For DEP use	only
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CD 070187

Growing our Communities

ENVIRONMENTAL STEWARDSHIP AND WATERSHED PROTECTION GRANT APPLICATION 2007

1.	Short Title: Sandy Run AMD Con	reptual Designs & Estimates
2.	Project Location:	
		40-07-30 N Longitude: 78-13-16W
		nicipality(ies): Broad Top Township
	(Include an 8.5"x11" copy of a USGS 1:24000 topographic map with proje	ct boundaries and quadrangle name clearly marked.)
	Legislative District where the project is located:	House Senate
3.	Application/Project Type:	
	Watershed Protection (includes Section 319) (indicate s	ize, then check only one)
	Watershed size:13 sq. mi	f. Technical Assistance
	a. Watershed group organization/support	g. Evaluation, Assessment or Monitoring Tools
	b. Develop a watershed plan	Flood Protection (check all that apply)
	c. Education/outreach	h. Project improvement i. Non-routine maintenance
	d. ☑ Design and/or constructione. ☐ Operation, maintenance and replacement	j. Specialized equipment
		j. 🔲 Specialized equipment
4.	Applicant/Sponsor Information: APPLICANT	SPONSOR (If different from Applicant)
	Organization: Broad Top Township	
	Street: Po Box 57	
	Defrance PA 16633	
	City/State/(9 Digit) Zip.	
	Contact: Ernest Fuller Sec Treas.	Tel: () - Fax: () -
	Tel: (814) 98-5253 Fax: (814 98-5253	E-Mail:
	E-Mail:	
•		rederal Employer to moral volidor in
5.	Type of Organization:	☐ Incorporated Watershed Group
	☐ School ☐ Conservation District	☐ Incorporated Non-profit Organization
	Council of Governments	501(c)(3) status? Yes 🔲 No 📙
	☑ Government	Charitable Organization status? Yes \(\subseteq \text{No } \subseteq \)
_	If applicable is this project consistent with local comprehe	nsive land use plans and zoning ordinances under Acts 67
о.	o co et 20002 Vec VI No. DEP policy documents ()	12-0200-002 and 012-0200-004 and the appropriate forms
	are available at http://www.depweb.state.pa.us/growinggreet	ener select "Help for Applicants" in the Resources section.
7.	Name of the DEP Regional Watershed Manager, Mineral	Resources Watershed Manager or Bureau of Watershed
	Management staff person with whom you consulted about t	ne proposed project (see Appendix 3). In Miching Chinach
8.	Will this project implement recommendations of an existing	ng watershed, river conservation, source water protection
	plan or conservation district implementation or strategic plai	n? res K 140 □
	If yes, attach Executive Summary and pertinent pages, ider	
	TMDL Report (DEP) Juniata Water	ershed Management Plan (JCWP), atersheds
	Six Mile, Sondy + Longs Run Wo	etersheds
9.	Will your project hinder the practice of sustainable forestry?	Yes □ No ☒
	Amo assessment & Kemediation Plan	(Broad Top I wp) and Dix Mile Kun,
	Sordy Run + Longs Run Kestoration	(Broad Top Twp) and Six Mile Run, Plan update (DEP)
	20	

10. Will your project be conducted appropriate agency?	ed on land owned by oth	ner Commo	onwealth agencies an	d have	you contacted the Yes ☐ No 🗵
If yes, identify agency contact	cted:				
11. Is your project located within		tate funde	d flood protection proj	ect?	Yes No
If yes, provide a copy of prev					my Corps of Engineers.
12. Attach a detailed project de	and the second s				
 Budget Summary (Must be f nearest dollar.) 	rom attached DEP Deta	med budge	et vvoiksileet loillis –	do not	include cents, round to the
Category	Grant Request	+	Match	=	Project Cost
Salaries/Benefits		+		= -	
Travel		+		= -	
Equipment and Supplies		+ -		=	<u>—————————————————————————————————————</u>
Administration (max 5%)		+	7.50	=	150
Contractual	16,000	+	150	=	16,700
Construction		+ -	1 000	=	1000
Other		+	7,000	=	1000
Total for each column:	16,000	+	2,700	=	18,500
14. Will competitive bidding or RIf yes, for which budget it15. Was this proposal submitted	ems? Engir	18981	ng	<u> </u>	Yes ☑ No ☐ — Yes ☐ No ☑
Name of other source:	eral funding for this proi	ect?			— Yes ☑ No □
•					Yes ☒ No ☐
17. Are you willing to accept Gro					Yes ⊠\No □
18. Do you wish to be considere					· •
CERTIFICATION AND					
Applicant: I certify that the infor	mation in this application	n is true a	ind correct to the bes	t of my	knowledge.
Broad Top Town:	ship				
T // // /	Applicant Organ	zation		00/	Treas.
Ernest Fuller Printed Name	Signa			7	Title
Sponsor: I certify that the inform am willing to accept responsibilit	nation in this applicatior y for a grant on behalf o	n is true ar of the appli	nd correct to the best cant.	of my k	knowledge. I certify that I
	Applicant Organi	ization			Date
Printed Name	Sign	ature			Title

TWO SIDED PAGES ONLY - NO PERMANENT BINDING (USE STAPLES ONLY) - NO FAXES

SEE PAGE 37 FOR SUBMITTAL INSTRUCTIONS DEADLINE FOR SUBMITTAL IS APRIL 13, 2007

SANDY RUN AMD CONCEPTUAL DESIGNS & ESTIMATES PROJECT BROAD TOP TOWNSHIP

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SANDY RUN AMD CONCEPTUAL DESIGNS & ESTIMATES PROJECT

NOTE

RE: MATCHING FUNDS & USE OF FEDERAL FUNDS FOR THIS PROJECT

This project is part of the larger Broad Top Township/Coaldale Borough Wastewater Management and Environmental Restoration Project which is working to solve problems of non-point pollution throughout our two municipalities, especially abandoned mine drainage and failing on lot sewage systems. The majority of the funds for the overall project are being provided by the U.S. Army Corps of Engineers.

The Township is committed to do this specific AMD project whether state or federal funds are provided by the Growing Greener Grant program. However, if state funds are provided then those funds can be counted as match for U.S. Army Corps of Engineers funds which are being used for other parts of the overall joint project. The \$16,000 of state funds will leverage \$48,000 of federal funds for sewage pollution problems within these watersheds. While those federal funds will not be used specifically for this AMD project they will be used to solve non-point pollution problems.

I. EXECUTIVE SUMMARY

For over twenty-five years, Broad Top Township has been actively working to remediate abandoned mine drainage (AMD) and other pollution within the Six Mile Run, Sandy Run and Longs Run watersheds. The 2001 AMD Assessment and Remediation Plan of the combined Six Mile Run and Sandy/Longs Run watersheds which was updated in 2005 listed twenty-one untreated AMD discharges within the Sandy Run watershed. The 2003 Watershed TMDL Report shows serious pollution problems resulting from abandoned coal mines and recommends that "a focused effort should be made by the DEP to make real and significant reductions to the loading of Sandy Run whenever the opportunities arise." This Project will provide the detailed information needed to create such opportunities.

