres have been graded and made into a baseball field, reclaiming about 1/4 of this feature. Small pools, unmapped because of relative size, are located in the spoil area near the vertical opening. Water quality is unknown.
Humboldt East [2057]

Summary:
Municipality: Hazle Township
Sub-Watershed: Cranberry Creek
Mine Pool Basin: Hazleton Basin

Problem Area Size: 21.554 acres
Reclamation Status: 9 of 9 = 100%
Map Scale: 1:10,000

Narrative:

Current Mining in the Problem Area:
Bonner Shale Co. - Harwood Mine [Site ID 494046, Facility ID 470326] – an inactive refuse reprocessing operation. Looks to have already reclaimed much of the problem area in cooperation with CANDO.

General Description:
This problem area covered approximately 21.5 acres in Hazle Township, Luzerne County, Pennsylvania. It is situated south of State Route 924 behind Barletta's Construction and adjacent to Interstate 81. The area problems were mainly dangerous highwalls. There were, surrounding pits, spoil piles of loose unconsolidated material, in some cases, making dangerous highwalls even higher. There were 9 features including pits (PI), dangerous highwalls (DH), spoil areas (SA), vertical opening (VO), and mine drainage (WA). One of the DH was located within 200 feet of a local residence. There is a recreational area adjacent to the site on the south and evidence of site visitation throughout the site. This site has been reclaimed as a part of the Can Do Humboldt Industrial Park, Humboldt East and is part of a 52.7 acre commercial development.

Reclaimed High Priority Problems (5 of 9):
AMLF #1 (DH): This feature located approximately 1200' southeast from the entrance to Barletta's Construction on SR-924 in Hazle Township, was a pit measuring 570' x 420' x 15'-90' deep. This feature is categorized as a priority 1 because it lies within 300' from a local residence. This pit can be easily accessed by following Barletta Road through Barletta's Construction and to the south. Piles of spoil material line the southeastern edge of the pit. There is dangerous highwall (1000' x 53', 45-80 degree slope) from the north rim of the pit around to the west and ending on the southern end of the pit. Evidence of visitation was found in trash and ATV tracks near the pit. Someone walking or riding through the area could fall from the top of the highwall and sustain serious injuries or even be killed.

AMLF #2 (DH): This feature, located approximately 300' southeast of AMLF #1 and 250' west of I-81, was a pit measuring 210' x 200' x 60' deep. There is dangerous highwall (600' x 60', 45 to 65 degree slope) completely surrounding the pit. There is a vertical opening, AMLF #7, at the bottom of the northwestern end of the pit. Evidence of site visitation was found in trash dumped near and in the pit. Someone walking in the area could be killed or seriously injured falling from the top of the highwall.
AMLF #3 (DH): This feature, located just north of AMLF #2 and 250' west of I-81, was a pit measuring 100' x 90' x 20' deep. There is dangerous highwall (250' x 20', 50 to 60 degree slope) completely surrounding the pit. Evidence of site visitation was found in trash dumped near and in the pit. Someone walking in the area could be killed or seriously injured falling from the top of the highwall.

AMLF #7 (VO): This feature, located in the bottom of the northwestern end of AMLF #2, was a vertical opening measuring about 3' x 5' straight down with an unknown depth. Evidence of site visitation was found in trash dumped near the opening in AMLF #2. Someone walking in the area could fall into the opening and be killed or seriously injured.

AMLF #9 (DH): This feature, located approximately 50' to the northeast of AMLF #3, was a pit measuring 50' diameter x 10'-30' deep. There is dangerous highwall (40' x 20', 65 degree slope) on the northeastern side of the pit. Evidence of site visitation was found in trash dumped near and in the pit. Someone walking in the area could be killed or seriously injured falling from the top of the highwall.

Estimated High Priority Costs:

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QUANTITY</th>
<th>UNIT COST</th>
<th>TOTAL COST</th>
</tr>
</thead>
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<td>Eliminate DH #2</td>
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<tr>
<td>Close VO</td>
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Reclaimed Lower Priority Problems (4 of 9):
AMLF #4 (PI): This feature, located approximately 100' west of AMLF #2 just below the grade of Barletta Road across from the electric substation, was a pit measuring 120' x 75' x 10'-15' deep. The feature covers an area of about .25 acres. This pit is aesthetically undesirable and unnatural.

AMLF #5 (SA): This feature, located just to the south of AMLF #2 and adjacent to I-81, was a series of spoil piles measuring 250' x 40'-50' x 50'-60' high. They cover an area of approximately 0.30 acres. This spoil area was aesthetically undesirable and unnatural. Runoff from these piles could become acidic and pollute nearby surface water or groundwater.

AMLF #6 (WA): This feature, located near the top of the highwall on the southeastern end of AMLF #2, was a seep discharging water at about 10 gpm. The water runs down into AMLF #2 finally disappearing into AMLF #7, vertical opening. This water was routed here due to the mining activities that have taken place in the area. The water could contribute to acid mine drainage problems in the local watershed. This site may also be connected via subsurface mines to the ponds in Southeast Humboldt (PA3719).

AMLF #8 (SA): This feature, located near the eastern and southern edges of AMLF #1 and adjacent to I-81, was a series of spoil piles measuring 150' x 50' x 40' high. They cover an area of approximately 0.20 acres. This spoil area is aesthetically undesirable
and unnatural. Runoff from these piles could become acidic and pollute nearby surface water or groundwater.

Estimated Lower Priority Costs:

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<thead>
<tr>
<th>ITEM</th>
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</table>
Southeast Humboldt [3719]

**Summary:**
Municipality: Hazle Township
Sub-Watershed: Cranberry Creek
Mine Pool Basin: Hazleton Basin
Problem Area Size: 197.419 acres
Reclamation Status: 2 of 12 = 16%
Map Scale: 1:10,000

**Narrative:**

Recent Mining in the Problem Area:

Mine drainage permits that may have affected this problem area:
No. 40950201 - dated 9/28/95, submitted by Skytop Coal Inc.

Reclaimed Lower Priority Problems (2 of 12):
This site has been reclaimed as a part of the Can Do Humboldt Industrial Park, Humboldt East. AMLF #02 (PI) and 03 (SA) were reclaimed and currently Williams Energy sits on the site as seen in aerial photos.

Unreclaimed Lower Priority Problems (10 of 12):
AMLF # 1, 4-7, 11-12 (HWB): 7 flooded pits are found in this problem area. Water samples were taken from the 3 largest pits. The westernmost pit (AMLF #12) had a pH of 4.9 and 0.5 mg/l iron. The middle pit (AMLF #01) measured pH 4.4 and 0.5 mg/l iron. The easternmost pit (AMLF #07) measured pH 5 and 5 mg/l iron. All samples were taken in winter from pits that had a layer of ice on the surface. No discharge was noted upon this site visit. The flooded pits appear silt laden on aerial photos and AMLF #12 had 25 degree banks and moderately vegetated slopes. During an EPAMR site visit, orange water was flowing into this problem area and exiting to the adjoining South Humboldt Reservoir problem area (PA3718). The site spans a watershed divide between Nescopeck Creek and Catawissa Creek Watersheds.