The level of detail provided in the 2001 Assessment for the treatment of AMD discharges in the Sandy Run watershed was significantly less than that provided for Longs Run which was then the top priority for remediation. Since then the treatment of AMD discharges within the Longs Run watershed has been successfully completed and work is well underway on treating the discharges in the Six Mile Run Watershed. The latest update to the Remediation Plan has therefore raised the priority of work on the Sandy Run AMD discharges. Several of the large discharges (SA0-D11, SA0-D14 & SA0-D17) present significant challenges to treatment due to their locations. In addition, new techniques for the cost effective treatment of AMD have been implemented since 2001. The specific objective of this project is to update information and provide more detailed conceptual designs and cost estimates for designing and constructing AMD treatment systems for the remaining untreated discharges in the Sandy Run watershed. This will expedite the Township's continuing cleanup of AMD pollution in Sandy Run.

II. NEED AND JUSTIFICATION OF FUNDING

Although deep and surface coal mining have been major contributors to the economic base of the watershed for over one hundred and fifty years, environmental problems resulting from abandoned mines have exacted a cost environmentally, economically, and developmentally throughout the area. Acid mine drainage affects nearly

all of the streams throughout the watersheds reducing the environmental, economic, aesthetic, and recreation value through diminished water quality. Although the last deep mine was closed in 1972, surface mining activities continue in the Township.

Broad Top Township formed a joint Citizens Watershed Advisory Committee with Coaldale Borough to determine its watershed priorities and activities. We have sought to find innovative and cost effective ways to treat AMD sites and sewage pollution. Township officials have supported and participated in numerous State and Federally funded programs and projects which have eliminated many health and safety hazards to the area's residents and environment that were a result of past coal mining activities and practices.

In 2001 Broad Top Township used Growing Greener funds to perform an AMD assessment of the combined Six Mile Run and Sandy/Longs Run watersheds for the purpose of updating outdated water quality information and to establish a priority list for AMD remediation projects. TMDL Reports for the watersheds were completed in 2003 and the Restoration Plan was updated in 2005. The Township has made significant progress in the restoration of Longs Run and the headwaters of Six Mile Run. The Watershed Advisory Committee has recommended that the Township begin work on restoring Sandy Run. The Committee has recommended that the Township construct treatment systems for discharges in Sandy Run starting from the headwaters and working downstream. This strategy will ensure that every completed project will produce some new length of restored stream.

In 2000 treatment systems were completed by BAMR and the Sandy Run Landfill for the first three discharges (SA0-D1, SA0-D2 & SA0-D3) producing a dramatic improvement in the life within Sandy Run. A macro invertebrate study in 2004 showed optimal conditions just downstream of these discharges, but no life downstream of the next AMD discharge point. Since then funds have been obtained for designing a treatment system for the next discharge downstream (SA0-D4) and this year Growing Greener grant applications are being submitted for construction of that system and for treatment of the next discharge downstream (SA0-D5).

There are an additional twenty untreated AMD discharges in Sandy Run which were identified in 2001. The 2001 AMD Assessment and Remediation Plan proposed limestone

quantities, passive treatment system type, potential concerns, and cost estimates for each of the Sandy Run discharges based on water chemistry, flow data and site visits. However, no treatment systems have been constructed along Sandy Run since the 2001 project findings. Therefore, because of changes and innovations in treatment technologies and construction costs, it is imperative to update the information contained in the 2001 Plan for the Sandy Run AMD discharges as the next step in the restoration efforts in the watershed.

The Township has also learned from its current restoration work that permitting issues can take substantial time and effort to complete. Having more complete conceptual designs for the difficult discharges will enable the Township to conduct its permitting activities in the most cost effective and timely manner possible. In addition, performing this initial work for the eventual design of treatment systems for all these sites at this time in one project will save the Township money for future engineering costs in the near future. The detailed conceptual designs will significantly help in stream-lining future engineering design processes by providing a solid foundation from which to develop final engineering design plans for each passive AMD treatment system.

These remaining untreated AMD discharges in the Sandy Run watershed are estimated to contribute 32 tons of iron, 14 tons of aluminum and 209 tons of acidity per year. Providing an up-to-date approach for handling each remaining AMD discharge in the watershed will expedite the remediation of these discharges and move the final restoration of Sandy Run closer to completion. This project will utilize the 2001 project findings and additional water chemistry and flow data obtained between 2001 and 2007 to provide detailed conceptual designs for treatment systems for the remaining AMD discharges in Sandy Run and cost estimates for their construction. This will provide the Township with the information necessary to seek appropriate funding for the remediation of each of the AMD sites to enable the restoration of approximately 2.5 miles of the middle and lower sections of Sandy Run and thereby meet the required TMDL reductions for metals and acidity loading. Since the 2001 Assessment was unable to locate all the AMD sources in Sandy Run it is essential to treat all the known sources to meet the TMDL requirements.

III. COMMONWEALTH INVESTMENT CRITERIA

The goal of this project is to improve water quality in Sandy Run by using cost effective means to remediate AMD discharge sites. This project will help the Township to eventually meet the pollutant load reductions required by the TMDL Report and supports and complements other environmental and economic needs of the region. Restoring our streams from being sewers as acid as vinegar will improve the quality of life in Broad Top Township significantly. It will make the Township a more desirable location to live and work in and create recreational opportunities thereby increasing local economic activity in the long term. This project is part of the larger Wastewater Management and Environmental Restoration Project which also seeks to provide efficient infrastructure for our existing villages making infill growth possible in them.

IV. PARTNERSHIPS

For over twenty-five years, the Broad Top Township Supervisors have supported and participated in numerous environmental restoration projects. Through these efforts we have developed partnerships and gained the support of numerous volunteers, governmental agencies, organizations, and our community. During the project, Broad Top Township will work with Skelly and Loy, the Township's environmental consulting firm. The Township will be performing water testing in cooperation with teachers and students of the Tussey Mountain High School. In addition, we will continue our close cooperation with the Bedford County Conservation District, the Bedford County Planning Commission, the Western Pennsylvania Coalition for Abandoned Mine Reclamation and the PA DEP.

In addition to working with the U.S. Army Corps of Engineers and DEP in solving the wastewater pollution problems in our watersheds the Township has completed many cooperative AMD projects which show our commitment to improving and protecting our watersheds. These AMD related projects are listed in the table below:

Completed and Funded AMD Remediation Projects

Program/	Project	Problem/Action	Date
Sponsors	Location		Completed
		SIX MILE RUN WATERSHED	

Program/ Sponsors	Project Location	Problem/Action	Date Completed
RAMP	First Church of God	2 mine shaft openings, 1 airshaft and a concrete structure. Openings were closed, building was moved and buried and whole area was re- vegetated	1979
RAMP	Coaldale Borough	2-3 mine openings were closed. Area re-seeded.	1980/81
RAMP	Six Mile Run Fire Hall	Deep mine refuse pile. Leveled and seeded for fire company carnival.	1980/81
RAMP	New Enterprise	4 mine openings and 1 airshaft (next to Six Mile Run fire company); filled and closed.	1985-88
RAMP	Cartwright	Small subsidence in front yard of house. Regraded and seeded.	1986
RAMP	David Thomas	1 main mine opening in a waterway. Closed, and wetland built to filter water.	1990
RAMP	Eichelberger I	Small wooden tipple, small highwall, 1 deep mine opening; closed and regraded.	1990
RAMP	Eichelberger II	Mine opening, airshaft, building, deep mine discharge and refuse pile. Closed and regraded.	1993
BAMR	Coaldale Post Office BD	Mine opening filled and closed.	1996
WPCAMR, DEPDMO, BCCD, BTT	North Point SAP	SAP passive treatment system installed for discharges at North Point.	1998
BAMR	Defiance North	Regraded a highwall area.	1999
WPCAMR, BCCD, BTT	Shreves Run Diversion Well		1999
PADEP GG, OSM, BTT	Finleyville Discharges	Passive treatment of 3 AMDs along Shreves Run.	2006
319 PGM, BTT	SX0-D2 Discharge	Passive treatment of AMD along Six Mile Run.	2006
319 PGM, BTT	Brewster Hollow Discharges	Passive treatment of 2 AMDs along Brewster Hollow Run. AMD project in progress.	2007
319 PGM, BTT	SX3-D9 & SX0- D16 Discharges	Passive treatment of 2 AMDs at the confluence of Shreves & Six Mile Run. AMD project in progress.	2007
319 PGM, BTT	Shreves Run Regional Discharges	Passive treatment of 5 AMDs along Shreves Run. AMD project substantially completed.	2007

Program/ Sponsors	Project Location	Problem/Action	Date Completed
319 PGM, BTT	SX2-D5 Discharge	Passive treatment of AMD along Spruce Hill Run. AMD project in progress.	2007
319 PGM, BTT	SX2-D6, SX2- D7 & SX2-D8 Discharges	Design for passive treatment of 3 AMDs along Spruce Hill Run. AMD project in progress.	2007
319 PGM, BTT	SX0-D6 Discharge	Passive treatment of AMD along Six Mile Run. AMD project in progress.	2007
319 PGM, BTT	SX0-D7 Discharge	Passive treatment of AMD along Six Mile Run. AMD project in progress.	2007
		SANDY RUN WATERSHED	
RAMP	Heckman	Mine openings, 2 acres of deep mine refuse, and run-off into adjacent water supply. Closed and re-graded.	1980/81
OSM	T549 (Landfill Road)	Mine collapse restoration.	
OSM	T549 (Landfill Road)	Mine washout restoration.	
BAMR	Kimber Mountain (State Games Land #261)	Hazardous recreational water body; Dangerous highwall; Spoil area.	1990
BAMR, SCC5WA	BFHSWA Landfill MP 10, 11, 12 SAPs	SAPs passive treatment systems installed for discharges at the Sandy Run Landfill.	2000
319 PGM, BTT	SA0-D4 Discharge	Design for passive treatment of AMD along Sandy Run. AMD project in progress.	2007
		LONGS RUN WATERSHED	
RAMP	Mort	Highwall (500 ft. long) running behind several houses, 2 mine openings. Closed and re-graded.	1982-85
RAMP	Barton-Meck	Mine opening and small refuse pile, close to a house. Re-graded and seeded.	1986
RAMP	Figard	Big mine opening next to house, and a highwall. Closed and re-graded.	Before 1990
RAMP	Zelanko	Coke ovens. Re-graded.	1991
BAMR	North Langdondale	Regraded a highwall area.	1998

Program/ Sponsors	Project Location	Problem/Action	Date Completed
PADEP GG, BTT	Longs Run Watershed	AMD near spoil pile. Diversion of surface water away from mine spoil pile believed to be a source of water for AMD. Completed AMD project.	2001
PADEP GG, BTT	Longs Run Regional 1	Passive treatment of 7 AMDs along Longs Run.	2005
319 PGM, BTT	Longs Run Regional 2	Passive treatment of 6 AMDs along Longs Run.	2006

Note:

RAMP: Rural Abandoned Mine Program; BAMR: Bureau of Abandoned Mine Reclamation; WPCAMR: Western Pennsylvania Coalition for Abandoned Mine Reclamation; OSM: Office of Surface Mining; 319 PGM: PADEP Section 319 Program; PADEP GG: Pennsylvania Department of Environmental Protection Growing Greener; PADEPDMO: Pennsylvania Department of Environmental Protection District Mining Office; BTT: Broad Top Township

V. SCOPE OF WORK

Broad Top Township is proposing to update the information and provide more detailed conceptual designs and cost estimates for designing, permitting and constructing treatment systems for the remaining untreated AMD discharges in the Sandy Run watershed. Because of changes in costs and technologies used for AMD treatment the Township knows it must update its information as the Sandy Run watershed becomes the focal point for its restoration efforts in the upcoming years. Conceptual treatment ideas and cost estimates from the 2001 AMD Assessment and Remediation Plan for the remaining untreated Sandy Run discharges will serve as the foundation for this project. However, this project will provide a better understanding of and the information needed for conducting the engineering design, permitting work and cost estimates necessary to construct treatment systems for each discharge in the near future.

<u>Detailed Conceptual Designs</u>

On-site engineering investigations will be conducted for the discharges from SA0-D6 downstream as shown on the location map to detail their topographic conditions and to provide reference photographs of the sites. Water chemistry will continue to be monitored by Township volunteers at each of the discharges and the stream to add to the existing watershed database. This is essential for understanding the AMD discharge

characteristics and trends in both flow and water quality. All this information will then be used to develop detailed conceptual design drawings for these AMD discharges in the Sandy Run watershed. Most of the remaining discharges in Sandy Run are anticipated to have the potential for some level of passive treatment at or near the discharge point. Sites from the 2001 AMD assessment and remediation plan that were labeled as more difficult sites, SA0-D11, SA0-D14 and SA0-D17, will be the focal points of the conceptual designs since those three sites along with SA0-D4, SA0-D5 and SA0-D10 are estimated to contribute more than 90% of the iron, aluminum and acidity loading to Sandy Run.

The information obtained in this part of the project will help in understanding the permitting and construction issues associated with the particular characteristics and constraints at each site. The development of detailed conceptual design information will allow the project partners to thoroughly review and discuss alternatives for treatment at each of the Sandy Run discharge sites which will help to ensure that the most appropriate and cost effective treatment approaches are utilized. These detailed conceptual designs will be a significant step towards remediating the AMD discharges and will provide the preliminary information typically performed as the initial part of a full-scale engineering design.

The conceptual designs will include such details as treatment type, approximate treatment pond dimensions, estimates of limestone quantities and other treatment materials and limestone bed flushing requirements and options. No surveying will be conducted as part of this project, but rough estimates of topographic conditions at each site will be included in the site descriptions. The conceptual design information will be used to understand the permitting needs associated with each site for erosion and sediment control, NPDES, and Chapter 105 permitting issues. Wetland specialists may visit some of the sites to perform a preliminary identification of any wetlands or watercourses.

Cost Estimates

Once a detailed conceptual design is developed for each of these AMD discharge sites, the next step in the project will be to develop up-to-date cost estimates for engineering design, permitting, and construction of each passive AMD treatment system. These cost estimates will be based on the conceptual designs that were developed for

each site. Programs such as AMDTreat v4.1 may be used to provide a basis for the type of treatment and costs for the construction of the most appropriate system. Projections of the permitting activities and costs required for each site will provide realistic timelines for obtaining the necessary permits for future construction of treatment systems. The Final Report which will include the detailed conceptual designs and cost estimates will provide the Township with the up-to-date information necessary to obtain the funding required for the future AMD remediation efforts in the Sandy Run watershed.