AMLF #8 (PI): The pit is about 5 acres. Approximate dimensions are 1200' long x 15' deep. It is 100% vegetated.

AMLF #9 (PI): The pit is about 4 acres. Approximate dimensions are 900' long x 15' deep. It is 100% vegetated.

AMLF #10 (SA): The spoil area is approximately 12 acres with an average height of 15'. There is an estimated 286,600 cubic yards of material and is 70% revegetated. AMLF #8, 9 & 10 are contained within a 68 acre Keystone Opportunity Zone section of the Humboldt Industrial Park.
**Stony Creek [3726]**

**Summary:**
- Municipality: Hazle Township
- Sub-Watershed: Stony Creek
- Mine Pool Basin: Stony Creek Basin
- Problem Area Size: 84,857 acres
- Reclamation Status: 0 of 5 = 0%
- Map Scale: 1:10,000

USGS Reported Discharge and Impaired Waters on the 303 (d) List: Stony Creek Mine Seepage [4 cfs] & Stony Creek Mine Pool Overflow [0.3 cfs] – drains to Stony Creek impairing .77 miles of Stony Creek and .5 miles of Cranberry Creek with Abandoned Mine Drainage metals (2002) and pH (2002) until the confluence with Black Creek which is already impacted by several other AMD Sources.

**Narrative:**

Update History:

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Recent Mining near the Problem Area:

Mine drainage permits that may have affected this problem area:


General Description:

This problem area is adjacent to the north side of the Humboldt Industrial Park and consists of at least 3 water filled pits that discharge mine drainage to Stony Creek. Currently, the Coca Cola Company owns 3 lots only about 1,500’ away.

Unreclaimed Lower Priority Problems (5 of 5):

AMLF #1 (PI): The long, narrow water filled pit is approximately 400' long, 80' wide, and 10' deep to the water.

AMLF #2 (PI): The pit is 1500' long, 250' wide, and 15-30' deep to the water. Loose, unconsolidated spoil piles 30-50' high line the pit's north side. Large, blocky spoil slopes into the pit's south side. This area is 20% vegetated.

AMLF #3 (PI): This is actually two parallel pits divided by a haul road. The pits are approximately 500' long, 100' wide, and 10-20' deep to the silt laden water. A regraded area with light vegetation covers 15-20 acres to the east of the problem area.

AMLF #4 (PI): Strip pit overflow is discharging 135 gpm of water to stony creek according to USGS. Reported pH is 4.2 with less than 1 mg/l iron.

AMLF #5 (WA): According to USGS, the Stony Creek Mine is "seeping" 1,796 gpm. The flow appears to discharge to Stony Creek. USGS reports pH as 4.4 with 1 mg/l iron.
**Black Ridge [1613]**

**Summary:**

Municipality: Sugarloaf and Hazle Townships  
Sub-Watershed: Black Creek  
Mine Pool Basin: Tomhicken Basin

Problem Area Size: 210.967 acres  
Reclamation Status: 1 of 3 = 33%  
Map Scale: 1:10,000

USGS Reported Discharge: Black Ridge Mine Pool Overflow [1.2 cfs] – drains to Black Creek

Impaired Waters on the 303 (d) List: Black Creek flows through site, but is affected by mine drainage metals and combined sewer overflow suspended solids (1996). Later it was listed for pH impairment (2002).


**Narrative:**

Update History:

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<td>STEPANSKI W-B SITE VISIT</td>
<td>AMLF #1-3</td>
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<td>07/29/04</td>
<td>SWARTZ UPDATE</td>
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General Description:

This is an isolated strip mine area paralleling the Sugarloaf and Hazle Township line. Waste Management of Hazleton has cleared and is utilizing the land immediately west and abutting this problem area as a land fill site.

Reclaimed High Priority Problem (1 of 3):

AMLF #3 (DH): This feature has been reclaimed under project number OSM 40(1613)101.1, Black Ridge. The project was completed on 1/3/03 by E.M. Brown Incorporated of Clearfield, PA, at a cost of $428,158.52. The following is a breakdown of funding sources for the project:

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<th>Source</th>
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<tr>
<td>OSM grant funds</td>
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AMLF #3 (DH): This strip mining pit once contained dangerous highwalls on both sides of the pit. The pit measured approximately 2,000’ long, 350’ wide, with an average depth of 100’. The northern highwall was vertical rock and the southern wall was unconsolidated soil and some rock that is on a 35 degree angle. Two water bodies were located in the eastern bottom end of the pit. The water bodies measure approximately 300’ long, 100’ wide, with an unknown depth. The pit was located approximately 200 feet south of SR 3020 and 400 feet north of a railroad track. The pit was surrounded by unconsolidated spoil and was approximately 70% vegetated.
Unreclaimed High Priority Problems (2 of 3):

AMLF #1, #2 (HWB, DH): These features are a series of water-filled strip mining pits located adjacent to the southern side of a Conrail railroad line. The water bodies within this mined area vary from 100 feet to 600 feet in width, approximately 5,000 feet in length, with unknown depths. The dangerous highwall located in the pits totals approximately 3,900’ in length and slopes at an angle of 35 degrees or more, with an average depth of 30’. The pits are bordered on all sides by loose, unconsolidated material up to 30 feet in height. The pits are approximately 80% vegetated. Water quality in the three largest eastern water bodies appears to be relatively good due to the presence of fish and aquatic insects. The western water body appears clear, but no aquatic life was visible. This waterbody outlets to the south into a smaller water body, with orange staining in the eastern portion. These water bodies are believed to be acid mine drainage not capable of supporting aquatic life. USGS reports a discharge of 538 gpm of water to Black Creek. Reported pH is 3.9 with less than 1 mg/l iron. Some reclamation has been completed in the middle of the pit. Approximately 600 feet of the pit was reclaimed, but no one knows who did the reclamation work. Site visitation is evident by the presence of garbage, spent gun shells and various tracks. AMLF's #1, 2 and 3 were scheduled for reclamation under the RAMP program; however, no earthwork activity had been started as of 7/19/94.
**Humboldt North [0263]**

**Summary:**
Municipality: Hazle Township  
Sub-Watershed: Stony Creek and Cranberry Creek  
Mine Pool Basin: Hazelton Basin  
Problem Area Size: 322.32 acres  
Reclamation Status: 13 of 14 = 93%  
Map Scale: 1:12,000

Impaired Waters on the 303 (d) List: Stony Creek flows through site, but is affected by abandoned mine drainage pH and metals and was listed in 2002

Infiltration Points Identified by the SRBC: This problem area contains Cranberry Creek #3, #8 & #9 (SRBC Pub. #204 pp 78,83,84). #8 & #9 refer to AMLF #1 & #2 respectively and have been reclaimed. #3 refers to AMLF #10. This feature may also be reclaimed.