Project Schedule

<u>Task</u>	<u>Time Frame</u>	Responsible Party
AMD Water Monitoring	2007 and 2008	Broad Top Township
AMD Site Visits	Fall 2007	Skelly and Loy
Detailed Conceptual Designs	Winter 2008	Skelly and Loy
Cost Estimates	Winter 2008	Skelly and Loy

VI. COST ESTIMATE

The overall cost estimate for this project is \$18,500. This grant application includes AMD water monitoring, site visits and the development of detailed conceptual designs and cost estimates for the remaining untreated AMD discharges downstream of SA0-D6 in the Sandy Run watershed. A breakdown of estimated costs for this combined effort follows:

Grant Funded Engineering Services	\$ 16,000
Matching Services:	
Unreimbursed engineering provided by Skelly & Loy	\$ 750
Unreimbursed administrative/coordination by Broad Top Township	\$ 750
Unreimbursed Volunteer Water Testing by Broad Top Township	\$ 1,000
Total Cost of Project	\$ 18,500
Total Match (15%)	\$ 2,500

TASK AND DELIVERABLE WORKSHEET

Identify each deliverable, title, dollar amount, estimated date of completion for deliverable, person responsible for task, and associated tasks (including tasks provided as match).

Deli	Deliverable #: ∠					
Title:	3: Final Rungy					
	Dollar Amount for Grafit Request: 6	000	Match Dollar Amount: 175	1	Total Cost: 1775	1
Esti	Estimated Date of Completion for Deliverable	ble:	Mirsen 2008			
Sala	Salary Staff/Contractor/Match Contributor:	Tasks:				
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Doll	Dollar Amount for Grant Request:		Match Dollar Amount:	1 05	Total Cost: 750	
Esti	Estimated Date of Completion for Deliverable	ble:	800E CALLIN			-
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Detailed Budget Worksheet

application package. The totals for each of these categories must match those entered on the application form. Do not This worksheet should be used to prepare Application Item #13, Budget Summary, and must be submitted with the use cents; round to the nearest dollar.

Certain restrictions apply to Growing Greener II projects (Refer to Appendix 1)

1. SALARIES/BENEFITS

		The state of the s			
INDIVIDUAL	POSITION	HOURLY RATE	HOURS	BENEFITS	TOTAL COST
	÷				
	The state of the s				
TOTAL SALARIES/BENEFITS					

2. TRAVEL – Travel costs are not eligible for GG II projects.

Ensure that maximum reimbursement is	http://www.depweb.state.pa.us/growinggreener under "Help for Recipients", "Tips for Travel Reimbursement".	
Mileage: miles @ \$/mile = Meals:	Lodging: nights @ \$/night =	TOTAL TRAVEL =

3. EQUIPMENT AND SUPPLIES (Non-Construction-Related Costs)

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ADMINISTRATIVE (List all overhead -- 5% maximum -- see Instructions) (not permitted for GG II grants or Flood Protection Grant Program)

I TEM	TSOS
TOTAL ADMINISTRATIVE	

5. CONTRACTUAL

Contractor Salaries (List exact billing rate by task with no salary ranges, see Instructions) Ą.

TASK	CONTRACTOR	HOURLY RATE	HOURS	BENEFITS	CONTRACTOR SALARY	
						_
		-				
OTAL CONTRACTUAL SALARIES						
TAL CONTRACTUAL SALARIES						

B. Other Contractual Expenses

C. Total Contractual (A+B)

	TOTAL CONTRACTUAL	
OTUED CONTRACTION	اب	000
CONTRACTOR SALARIES		(

CONSTRUCTION (List materials (including plants) and labor)

A. Materials

6.

COST				
COST PER UNIT				
TYPE OF MATERIAL				IOIAL MAIERIALS

B. Labor

COST					
HOURLY RATE					THE RESERVE AND THE PROPERTY OF THE PROPERTY O
TOTAL HOURS					
JOB				IOIAL LABOR	

Total Construction (A+B)

TOTAL MATERIALS	TOTAL LABOR	TOTAL CONSTBILLTON	TOILCTION	
		I O I AL COINS	NOC TOOL	

OTHER

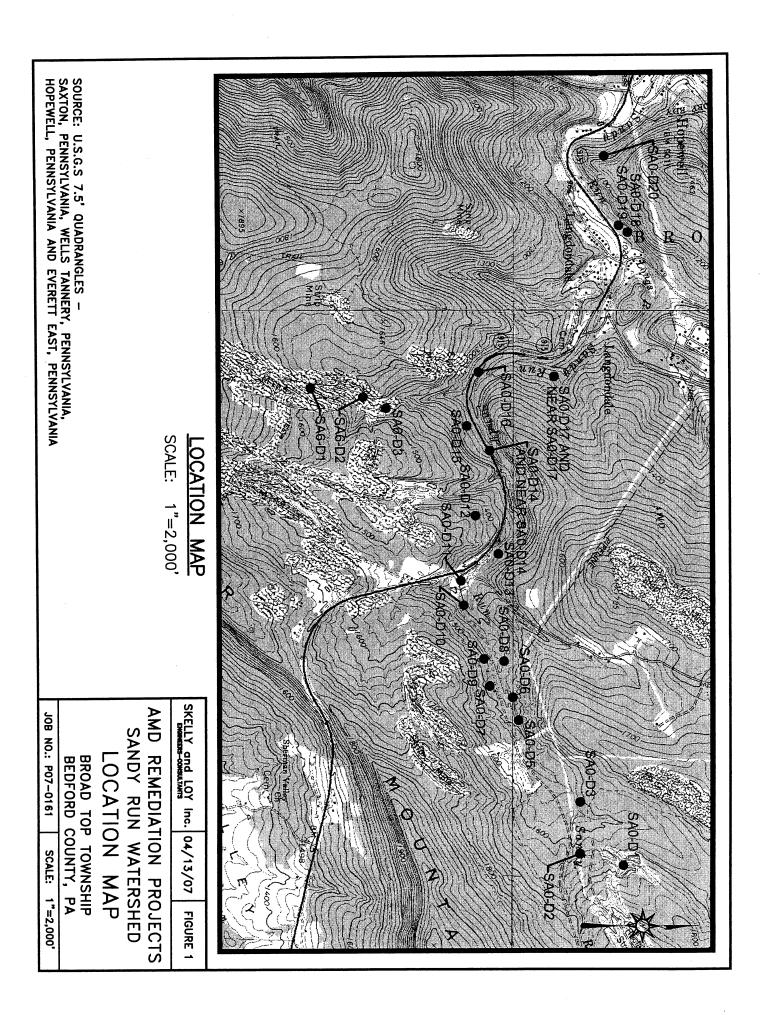
TOTAL OTHER	

MATCH

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Please use the following table to calculate matching contributions of cash, goods and services to enter on the application form. Do not include other DEP funding sources or DEP in-kind services. A CURRENT LETTER OF COMMITMENT IDENTIFYING DOLLAR AMOUNT AND TYPE OF MATCH MUST ACCOMPANY ALL PLEDGED OR IN-HAND ITEMS LISTED. DOCUMENTATION REQUESTING FUNDING MUST ACCOMPANY ALL APPLIED-FOR ITEMS LISTED.