**Narrative:**

Update History:

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<td>JEFF KOSTIC</td>
<td>BMR</td>
<td>AMLF #1,3,5,6,7</td>
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Reclaimed High Priority Problems (13 of 14):
AMLF #2 (P), #11 (DH, HWB), #12 (DH), #13 (HEF): These features have been reclaimed as a result of the following project funded under the OSM 1997 Program Grant:

- OSM 40(0263)101.1
- Backfilling strip pits
- Humboldt North
- Hazle Township, Luzerne County
- The work was completed by Napcon Enterprises at a cost of $1,082,936.20 and affected 65.8 acres. The final inspection was held on July 1, 1999.
AMLF #2 (P): This Priority 1 feature was the Humboldt No. 1 slope located 240 feet south of state highway route 924 in Humboldt. The slope opening measured 12' x 8' and dipped northerly at 35 degrees. Various concrete, metal and wood debris was at the surface and within the void. The slope has been backfilled and mounded at the surface. This feature was erroneously reported as having been backfilled by the property owner in the 8/2/94 NALIS inventory report. It subsequently was backfilled under Project No. OSM 40(2063)101.1.

AMLF #11 (DH,HWB): This Priority 2 feature was located 2,200' northwest of Humboldt and 1,700' east of the Humboldt reservoir. The triangular shaped pit measured about 700' x 100-400' x 30' deep to the water's surface. Sidewall slopes consisted of both consolidated and unconsolidated material having an average slope of 60 degrees, with a total of 1,400 feet of highwall along the north and south sides. A water body used for recreation was within the pit and had an average depth of about 10 feet with a measured maximum depth of 22 feet. The pit has been backfilled.

AMLF #12 (DH): This Priority 2 feature pit was situated 100 feet to the east and was a continuation of AMLF #11. It was a highly irregular series of pits and spoil piles within a larger pit generally measured as 1,700' long x 300' wide at the west end and 700' wide at the east end. A total of about 5,000' of dangerous highwall having slopes of 45-80 degrees with depths of 25-80' existed within the area. The pits have been backfilled and the entire area regraded.

AMLF #13 (HEF): This Priority 1 feature was a cluster of 2 small buildings and a weigh scale located 170' south of state highway route 924. Work involved the demolition and removal of the structures, including the removal and disposal of asbestos and the backfilling of the scale vault.

* * * * * * * * * * * * * * * * * * * * * * *

AMLF #3 (P): The 8' x 15' opening is located in the western portion of a small pit approximately 800' west of J. Callavini Leasing and 350' north of route 924. A dirt road along the south side of the pit provides access to the area. A large amount of residential garbage is around and within the opening which dips to the north and extends an unknown distance. A small amount of water is draining into the opening. See justification notes #1 and #2.

AMLF #8 (P): This portal is located within a shallow strip pit 500' north of route 924 and 125' north of AMLF #3 (p). The opening of this portal measures 5' x 15' and dips steeply to the north for an unknown distance. Vegetation is 50%, with garbage strewn throughout the pit. Access is from the Humboldt reservoir, as well as many abandoned haul roads. Visitation is frequent as deer hunters were seen, as well as newly dumped piles of garbage. See justification note #2. This area looks to have been reclaimed. A rail extension right of way now exists on the site.

AMLF #9 (P): This portal is located within a shallow strip pit 200' north of route 924 and 100' south of AMLF #3 (p). The opening measures 2' x 10' and dips to the south for
an unknown depth. Vegetation is 50%. Garbage is dumped along a haul road just above the portal. Visitation by hunters, hikers and garbage dumpers is evidently quite frequent. See justification note #2. This area looks to have been reclaimed. A rail extension right of way now exists on the site.

AMLF #10 (P): This mine opening is located at the base of a 100' x 35' vertical highwall in a strip mined pit approximately 400' north of AMLF #3 and 750' north of route 924. The pit is 150' x 75' x 35' deep with a 20' x 6' high mine opening at midpoint of the south side. The void slopes to the south and is visible for approximately 50'. The roof and highwall above this feature consist of highly fractured bedrock (conglomerate) of which large segments have collapsed into the mining chamber and pit. Access is via the UGI pipeline road then approximately 250' west by footpath which traverses the south edge of the highwall. During periods of high precipitation a stream overflows its channel sending fresh water into this feature recharging the mine water pool. Vegetation consists of dense white birch and pine 5' to 15' tall near the pit with little or no vegetation within. This area looks to have been reclaimed. A rail extension right of way now exists on the site.

Justification note #1: Mr. John F. Washko (R.D. #1, box 423, Humboldt, Hazleton, PA) is familiar with the mine openings and pits. He cited heavy use of the area by local youths, dumpers, ATV's, and four-wheelers. Mr. Washko fears someone will fall into a pit or opening while in this area and favors reclamation of the entire problem area.

Justification note #2: Cal Snyder, foreman for the Hess Stone Quarry, has stated concern over these mine openings and pits. He stated the power line and other haul roads provide easy access from Tomhicken to Humboldt. He said four-wheeling is what weekends are all about to a lot of kids. He feels these features should be reclaimed before someone gets hurt.

According to Jeff Kostic of the Bureau of Mining and Reclamation in Pottsville, BMR is going to issue a mine permit for the processing of spoil material within this problem area north of traffic route 924. Some of the AMLF’s in this area may be affected especially AMLF #5 and AMFL #6. (This note added 5/1/91.)

Estimated High Priority Costs:

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AMLF #1 (VO): This was the air shaft to the No.3 slope. It was located 1600' north of Humboldt and 2300' northwest of state route 924. It was accessible via a dirt road along a major power transmission line. A brick and concrete enclosure along 3 sides measured 11' x 10' x 7' high, with the shaft open to a depth of 25' where it was apparently blocked with various residential refuse. The shaft has now been backfilled and the brick and concrete structure demolished by the property owner.
AMLF #4 (HEF): This corrugated metal breaker was a Priority 2 feature located 300' south of route 924. The breaker has been demolished by the landowner and the debris removed from the site.

AMLF #5 (DH): This pit is located 300' north of Humboldt. The pit is approximately 250' long, 150' wide, and 55' deep. It contains a total of 500' of dangerous highwall along the north and south sides. The highwalls are highly fractured and unstable. Both sides are easily accessible and abutted by dirt roads. Numerous tire tracks and garbage within the pits indicated site visitation. (This investigation was conducted 10/7/86).