			_	 	 				 	
VALUE in DOLLARS	150	1000	750			•	-			
STATUS (applied for, pledged or in-hand)	pappald	predoed	1) Ship ed					•	•	
DESCRIPTION (cash, goods or service)	SUNICE	541108	SOMICE							
BUDGET CATEGORY (purpose in project)	Combractual	Offige	Palminigragive			·	-			
CONTRIBUTOR	skelled fox	Broad Gas Green	Broad ton Tube							



	-						SANDV RUN	WATERSHE						
Discharge ID	Date	Cond	Field pH	Lab pH	TSS	Sulfate T	Iron	Managnese		Sodium	Hot Acidity	Alkalinity	D.O.	Flow
											,		5.5.	11011
SA0-D17	1/10/01			3.5	<3	466.9	53.400	2.600	18.700	<10	232.00	0.0		1008
12" PIPE	3/29/01 5/14/01			3.4	<3	410.0	47.900	2.620	15.800		220.00	0.0		1251
12 FIFE	7/10/01	1080.0	3.5	3.4 3.4	<3	431.3	47.500	2.580	16.500		234.00	0.0		350N
	7/31/01	1130.0	3.5	3.4	<3 <3	395.4 351.5	55.000 53.600	2.810	19.100		263.80	0.0		190N
	9/26/01	1140.0	3.4	3.4	<3	216.0	50.700	2.760 2.490	17.600 17.500		247.20	0.0		901
	11/19/01	1150.0	3.1	0.4		210.0	30.700	2.450	17.500		250.40	0.0		240N
	6/18/03	1180.0	3.3											190N 420N
	7/1/04	1180.0	3.4											312N
	8/24/04	1170.0	3.1											180N
	10/20/04	1220.0	3.2											360N
	6/3/05	1080.0	3.3											275N
	7/22/05	920.0	3.1											180N
	10/26/05 4/26/06	1240.0 900.0	3.7											160N
	4/26/06	900.0	3.4											150N
SA0-D18	1/10/01			3.4	<3	309.8	30.600	1.850	1 400	<10	00.00			
	3/29/01			3.7	<3	154.0	16.700	1.850	1.420 0.945	<10	96.00 54.00	0.0		2E
4" PIPE	5/14/01			3.8	<3	295.5	21.400	1.710	1.630		80.00	0.0		3.5N
	7/10/01	700.0	3.9	3.7	<3	275.2	28.800	1.770	1.590		102.60	0.0		7N 6N
	7/31/01	740.0	3.8	3.8	4.0	265.3	39.100	2.150	1.880		109.00	0.0	.77 mg/l	6N
	8/22/01			1							100.00	0.0	0.85	OIV
	9/26/01	740.0	3.9	3.5	10.0	227.0	41.900	1.930	1.320		107.00	0.0	0.00	1.5M
	11/19/01													NO FLOW
	6/18/03	1110.0	3.2											6N
	6/22/05	660.0	3.9											10N
SA0-D19	1/10/01			UNAVAIL										
	3/29/01					110.0	0.440	4.000	1 100					
	5/14/01			3.3	<3 68.0	118.0 326.7	0.412	1.220	1.190		48.00	0.0		2N
	7/10/01	1090.0	3.1	3.1	32.0	289.7	1.450 1.640	2.570 2.660	3.720		58.00	0.0		1E
	7/31/01	1060.0	3.3	3.1	<3	261.0	1.120	2.930	3.980 3.980		119.40 104.80	0.0		1N
	9/26/01	1070.0	2.9	3.1	<3	259.8	1.290	2.930	3.970		103.20	0.0		.4E .25N
	6/22/05	920.0	3.3			200.0	1.250	2.550	3.970		103.20	0.0		.25N <1N
														×110
212 222	5/14/04													
	5/14/01	200.0		3.9	88.0	23.0	0.917	0.440	1.980		40.00	0.0		.75E
	7/10/01 7/31/01	200.0 250.0	3.8	3.7	376.0	46.8	2.900	0.661	5.670		144.20	0.0		.5N
	9/26/01	270.0	3.7	3.7 3.6	<3 <3	43.1 58.2	0.544	0.768	2.270		72.00	0.0		.11
	5/20/01	. 270.0	3.7	3.0		30.2	0.587	0.857	3.270		81.60	0.0		.13M
	5/14/01 7/10/01	1250.0	- 20	3.1	4.0	599.4	8.750	8.310	36.400		330.00	0.0		10M
	9/26/01	1250.0 1780.0	3.2	3.2	<3	522.9	25.700	10.500	36.400		307.20	0.0		1.5M
	11/19/01	1780.0	3.1	3.1	10.0	560.6	22.600	20.300	25.500		316.20	0.0		3.0M
	11/13/01													NO FLOW
SA6-D1WEIR		4540.0		3.1	<3	411.0	4.140	7.900	25.500		228.00	0.0		10M
	7/10/01	1510.0	3.0	3.0	6.0	427.0	4.120	11.200	36.400		328.80	0.0		6E
	0/26/01 1/19/01													NO FLOW
-	1713/01													NO FLOW
													-	
SA6-D2 1	/10/01			4.6	<3	40.0	<.300	1.010	1.040	<10.	14.80	7.4		12E
	/14/01			4.0	<3	51.7	<.300	0.786	1.310		19.00	2.4		5M
	/10/01	490.0	3.7	3.6	<3	162.5	0.831	3.540	9.870		96.60	0.0		1M
	/31/01	1110.0	3.4	3.4	<3	556.0	2.090	10.100	37.300		288.60	0.0		.75M
	/26/01	1330.0	3.4	3.4	<3	353.5	2.380	10.700	41.700		331.80	0.0		.65M
	1/19/01													NO FLOW
SA6-D3 1	/10/01			4.3	8.6	76.0	<.300	2.180	2.290	<10	24.00	5.6		
	/14/01			3.3	<3	259.4	10.300	6.350	10.900	`10	142.00	0.0		3E
7.	/10/01	470.0	3.6	3.7	10.0	148.4	19.200	5.210	3.120		74.80	0.0		6.5M 2.5M
	/31/01	740.0	3.2	3.1	<3	238.7	11.400	6.790	6.880		130.20	0.0		.5M
	/26/01	770.0	3.6	3.3	28.0	178.3	11.000	6.940	7.200		123.60	0.0		.3M
11	1/19/01													NO FLOW

							SANDY RUN	WATERSHE	D			+		
Discharge ID	Date	Cond	Field pH	Lab pH	TSS	Sulfate T		Managnese		Sodium	Hot Acidity	Alkalinity	D.O.	Flow
Jioonarge II														
SA0-D9	1/10/01			2.8	<3	235.5	6.100	1.270	14.900	<10		0.0		2E
	3/29/01			2.8	<3	258.0	14.300	1.430	16.500		274.00	0.0		13M
4" PIPE	5/14/01			2.8	<3	298.1	14.400	1.340	17.900 16.900		264.00 262.00	0.0		4.5M 1.5M
	7/10/01	1070.0 1100.0	2.9 2.8	2.7 2.7	<3 <3	210.3 221.6	12.000 10.100	1.370 1.380	13.700		225.60	0.0		.7N
	7/31/01 9/26/01	100.0	2.8	2.7	40.0	176.0	12.100	1.360	12.200		206.80	0.0		.05N
	11/19/01	1090.0	2.0	2.0	40.0	170.0	12.100	1.000	12.200		200.00			NO FLOW
	5/30/02	1310.0	2.9											14.0
	6/18/03	1160.0	3.1											241
	4/28/04	1010.0	2.9											30N
	7/1/04	1010.0	2.9											30N
	8/24/04	1090.0	2.8				<u> </u>	1						31
	10/20/04	1160.0	3.2								<u> </u>			111
	4/14/05	1110.0	2.9				ļ	ļ				<u> </u>		10M 39.5M
	6/3/05	900.0	3.0				 		 	-	1	 		1.13
	7/22/05	740.0 760.0	2.7 3.4	ļ			ł		 		 			191
	10/26/05 4/26/06	820.0	3.1	l			 		 					101
	7/26/06	960.0	3.0				1		 	t	T			5!
	1120100	300.0	0.0			<u> </u>	t	t	T	I				
														
SA0-D10	1/10/01			3.0	<3									20
	3/29/01			2.9	<3						298.00			45
TILE	5/14/01			2.9	<3						234.00			40 30
	7/10/01	840.0	3.1	2.9	<3						190.60			30
	7/31/01	890.0	3.1	2.9	<3 . <3						182.80			20
	9/26/01	950.0 980.0	2.9 2.8	2.9	<3	200.0	10.000	1.300	10.300	1	102.00	3.0		11
	11/19/01 5/30/02	1090.0	3.0	 		 	 	 	 	 	†	 	1	28
	6/18/03	1300.0	3.0			 	1		t	1	1			40
	4/28/04	1070.0	3.0			T	 							60
	7/1/04	1070.0	3.0											60
	8/24/04	950.0	3.1											. 30
	10/20/04	. 1170.0	3.1										ļ	40
	4/14/05	1170.0	2.9						ļ		1	 		40
	6/3/05	860.0	3.0			<u> </u>			<u> </u>	↓	1	+	 	30
	7/22/05	720.0	2.8			ļ	 			+	+	+	 	36
	10/26/05	930.0	3.3			_	ļ	-	ļ	-	+		-	30
	4/26/06	920.0	3.0			ļ		 				+	 	35
	7/26/06	870.0	3.0			ļ	1	 	 	 	+	-	1	├ ──
						 		1						
SA0-D11	1/10/01			5.2	<3	135.2								30
	3/29/01			5.1	<3						22.0			100
TILE	5/14/01			5.1	6.0						22.0			15
NEEDS WEIR		180.0	5.3	5.0	<3						51.8			9
	7/31/01	180.0	5.2	5.3	<3	75.7	11.200	0.91	<.50	0	56.2	20 12.4	4 1.67 mg/ 1.98	
	8/22/01					104	12.400	0.93	2 <.50	_	48.2	20 12.8		6
	9/26/01	230.0	5.1 4.6	5.2	<3	124.0	12.400	0.93	2 \.30	4	40.2	.01 12.0		2
	11/19/01 5/30/02	230.0 170.0	5.0				+	 						20
urface Flow		500.0	3.5	 		 		+		1	1		1	12
	6/18/03	190.0	5.1			 	†	1		1	1			5
1116	7/1/04	160.0	4.8	l	—	1	1							9
	8/24/04	160.0	4.8											18.7
	4/15/05	180.0	4.9											12
	6/3/05	350.0	3.8										ļ	9
	7/22/05	140.0	5.5						4				4	
	10/26/05	210.0	5.3				<u> </u>		 			- ·		
	4/26/06	160.0	5.1				ļ							1 3
	7/26/06	150.0	5.2	ļ		ļ	 	 	+			+	+	
				<u> </u>	-	 	 	 	 	1	1		1	
SA0-D12	1/10/01	 		5.8	<3	116.6	1.210	0.24	7 <.50	0 12	.9 0.0	00 . 17.	4	1
3A0-D12	3/29/01			6.0	<3						0.0	00 19.	.8	2
4" PIPE	5/14/01	l		6.1	<3	91.0		0.31	2 <,50		0.0			1
	7/10/01	250.0	6.3	5.7	<3	52.0	2.070	0.35	5 <.50		23.4			1
	7/31/01	220.0		6.2	<3	70.4					28.0			1
	9/26/01	270.0	6.1	6.0	<3	86.3	3 1.56	0 0.31	9 <.50	00	15.8	80 18	.6	
	11/19/01	280.0	5.1					4						<u> </u>
	6/18/03	530.0	5.7				1	_						7
	4/28/04	410.0	5.7		-			4						2
	7/1/04	410.0	5.7						-	+				2
	8/24/04	1380.0	5.3			 	.	1						-
	10/20/04	370.0	5.5					+	+					no
	4/15/05	370.0	5.5		ļ		 		+					110 <.
	6/30/05	230.0	6.5				 		+	 	+			+
	7/22/05 10/26/05	does not exist					 	-	-	-				
		does not exist			L					- · · · · · · · · · · · · · · · · · · 				
	4/26/06	does not exist			1	1		1	1					