A reinvestigation in January 1992 found this pit as being utilized by the Hess Stone Quarry. A stone crusher and other heavy equipment were within the pit.

AMLF #6 (DH): This pit is located 250' north of AMLF #5. A dirt road abuts the pit's south side, where garbage is being dumped. The pit is approximately 250' long, 120' wide, and 35-50 deep. The south side is steeply dipping, loose, unconsolidated material. A total of 250' of dangerous highwall exists here. (This inventory was conducted 10/7/86).

A February 1997 reinvestigation could not conclusively locate a pit as described above. An area 250' north of Humboldt is reclaimed, and if it is located within the quarrying operation it could not be identified as an abandoned strip pit.

AMLF #7 (DH): This pit was previously inventoried as a priority 2 feature. The pit measured about 450' long, 75-200' wide and 40' deep with approximately 400' of vertical to 60 degree highwall along the eastern side. The quarrying operation aforesaid in narratives for AMLF #5 and AMLF #6 has now extended northward and now includes the area of this feature.

Unreclaimed Lower Priority Problems (1 of 14):
AMLF #14 (WA): A water filled area that still exists after all the reclamation on the site. It is now relocated to the previous location of AMLF #11 and about 100' north of its original location based on aerial photo analysis.
**Humboldt Southwest [1372]**

**Summary:**
- Municipality: Hazle Township
- Sub-Watershed: Stony Creek
- Mine Pool Basin: Hazelton Basin
- Problem Area Size: 152.30 acres
- Reclamation Status: 2 of 4 = 50%
- Map Scale: 1:10,000

303 (d) List of Impaired Waters: Stony Creek flows through site, but is affected by abandoned mine drainage pH and metals and was listed in 2002

Infiltration Points Identified by the SRBC: This problem area contained Cranberry Creek #5 (SRBC Pub. #204 pp 80). It referred to AMLF #01 but looks to have been reclaimed.


**Narrative:**

Update History:

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<td>ANNA OKASSICK INTERVIEW</td>
<td>#1,2,3,4</td>
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General Description:

Near to this problem area, there have been vast changes to the topography as well as the industrial community. A majority of the problem area as well as the Humboldt Far Southwest problem area (1374) are now a 336.60 acre site that is available for development through the CanDo Industrial Park. The reclaimed portion encompassing what was AMLF #2 is a 41.03 acre parcel zoned KOZ. The reclaimed portion encompassing what was AMLF #1 is now a 32.57 acre parcel that is owned by U.S. Cold Storage and a rail extension right of way. Humboldt North (0263) also adjoins this area. The rest of the area still wears the scars of coal mining practices. The area is being progressively more populated and visited daily by people who are unaware of hazards left behind from coal mining. Less than a mile from these dangerous pits is the Humboldt Industrial Park, with tractor trailer rigs as well as many vehicles and people doing business. The Eagle Rock Ski Resort, which is to the west off route 924, is within two miles of the problem area, and the Humboldt Reservoir is a popular hunting area with thick underbrush and excellent habitat for small game and deer. These pits are being dumped in with garbage and they are truly an eyesore and dangerous.

Reclaimed High Priority Problems (2 of 4):
- AMLF #1 (DH, HWB): This hazardous water-filled strip pit was located 1500' southwest of Humboldt. The pit's dimension were 100' x 50' x 10' to the water. The depth of the water was unknown. Bedrock was exposed to the water's edge along the north wall. The bedrock was vertical, leaving an impression that this pit is very deep beneath the water's surface. A haul road which accessed the pit in a horseshoe fashion abutted the entire highwall and edge. The accountable highwall was 200' x 10'. Garbage was strewn down the northern and western sides of the pit. A dumper could back up anywhere along this edge and could accidentally drive right into the pit. A fire ring and makeshift chairs were
at the water's edge. In January, the water body appeared to be used as an ice skating or ice hockey rink along with being a natural party area. See justification note. This area looks to have been reclaimed based on aerial photo analysis.

AMLF #2 (DH): this abandoned strip pit was located 1600' northwest of AMLF #1. It was along the most traveled haul road leading west off the Humboldt Reservoir access road. The haul road leads directly to and abutted the pit's southern highwall. The pit measured 400' x 150-200' wide with an average depth of 50'. The north wall consisted of intermittent bedrock and loose overburden, with a slope that averaged 55 degrees. Access along the north wall is in the form of a road which could accommodate ATV or four-wheel drives. Garbage was scattered throughout the area along these haul roads. The southern highwall consisted of loose broken spoil material and overburden. The slope averaged 60 degrees. Access was the main haul road which could accommodate a car or truck and abutted the total southern highwall. Garbage dumping indicates visitation to this pit and the general problem area. This garbage was of concern as it could have infiltrated the subsurface aquifers and possibly contaminate the Humboldt Reservoir which is 2000' to the north. Also, the garbage which consisted of commercial and residential wastes could have been ignited and possibly create an underground mine fire. Total accountable highwall was 800' x 50' deep. See justification note.

Unreclaimed Higher Priority Problems (2 of 4):
AMLF #3 (DH): This abandoned strip pit is located 3000' southwest of AMLF #2, and along the heaviest used haul road that travels west from the Humboldt Reservoir service road. The pit's measurements are 200' x 125' wide, with a depth ranging from 40' to a maximum of 80'. The dangerous highwall along the south wall consists of bedrock with spoil material covering the top. This spoil material creates an additional 20' to 40' higher elevation at the western end. Access is for a distance of 50' along this south wall, and then is blocked by small spoil piles and garbage. The slope of the highwall is 80 degrees and vegetation is nonexistent. The north highwall consists of loose spoils which have been partially pushed into the pit at some time. Garbage is strewn down the highwall at the eastern end. Access to the highwall is by a haul road. The highwall is intermittent and ranges from 0' to 35' along the entire distance. The slope of the highwall is 70 degrees and vegetation is 5%. The dumping in this pit consists of commercial, residential and demolition materials from homes. This could be ignited creating a mine fire, along with contaminating water aquifers. Visititation to the problem area and the pit appears intense. Investigators observed hunters, hikers, signs of fresh dumping during the two-day investigations. Total accountable highwall is 400' x 80' deep. See justification note.

AMLF #4 (DH): This abandoned strip pit is located 200' north of AMLF #3. The pit measures 1200' x 100' with a depth ranging from 25' to a maximum of 60'. This maximum depth is due to the amount of spoil on and along the highwalls. The north highwall consists of 25' of exposed bedrock which is nearly vertical, and 25' x 35' spoil castings which have an approximately 70-degree slope. These spoil castings along the entire north wall have slumped or eroded down over the bedrock creating a dangerous situation. Although a haul road is not along this highwall, there is a maze of motobike and ATV trails worn deep into the ground. Vegetation is 20%. The southern highwall consists of spoil and overburden castings along the entire length. The total southern highwall is exposed the distance to the main haul road. Garbage is dumped off the
highwall and there are areas where it is apparent that parties are held, judging the amount of empty beer cans and bottles. This south highwall slope is approximately 70 degrees the entire distance. Visitation is constant as hunters were observed during the investigations, along with vehicles navigating the haul roads. Total accountable highwall is 2400' x 60' deep. See justification note.