	 		 				SANDY RUN	WATERSHE	D				-	
Discharge ID	Date	Cond	Field pH	Lab pH	TSS	Sulfate T		Managnese		Sodium	Hot Acidity	Alkalinity	D.O.	Flow
		1	1					330						
SA0-D9	1/10/01			2.8	<3	235.5	6.100	1.270	14.900	<10	208.00	0.0		28
	3/29/01			2.8	<3	258.0	14.300	1.430	16.500		274.00	0.0		131
4" PIPE	5/14/01			2.8	<3	298.1	14.400	1.340	17.900		264.00	0.0		4.51
	7/10/01	1070.0	2.9	2.7	<3	210.3	12.000	1.370	16.900		262.00	0.0		1.51
	7/31/01 9/26/01	1090.0	2.8 2.8	2.7 2.8	<3 40.0	221.6 176.0	10.100 12.100	1.380 1.360	13.700 12.200		225.60 206.80	0.0		.7N .05N
	11/19/01	1035.0	2.0	2.0	40.0	170.0	12,100	1.300	12.200		200.00	0.0		NO FLOV
	5/30/02	1310.0	2.9							Harris Stranton	The second secon			14.
	6/18/03	1160.0	3.1											241
	4/28/04	1010.0	2.9											301
	7/1/04	1010.0	2.9											301
	8/24/04	1090.0	2.8											31
	10/20/04	1160.0	3.2											111
	4/14/05	1110.0 900.0	2.9											101
	6/3/05 7/22/05	740.0	3.0 2.7									A		39.5M
	10/26/05	740.0	3.4											.191
	4/26/06	820.0	3.1											101
	7/26/06	960.0	3.0											51
	1/10/01			3.0	<3	221.0	18.900	1.290	11.100	<10	188.00	0.0		201
	3/29/01			2.9	<3	276.0	35.100	1.610	19.300		298.00	0.0		451
	5/14/01			2.9	<3	218.1##	19.700	1.280	14.400		234.00	0.0		401
	7/10/01	840.0	3.1	2.9	. <3	222.1	17.900	1.340	12.500		205.60	0.0		301
	7/31/01	890.0 950.0	3.1	2.9	<3 <3	228.2	17.300	1.320 1.300	10.800		190.60	0.0		301
	9/26/01	980.0	2.9 2.8	2.9	۲3	205.0	16.600	1.300	10.300		182.80	0.0		20N
	5/30/02	1090.0	3.0											281
	6/18/03	1300.0	3.1											401
	4/28/04	1070.0	3.0											601
	7/1/04	1070.0	3.0											601
	8/24/04	950.0	3.1											301
	10/20/04	1170.0	3.1											401
	4/14/05	1170.0	2.9											401
	6/3/05	860.0	3.0											301
	7/22/05	720.0 930.0	2.8											361
	10/26/05 4/26/06	920.0	3.3 3.0											12N 30N
	7/26/06	870.0	3.0											35N
	1720700	0.0.0	0.0											
SA0-D11	1/10/01			5.2	<3	135.2	12.400	0.894	<.500	<10	24.00	13.6		308
	3/29/01			5.1	<3	60.0	9.400	0.905	<.500		22.00	12.0		1001
	5/14/01			5.1	6.0	92.2	8.690	0.788	<.500		22.00	13.6		150
NEEDS WEIR		180.0	5.3	5.0	<3	53.8	10.500	0.897	<.500		51.80	12.8		908
	7/31/01	180.0	5.2	5.3	<3	75.7	11.200	0.919	<.500		56.20	12.4	1.67 mg/l	601
	8/22/01 9/26/01	230.0	5.1	5.2	<3	124.0	12.400	0.932	<.500		48.20	12.8	1.98	65N
	11/19/01	230.0	4.6	5.2	\3	124.0	12.400	0.932	×.500		40.20	12.0		251
	5/30/02	170.0	5.0											2001
Surface Flow		500.0	3.5											1201
	5/18/03	190.0	5.1											501
7	7/1/04	160.0	4.8											901
	3/24/04	160.0	4.8											18.75N
	1/15/05	180.0	4.9											1281
	5/3/05	350.0	3.8											901
	7/22/05	140.0	5.5											521
	10/26/05 1/26/06	210.0 160.0	5.3 5.1											· 40N
	7/26/06	150.0	5.1											601
<u>-</u>			V.2											001
	/10/01			5.8	<3	116.6	1.210	0.247	<.500	12.9	0.00	17.4		16
	3/29/01			6.0	<3	68.0	1.450	0.357	<.500		0.00	19.8		2.31
	/14/01	T		6.1	<3	91.6	1.570	0.312	<.500		0.00	24.0		1.51
	7/10/01	250.0	6.3	5.7	<3	52.6	2.070	0.355	<.500		23.40	22.0		1.51
	//31/01	220.0	6.0	6.2	<3	70.4	2.030	0.364	<.500		28.00	22.0		1.91
	0/26/01 1/19/01	270.0 280.0	6.1 5.1	6.0	<3	86.3	1.560	0.319	<.500		15.80	18.6		11
	7/19/01	530.0	5.1								,			7.51
	/28/04	410.0	5.7											7.5N 2.5N
	/1/04	410.0	5.7											2.51
	/24/04	1380.0	5.3											2.51
	0/20/04	370.0	5.5											11
1.11	/15/05	370.0	5.5											no flo
4,	/30/05	230.0	6.5	i	1	I	i i			ļ		l i		<.051
6/		230.0 does not exist	6.5											<.051
4, 6, 7,	/30/05		6.5											<.05

	 						SANDY RUN	WATERSHE	<u> </u>					
Discharge ID	Date	Cond	Field pH	Lab pH	TSS	Sulfate T			Aluminum	Sodium	Hot Acidity	Alkalinity	D.O.	Flow
				-					1		1101 7.0.0	Airaiiiii	D.O.	FIGV
SA0-D17	1/10/01			3.5	<3	466.9	53.400	2.600	18.700	<10	232.00	0.0		100E
	3/29/01			3.4	<3		47.900	2.620			220.00	0.0		125M
12" PIPE	5/14/01			3.4	<3		47.500	2.580	16.500		234.00	0.0		
	7/10/01	1080.0	3.5	3.4	<3		55.000	2.810			263.80	0.0		350M
	7/31/01	1130.0	3.5	3.4	<3		53.600	2.760	17.600		247.20	0.0		190N
	9/26/01	1140.0	3.4	3.4	<3		50.700			l	250.40			90N
	11/19/01	1150.0	3.1			210.0	30.700	2.450	17.500		250.40	0.0		240N
	6/18/03	1180.0	3.3											190N
	7/1/04	1180.0	3.4						 	ļ				4201
	8/24/04	1170.0	3.1						ļ					3121
	10/20/04	1220.0	3.2						 	 				180N
	6/3/05	1080.0	3.3						 	 				3601
	7/22/05	920.0	3.1							ļ				2751
	10/26/05	1240.0	3.7							<u> </u>				180
									<u> </u>					1601
	4/26/06	900.0	3.4					ļ		ļ		1		1501
									!					
640.540	1/10/01										ļ			
SA0-D18	1/10/01			3.4	<3	309.8	30.600	1.850		<10				2
	3/29/01			3.7	<3	154.0	16.700	1.310			54.00			3.51
4" PIPE	5/14/01			3.8	< 3	295.5	21.400	1.710			80.00			71
	7/10/01	700.0	3.9	3.7	<3	275.2	28.800	1.770			102.60	0.0		6
	7/31/01	740.0	3.8	3.8	4.0	265.3	39.100	2.150	1.880		109.00	0.0	.77 mg/	
	8/22/01			•									0.85	
	9/26/01	740.0	3.9	3.5	10.0	227.0	41.900	1.930	1,320		107.00	0.0		1.5
	11/19/01										l			NO FLO
	6/18/03	1110.0	3.2	T										6
	6/22/05	660.0	3.9											10
														T
													l	1
	1/10/01			UNAVAIL									<u> </u>	
	3/29/01			3.3	<3	118.0	0.412	1.220	1.190		48.00	0.0		2
	5/14/01			3.5	68.0	326.7	1.450	2.570		 	58.00		 	1
	7/10/01	1090.0	3.1	3.1	32.0	289.7	1.640	2.660	3.980		119.40		 	11
	7/31/01	1060.0	3.3	3.1	<3	261.0	1.120	2.930	3.980	 	104.80			.4
	9/26/01	1070.0	2.9	3.1	<3	259.8	1.290	2.930		 	104.80			.25
	6/22/05	920.0	3.3			200.0	1,230	2.530	3.970	 	103.20	0.0	ļ	
		325.5	0.5						 	 	 	 	 	<1!
										 	 	 	 	