Justification Note: Robert Okassick, R.D. #1 Humboldt, PA, has expressed concern over all the Priority 2 features within the problem area. He stated the majority of visitors are kids who utilize the area for dirt bike riding and ATV quad four runners. He stated they are fearless when riding these motorized vehicles and is afraid someone will drive off a highwall. He said there is an influx of new people to the area due to the Humboldt Industrial Park, which is less than 1 mile from the problem area. He explained that lots of times trucks and cars get turned around as to the entrance to the park, and venture into the area to turn their rigs or vehicles around. He also stated dumpers and parties are of routine nature throughout the problem area.

Justification Note: Anna Okassick, R.D. #1, Humboldt, PA, also expressed concern over these dangerous strip mine pits. She is concerned over the health risks associated with unlawful dumping of, as she said, "God only knows." She is also fearful that kids who ride their ATVs and bikes around the area may ride off one of the highwalls and be hurt or killed. She stressed that summertime activities were very high as far as motorbikes, vehicles, sight-seeing and partying. She also feels people drift through the area to sneak into the reservoir and swim for the day.

Estimated High Priority Costs:
Estimate # PA1372-A including AMLF #1 (DH, HWB), #2 (DH), #3 (DH), #4 (DH):

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Humboldt Far SW [1374]

Summary:
Municipality: Hazle Township  
Sub-Watershed: Stony Creek  
Mine Pool Basin: Hazelton Basin  
Problem Area Size: 186.88 acres  
Reclamation Status: 1 of 4 = 25%  
Map Scale: 1:10,000

Impaired Waters on the 303 (d) List: Stony Creek flows through site, but is affected by abandoned mine drainage pH and metals and was listed in 2002


Narrative:
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<td>03/20/92</td>
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<tr>
<td>TOM MARNELL</td>
<td>INTERVIEW</td>
<td>AMLF #1-4</td>
<td>03/20/92</td>
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General Description:
Near to this problem area, there have been vast changes to the topography as well as the industrial community. A majority of the problem area as well as the Southwest Humboldt problem area (1372) are now a 336.60 acre site that is available for development through the CanDo Industrial Park. There are also a series of structures to the south of AMLF# 3 and 4.

Reclaimed Lower Priority Problems (1 of 4):
AMLF #3 (PI): Located 150' southeast of AMLF #1 is a circular pit 200' in diameter and 30' to the water. The walls of the pit consist of loose spoil with a 70-degree pitch and 5% vegetation. A haul road abuts the pit's northwest corner for 40'. This haul road is inaccessible to a conventional car or pickup truck due to mass barricading dirt and rock mounds surrounding the perimeters of the problem area. Access would be limited to walking or meandering an ATV quad or bicycle through the dense woods. The Eagle Rock Ski Resort and Humboldt Reservoir are heavily posted for trespassing and gated. There is no indication the area is being utilized for anything but occasional ATV use or hunting by walk-in only. This problem looks to have been reclaimed (or at least drained) through aerial photo investigation.

Unreclaimed Lower Priority Problems (3 of 4):
AMLF #1 (PI, HWB): Located 2.0 miles west of the village of Humboldt is a stripping pit measuring 800’ x 150’ x 45’ to the water. The depth of the water is unknown at this time. Both north and south walls consist of spoil castings mixed with loose unconsolidated rock. The average degree of pitch for both north and south wall is 55 degrees; Vegetation is 5%. Access to the pit's highwalls is by foot or an ATV. A conventional vehicle cannot get within 50 feet of the pit. To the north is the Humboldt Reservoir which is heavily posted with no trespassing signs and gated haul roads. To the west is Eagle Rock Ski Lodge which is also heavily gated and posted for trespassing. To
the south is route 924 which is also blocked by mass dirt mound-type barricades to deter dumpers. There is no indication of any visitation to this pit other than during hunting season or possibly recreation ATV use.

AMLF #2 (PI, HWB): Located 25' east of AMLF #1 is a stripping pit which is crescent-shaped. The pit measures 100' x 40' x 20' to the water. This pit is connected to AMLF #1 insofar as water is draining in the form of a stream into this pit. The pit's highwalls consist of bedrock along the north and loose fractured rock along the south. The average pitch of the walls are 65 degrees with 5% vegetation. A haul road hugs the northeastern side of the pit. Access by a conventional car or pickup is nil. Anyone visiting the pit would have to walk or meander through woods with an ATV to get to the pit. The depth of the water is unknown. The area north and west is heavily posted for trespassing by the Eagle Rock Ski Lodge and the Humboldt Reservoir. Route 924 is heavily barricaded to prevent anyone from accessing the area. Visitation to the pit is during hunting season or occasional recreational ATV exploring by youths.

AMLF #4 (PI): Located 2.0 miles west of Humboldt is a stripping pit 250' x 75' x 25' deep. Both the north and south walls consist of spoil casting strewn down over the walls with an average pitch of 55 degrees. The pit does not feature any haul road access whatsoever. The closest access is 50' from the east and 100' from the extreme west. These haul roads are not accessible due to mass barricading of rock and dirt along with locked heavy-duty gates. Walk-in from route 924 or other barricaded areas is light. Visitation signs are very light due to a very highlighted structure of no trespassing signs surrounding the problem area. The pit is probably visited by hunters or an occasional recreational ATV explorer.

Estimated High Priority Costs:
Estimate # PA1374-A including AMLF #1 (PI), #2 (PI), #3 (PI), #4 (PI):

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<thead>
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<th>ITEM</th>
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**Tomhicken East [1169]**

**Summary:**
Municipality: Sugarloaf Township  
Sub-Watershed: Black Creek  
Mine Pool Basin: Tomhicken Basin  
Problem Area Size: 210.967 acres  
Reclamation Status: 2 of 8 = 25%  
Map Scale: 1:10,000

USGS Reported Discharge: Tomhicken Mine Pool Overflow [2.7 cfs] – drains to Black Creek

Impaired Waters on the 303 (d) List: Black Creek flows through site, but is affected by abandoned mine drainage metals and combined sewer overflow suspended solids in 1996 then, was listed for pH in 2002.


**Narrative:**

**Update History:**

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<td>DON BOYER</td>
<td>INTERVIEW</td>
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<td>08/11/89</td>
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<td>HOOVER/WILLIAMSON</td>
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Reclaimed High Priority Problems (2 of 8):

AMLF #1 (DH, HWB): This feature has been reclaimed as a result of the following project funded under the OSM 1992 construction grant:
- OSM 40(1169)201.1
- Backfilling strip pits
- Tomhicken East
- Sugarloaf Township, Luzerne County
- The work was completed by East Ridge Mining, Inc., at a cost of $920,327.71.
- The project affected about 45.1 acres, including a 1.0 acre wetland constructed.
- The date of final inspection was August 31, 1995.

AMLF #2 (PI): This pit was located approximately 100' west of AMLF#1 and measured 350' x 200'. It was within the grading limits and has been reclaimed under OSM 40(1169)201.1.

Unreclaimed High Priority Problem (1 of 8):
AMLF #8 (DH): This feature is a water-filled pit located approximately 1400 feet southeast of the intersection of SR3020 and T301 (near BM 1332) in the village of Tomhicken. Access can be made by way of a dirt road heading southwest from sr3020 at a point 0.8 miles east of the intersection. It is easily accessible by two-wheel drive vehicles. The pit measures 100 feet long x 50 feet wide. The dangerous highwall is located on the north side of the pit and measures about 100 feet by 10 feet to the water surface. The depth of the water was not measured but it is probably at least 10 feet deep. The highwall is nearly vertical and appears stable. The top of the highwall is accessible by a footpath. There are campfire rings on both the north and south sides of the pit. The south side is accessible by a two-wheel drive vehicle and a yellow caution ribbon was placed in this area. Someone could be injured by falling off of the highwall. If a non-swimmer survived the fall he could drown because an exit from the water would be very difficult at the base of the highwall. This problem is not recorded with the problem area, but was discovered during partial reclamation of the site.

High Priority Cost Estimate:
Estimate # PA 1169-B including AMLF #8 (DH):

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Unreclaimed Lower Priority Problems (5 of 8):
AMLF #3 (PI): Is located immediately south of reclaimed feature AMLF #2 and is in a well-wooded area. A well-covered road leads to this pit and shows no signs of visitation. The pit measures 400' long x 100-200' wide with some large rocks on the north side. The area is 90% revegetated and is water-filled. At times water overflows this pit to Black Creek.

AMLF #4 (PI): Is located immediately west of reclaimed feature AMLF #2 and water-filled. The water shows iron stain in it. A haul road divides the west end of the pit where there is 5' high of bedrock exposed along the north side. This pit is in a well-wooded area and shows no sign of visitation. It measures approximately 1200' x 300'. At times water overflows to AMLF #3.

AMLF #5 (PI): Is located 400' west of AMLF #4 and measured 1100' long x 300' wide and is water-filled. Spoil material is on both north and south sides. At this time the water-filled pit shows no signs of danger. The spoil piles are moderate dipping.

AMLF #6 (WA): This feature is the outflow from AMLF #7. It flows southerly into black creek. USGS reports this feature as a discharge with a flow of 1,200 gpm, a pH of 5.6 and 12 mg/l of iron.

AMLF #7 (PI): This feature is a water-filled pit located approximately 370 feet southwest of AMLF #4. The pit measures about 400 feet long x 50 feet wide. Ducks have been seen in this pit. The pit is bounded on the east, south and west by a haul road and on the north by an abandoned railroad. AMLF #6 flows from the southeast end of this pit into Black Creek.
Tomhicken [3716]

**Summary**
Municipality: Hazle, Black Creek and Sugarloaf Townships
Sub-Watershed: Black Creek
Mine Pool Basin: West Black Creek Basin

Problem Area Size: 572.83 acres
Reclamation Status: 4 of 15 = 27%
Map Scale: 1:15,000

Impaired Waters on the 303 (d) List: Black Creek flows through site, but is affected by abandoned mine drainage metals and suspended solids in 1996 then, was listed for pH in 2002.


**Narrative:**

Reclaimed High Priority Problems (4 of 15):
AMLF #8 (DH, HWB): This feature has been reclaimed as a result of the following project funded under the OSM 1996 program grant:
- OSM 40(3716)101.1
- Backfilling strip pit
- Tomhicken
- Black Creek and Sugarloaf Townships
- Luzerne County
- The work was completed by Falls Creek Energy Co., Inc. and Maud Mining Company, a joint venture, at a final project cost of $559,399.98. The final inspection was held on December 10, 1997.

AMLF #8 (DH, HWB) This feature was located 1.5 miles southwest of Tomhicken and 1.0 mile northeast of Derringer along state highway route SR3020. This water filled pit measured about 1500' x 400' x 10-100' deep to the surface of a water body measuring 950' long x 150-275' wide and having a maximum depth of about 70 feet. pH measured 5.1 and iron concentration was found to be 1 mg/l. The north side had about 1000' of highwall having a slope of 35-60 degrees, while the south side had about 700' of highwall having a slope of 35 degrees to near vertical. The pit has been eliminated by backfilling.
and regrading the area. The work affected 28.4 acres including the creation of 2 wetlands totaling 2.4 acres.

AMLF #7(SA), 9 (SA): These spoil banks were utilized in the backfilling of AMLF #8(DH, HWB) under project No. OSM 40(3716)101.1.

AMLF #1 (PI): The pit was being re-stripped by Coal Contractors, Inc. the pit is known as the Derringer Mine, Fern Glen, PA surface mine permit no. 40840101. Property is owned by Yanello Industries. The pit looks to have been reclaimed.

Unreclaimed Lower Priority Problems (11 of 15):
AMLF #2 (PI): This feature consists of two parallel pits separated by spoil piles. Pits are 1200' long and 30-45' deep. Area is 50% vegetated.

AMLF #3 (PI): The long narrow pit is 2700' long and 20-35' deep. It is vegetated with large trees and brush (80-95%).

AMLF #4 (PI): The pit is 1100' long, 200' wide, and 60' deep. Spoil piles surround pit. Area is 60% vegetated with trees and brush.

AMLF #5, 6 (PI): The pits are approximately 300' long, 140' wide, and 30-45' deep. Area is 60-70% forested.

AMLF #10 (SA): The spoil area is approximately 31 acres and an average of 25’ high. The pile is about 80% revegitated.

AMLF #11, 12, 13, 14, 15 (PI): Blocked access roads wind through stripped area. These shallow pits are heavily vegetated with trees (to 12" in diameter) and brush. All features are on private (posted) property. No signs of site visitation. The approximate dimensions of each pit are as follows #11: 1000' long by 15' deep, #12: 1000' long by 30' deep, #13: 1200' long by 25' deep, #14: 1100' long by 25' deep, #15: 700' long by 20' deep.
**Buck Mountain – Sugarloaf [3253]**

**Summary:**
Municipality: Sugarloaf and Black Creek  
Problem Area Size: 204.43 acres  
Townships:  
Reclamation Status: 0 of 5 = 0%  
Sub-Watershed: Black Creek  
Map Scale: 1:10,000  
Mine Pool Basin: Unknown

USGS Reported Discharge: Dainty Slope Mine Collapse [1.6 cfs] – drains to Black Creek

**Narrative:**

Update History:

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<td>08/15/89</td>
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</table>

Unreclaimed Lower Priority Problems (5 of 5):

AMLF #1 (PI): Flooded pit surrounded by steeply sloped banks which are approximately 20% vegetated and 40-65' high. #1 was not investigated since this area is posted and patrolled. This pa is on property leased to the Hazle Rod & Gun Club. Access road to PA has a gate at entrance.

AMLF #2 (PI): Pit is approximately 350' long, 120' wide, and 35' deep. It is 75% vegetated.

AMLF #3 (PI): The long narrow pit is approximately 3500' long and 10-20' deep. It is heavily vegetated with large trees and brush.

AMLF #4 (SA): Spoil pile range from 5-25' in height and are 85% vegetated.

AMLF #5 (P), #6 (WA): This area is 100% vegetated. Water seeps from ground in a depression. Discharge follows creek bed to Black Creek (outside the PA). USGS data indicates a collapsed slope mine (Dainty Mine) is discharging 748 gpm with pH of 4.5 and iron content of less than 1 mg/l.
**Fern Glen [3044]**

**Summary:**
Municipality: Black Creek Township  
Problem Area Size: 749.99 acres  
Sub-Watershed: Black Creek  
Reclamation Status: 7 of 25 = 28%  
Mine Pool Basin: West Black Creek  
Map Scale: 1:20,000

303 (d) List of Impaired Waters – Black Creek flows through site, but is affected by abandoned mine drainage metals and suspended solids in 1996 then, was listed for pH in 2002.

**Narrative:**
Update History:

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Current Mining in the Problem Area:  
Coal Contractors 1991 Inc. - Derringer 2 Mine [Site ID 250476, Facility ID 258091] an active coal mining operation in compliance. The operation looks to have already reclaimed much of the problem area.

Reclaimed Lower Priority Problems (7 of 25):  
AMLF #2 (PI): The area is located 500' east of AMLF #1. Both AMLF #1 and 2 are reclaimed. The combined area is 5000' long and 300' wide. The pits are backfilled and graded, but not seeded. Area is not vegetated. *See note.

Portions of AMLF# 3, 5, 6, 7, and 16 look to have been reclaimed through aerial photo analysis. *See note.

AMLF #20 (HEF): This building is a one story brick, approximately 24' x 36'. It is located along a dirt access road, approximately 600' north of the town of Derringer. A 4' x 3' hole is located near the roof on the west wall. All doors and windows have been removed. There is very little sign of visitation. *see note.

*Note: AMLF# 1(PI), 2(PI), 3(PI), 4(PI), 5(PI), 6(PI), 7(PI), 8(PI), 9(SP), 10(PI), 14(SP), 15(PI), 16(PI), 17(SP), and 20(HEF) may be impacted by an active mining operation.

AMLF #21 (HEF): This was a 6' x 12' corrugated steel building. This structure appeared to be structurally safe and may have been utilized as a guard shed. **See note.
AMLF #22 (HEF): This building was a two story brick building about 50' x 100'. All doors and windows were missing. The building appears to be strong in structure. No danger exists. **See note.

AMLF #23 (HEF): This structure was a two-bay brick garage. The building had steel doors for the garage entrances. There was very little evidence of site visitation. **See note.

AMLF #24 (HEF): This building was 25' x 75' and made of brick. Some doors and all of the windows were missing. The building appeared to be soundly constructed. Danger to anyone appeared to be nil. **See note.

AMLF #25 (HEF): This building was identical to AMLF #24 and abuts the north side of said AMLF #24. **See note.

**Note: All HEF's were located within the colliery yard, which is located 600' north of the town of Derringer. AMLF feature numbers: 21(EF), 22(EF), 23(EF), 24(EF), and 25(EF) appear to have been reclaimed by an unknown party.

Unreclaimed High Priority Problems (1 of 25):
AMLF #19(DH): This feature is located 400' south of AMLF#11 and is adjacent to an active road leading from Weston into Fern Glen. This feature is a circular pit that is 100' in diameter x 40' deep. The sides of this pit have a slope of 50-80 degrees and are made up of loose, unconsolidated material. There are 2-3' high piles of debris separating the pit from the road. These piles keep the cars from going into the pit but do not deter people from falling into the pit. Someone could fall into the pit and become injured or killed, and with the slope of the pit wall they would not be able to escape. Evidence of site visitation can be seen by the presence of beer bottles, soda cans, and other paper litter.

Estimated High Priority Costs:
Estimate # PA 3044 including AMLF #19(DH):

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Unreclaimed Lower Priority Problems (17 of 25):
AMLF #1 (PI): The pit is approximately 1600' long and 20' deep. It is 65% vegetated with small brush and trees. The pit is located 1500' northwest of the intersection in Fern Glen (See AMLF #2).

AMLF #3 (PI): The pit is approximately 4000' long, 75' wide and 25' deep. It is 65% vegetated with small brush and trees. Overburden piles line the south side of the pit. The area is located 200' south of AMLF #2.

AMLF #4 (PI): This is a series of strip pits, located 1900' north of the town of Derringer on Buck Mountain. These pits form a line 3000' long and 40' wide, with an average
depth of 15'. It is 50% vegetated with small shrubs and trees. A dirt road 12' wide abuts the north side of the pit. A road is built through the overburden.

AMLF #5 (PI): The feature is made up of a series of strip pits. It is approximately 150' south of AMLF #4. This site averages 30' deep, 150-175' wide and extends about 1900' long. It is approximately 20-25% vegetated with small shrubs and trees. The sidewalls are not very stable. Erosion and sedimentation are evident.

AMLF #6 (PI): This pit is located 100' south of AMLF #5. Overburden piles separate #5 and #6. This feature is 2000' long, 30' deep, and 200' wide. The sidewalls are gently sloped and appear to be eroding. Small shrubs and trees cover approximately 20-25% of the pit. Dirt roads abut the north and south sides.

AMLF #7 (PI): This site is located 50' south of the east end of AMLF #6. This feature is a series of strip pits 30' deep, 120' wide and extending 1800' from west to northeast. A grassy road abuts the north side of the pit. A 15' highwall is located on the pit and a rock bank is on the south side. The area is 20-30% vegetated.

AMLF #8 (PI): This pit is located 100' south of AMLF #7 and abuts the rock bank noted in AMLF #7. This pit is 1700' long, 100' wide and 30' deep. The area is 20-30% vegetated with grasses, small shrubs and trees. Trees are 4"-6" in diameter.

AMLF #9 (SA): This spoil bank is located approximately 1500' north of the town of Derringer on Buck Mountain. The spoil bank is about 40' high and consists of overburden and shale placed on the side of the mountain approximately 400' from an old railroad bed. The bank is 60-65% vegetated with shrubs and trees.

AMLF #10 (PI): This feature is a series of strip pits 40' deep, 200' wide and approximately 1600-1700' long. It is located 300' southwest of AMLF #6. A dirt road abuts the north edge of the site. Vegetation is very sparse.

AMLF #11 (PI): This pit is located 800' southwest of the town of Derringer and 300' east of AMLF #12. It is 600' long, 100-120' wide and 25-30' deep. The overburden and spoil from the pit is piled along the north side of pit. Trees, 2"-8" in diameter, grow on this spoil. The spoil is 80% vegetated. The pit itself has little vegetation growing from its slate bottom.

AMLF #12 (PI): This area is located 300' west of AMLF #11. The pit is formed by overburden material piled on the side of the mountain. This pit is 20' deep, 75' wide and 500' long. No highwalls exist in this feature. The area is 60% vegetated with briars and shrubs. A dirt road abuts the west and south sides.

AMLF #13 (PI): This AMLF appears to be two strip pits joined together in an "h" pattern. It is located 150' north of AMLF #12. A 20' vertical wall exists on the south and east ends of the pits. A dirt access road enters the pit on the west end. Overburden abuts the north side of the pits. Small trees and shrubs inhabit the entire area.
AMLF #14 (SA): This site is located 600' north of AMLF #13 and along the north side of Black Creek. This spoil bank consists of refuse, possibly from deep mining. This bank has been regraded and was also used for backfill in the construction of a 40' wide dirt road which traverses through the feature.

AMLF #15 (PI): This pit is located 500' north of AMLF #14. It is 25' deep, 60' wide and 2300' long. No highwalls are present. The sides slope gently to the bottom. A dirt road runs along the north side of this feature and overburden is piled along the south side. Vegetation is 60-65% with small trees and shrubs.

AMLF #16 (PI): This pit is located 200' north of AMLF #15. The dimensions are 25' deep, 120' wide and 2000' long. This pit is 50% vegetated with small trees and shrubs. A dirt road abuts the north end of the pit with overburden on the south end. Recent mining activity has extended the AMLF by 1000' to the west, with a "v" type cut, 100' deep and 200' wide. Approximately 75-100 4" boreholes used for blasting are located on a bench 15' below the north rim of the cut. The investigators feel this area may be further mined in the near future.

AMLF #17 (SA): This spoil area abuts the west end of AMLF #14. It consists mostly of breaker rock and refuse placed on the side of the mountain. Approximately 494,700 cubic yards of material. A 40' wide road passes through this AMLF. This refuse bank is 3000' long and averages 500' wide. Small trees inhabit approximately 40% of the bank.

AMLF #18 (PI): This pit is located 700' south of the intersection in the town of Fern Glen. It consists of a 10-25' wide cut on the side of the mountain. The spoil was tossed to the north side of the pit. A 40' wide road was recently constructed over the spoil. Thus, in some places it totally eliminates the pit and narrows along the remaining parts of the pit. It is totally inhabited with trees and shrubs where no road construction has been performed.
**Gowen [3043]**

**Summary:**

Municipality: Black Creek Township (Luzerne County) and North Union Township (Schuylkill County)

Sub-Watershed: Black Creek

Mine Pool Basin: West Black Creek Basin and Roberts Run Basin

Problem Area Size: 106.89 acres

Reclamation Status: 2 of 8 = 25%

Map Scale: 1:10,000

USGS Reported Discharges: Derringer Tunnel [8.8 cfs] and the Gowen Tunnel [6.6 cfs] – both drain to Black Creek

303 (d) List of Impaired Waters: Black Creek flows through site, but is affected by abandoned mine drainage metals and suspended solids in 1996 then, was listed for pH in 2002.

**Narrative:**

**Update History:**

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General Description:

Polluted water from all 3 discharges in the problem area flows through 2 separate culverts, contributing an estimated 10,000 gpm to Black Creek. Most of this area was posted by the Mountain Bulls Gun Club.

Current Mining near the Problem Area:

Coal Contractors 1991 Inc. – Gowen Mine [Site ID 250501, Facility ID 258119] is an active coal mining operation in compliance. The operation looks to have already reclaimed much of the problem area, but they are actively mining westward out of the problem area and into Schuylkill and Columbia Counties.

Reclaimed Lower Priority Problems (2 of 8):

AMLF #1 (PI): This pit has been reclaimed by unknown parties. There is little vegetation, indicating that this work has been completed recently.

AMLF #2 (PI): This pit is 1000' long x 30-40' wide x 20-30' deep. The sides are moderately steep to nearly vertical in some places. Spoil piles are on both the north and south sides and are 90% revegetated with trees. The highwalls are mostly barren with little evidence of collapsing. The area within the pit is 20% revegetated.

Unreclaimed Lower Priority Problems (6 of 8):

AMLF #3 (MO): A capped vertical shaft is situated adjacent to the Derringer Tunnel 20 yards away. The cap is in fairly good shape although it is old and subject to tremendous hydraulic pressure. Long term structural integrity is doubtful. The cap measures 15' x 8'. There is an 18" diameter access hole in the center of the concrete cap. It is filled with rocks but there is considerable discharge from the hole.
AMLF #4 (P): The Gowen Tunnel Drift Entry has a collapsed facing, but the main body of the tunnel appears intact. The entry is located 25 yards from the main county roadway, 30' above the roadway elevation. The tunnel is known as the Haddock Tunnel by the owner.

AMLF #5 (P): The Derringer Tunnel entry appears fully intact. The mine entry is situated 50 yards from the main county roadway of same elevation.

AMLF #6 (WA): The Gowen Mine Tunnel discharges about 5,000 gpm and has a pH of 3.5 with 2 mg/l iron. USGS data shows pH to be 3.8 with 2 mg/l iron and 2,964 gpm flow.

AMLF #7 (WA): The Derringer Mine Tunnel discharges about 4,000 gpm and has a pH of 3.6 with 0.5 mg/l iron. USGS data for this discharge show a pH of 3.7 with 1 mg/l iron 3,950 gpm flow.

AMLF #8 (WA): The VO discharges about 1,000 gpm and has a pH of 3.6 with 0.5 mg/l iron. A sample was taken from combined flows of VO and Derringer Tunnel with 3.6 pH and 0.5 mg/l iron.

Please refer to Appendix B: Water Treatment Scenarios from AMD Treat.
Appendix B:

Water Treatment Scenarios from AMD Treat
Appendix C:

Revised Bond Rate Guidelines for the Calculation of Land Reclamation Bonds on Coal Mining Operations