SA0-D20	5/14/01		+	3.9	88.0	23.0	0.917	0.440	1.980		40.00			+
	7/10/01	200.0	3.8	3.7	376.0	46.8	2.900	0.440		_				.75
EEDS PIPE		250.0	3.8	3.7		43.1			5.670		144.20			.5
	9/26/01	270.0	3.7	3.7	<3 <3		0.544	0.768	2.270	ļ	72.00			.1
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	9/26/01											<u> </u>		NO FLO
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	5/14/01			4.0	<3	51.7	<.300	0.786	1.310		19.00			5
	7/10/01	490.0	3.7	3.6	<3	162.5	0.831	3.540		T	96.60			1
	7/31/01	1110.0	3.4	3.4	<3	556.0	2.090	10.100		T	288.60			.75
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	7/10/01	470.0	3.6	3.7				6.350			142.00			6.5
	731/01	740.0			10.0	148.4	19.200	5.210			74.80			2.5
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				1										NO FLC

Western Pennsylvania Coalition for Abandoned Mine Reclamation

226 Donohoe Road Suite 110, Greensburg, PA 15601 Your WPCAMR GG Letter of Acknowledgement is Attached (724) 832-3625 (724) 832-3625 (fax) bruce@wpcamr.org www.wpcamr.org www.AMRClearinghouse.org



broadtop@nb.net WPCAMR07GGL6449

April 11, 2007

Ernest Fuller Broad Top Township PO Box 57 Defiance, PA 16633

REF: WPCAMR Letter of Acknowledgement

Dear Ernest Fuller:

Thank you for informing us of the project "Sandy Run Conceptual Designs for AMD Remediation" you have proposed for Growing Greener funds in the Sandy Run watershed. In order for us to become more familiar with your proposed project, we would like a copy of your application form, scope of work and a location map. Once the application is completed and submitted to the DEP, we are requesting that you send us a copy of your workplan including budget information for our files.

In addition, we may be able to assist you with your AMD related project if necessary. You can reach us at (724) 832-3625. Good luck with your proposal.

Sincerely,

Bruce Golden

Regional Coordinator

Bedford County Conservation District



702 W. PITT STREET, SUITE 3, FAIRLAWN COURT, BEDFORD, PENNSYLVANIA 15522 TELEPHONE: (814) 623-7900 Ext. 3 or (814) 623-8099 FAX: (814) 623-0481

April 5, 2007

Ernest Fuller Secretary/Treasurer Broad Top Township 187 Municipal Road – PO Box 57 Defiance, PA 16633

Dear Mr. Fuller,

The Bedford County Conservation District is pleased to support your Growing Greener grant funding requests to design, construct, and maintain AMD discharge remediation projects that will continue the successes achieved in affected watersheds of Broad Top Township. Treatment of the targeted discharges will allow significant stream segments to begin recovery.

Broad Top Township continues to demonstrate a strong commitment to improve water quality by pursuing innovative and cost effective solutions in remediating AMD discharges. The Conservation District fully supports your efforts and will provide assistance as needed to implement the goals of this project.

Sincerely

James F. Eshelman

Chairman

Board of Directors

Bedford County Conservation District



Senate of Pennsylbania

Secretary Kathleen A. McGinty Pennsylvania Department of Environmental Protection (DEP) 16th Floor, Rachel Carson State Office Building Harrisburg, PA 17105-2063

April 9, 2007

Dear Secretary McGinty:

I would like to express my support for the Growing Greener grant applications submitted by Broad Top Township, Bedford County, to the Pennsylvania Department of Environmental Protection (DEP). These applications for funding assistance will support five projects in the area that are important for the continued clean-up of abandoned coal mine discharges that pollute our watersheds.

Bedford County is a rural county, and I support these efforts to protect our environment and quality of life. I would appreciate DEP's consideration of these projects.

Please let me know if you need additional assistance from my office. Also, please feel free to contact my Economic Development Director, Michele Adams (<u>mmadams@pasen.gov</u>), at 866-509-EICH. Thank you for your consideration of these requests.

Sincerely,

John H. Eichelberger/

State Senator

30th District

JHE/ma

DICK L. HESS, MEMBER

HOUSE POST OFFICE BOX 202020 ROOM 107, SPEAKER MATTHEW J. RYAN LEGISLATIVE OFFICE BUILDING HARRISBURG, PENNSYLVANIA 17120-2020 PHONE: (717) 787-7076 FAX: (717) 705-1835

133 SOUTH RICHARD STREET BEDFORD, PENNSYLVANIA 15522 PHONE: (814) 623-9097 FAX: (814) 623-6633

314 LINCOLN WAY EAST SUITE A MCCONNELLSBURG, PENNSYLVANIA 17233 PHONE: (717) 485-4430

April 5, 2007



House of Representatives COMMONWEALTH OF PENNSYLVANIA

OMMONWEALTH OF PENNSYLVANIA HARRISBURG

COMMITTEES

AGING AND OLDER ADULT SERVICES MAJORITY CHAIRMAN TRANSPORTATION POLICY

CAUCUSES COAL FIREMEN'S RURAL SPORTSMEN'S TIMBER

Broad Top Township 187 Municipal Road P O Box 57 Defiance, PA 16633

Dear Broad Top Township:

Please include this letter with your grant applications. I am writing to express my strong support of the Growing Greener Grant Applications being submitted by Broad Top Township to help the remediation process of AMD discharges in the Six Mile and Sandy Run Watersheds. This funding is urgently needed for these projects. This Growing Greener Grant will assist each of five projects in the final outcome needed to accomplish this endeavor.

The first project is to design and construct an anoxic limestone drain treatment system. This grant will complete the cleanup of Brewster Run.

The second project is for construction of a vertical flow wetland system to treat discharge on Six Mile run. In combination with the first project, one more mile of Six Mile Run will become free of discharge.

The third project is to construct a treatment system to further assist the removal of all the pollutants in Sandy Run.

The fourth project is a design and construction of a vertical flow wetland discharge system just down stream from the above project.

The fifth project is a detailed conceptual design and estimation of costs for the remaining untreated discharges not addressed in the other projects listed above.

I hope you agree that this would be money well spent and an investment in our future. Thank you in advance for your consideration of these five Growing Greener Grant applications.

Sincerely,

Dick L. Hess

State Representative

78th Legislative District

County Croceresdo Replicativy

STEVEN K. HOWSARE MICHAEL R. SHAFFER GLENORA H. FAUPEL

> County Commissioners Registration Commissioners County Board of Elections

COMMISSIONERS' OFFICE

COUNTY OF BEDFORD
P. O. Box 166
SOUTH JULIANA STREET
BEDFORD, PENNSYLVANIA 15522

Telephone: 814-623-4807 Fax: 814-623-0991 T.T.Y.: 1-800-654-5984 E-Mail: county@bedford.net



April 4, 2007

DEP Secretary Kathleen McGinty DEP Grants Center PO Box 8776 Harrisburg PA 17105

Dear Secretary McGinty:

The Broad Top Township Supervisors, Bedford County, are submitting five Growing Greener Grant Applications to help remediate acid mine drainages in the Six Mile and Sandy Run Watersheds.

These grants are being requested to continue the clean-up and restoration of the watersheds in this area. Growing Greener funds have been used by this municipality in the past with much success. We, as the Commissioners of Bedford County, strongly urge your department to award grants for their requested projects so that the Broad Top Township Supervisors can continue their progress in restoring these important Bedford County watersheds.

Sincerely,

Steven K. Howsare, Chai

Michael R. Shaffer, Vice Chair

Glenora H. Faupel, Secretary

mak

BEDFORD COUNTY PLANNING COMMISSION

LARRY W. WRIGHT

RUSSELL BUILDING 203 SOUTH JULIANA STREET P. O. BOX 166 BEDFORD, PENNSYLVANIA 15522

JEFFRY W. KLOSS, AICP Executive Director

ERNEST FULLER
GARY R. ICKES
MARIETTA A. PLANK
TODD ROADMAN
CHARLES SWARTZWELDER
FRED TEMKE
ROSE HOFFMAN

April 10, 2007

Broad Top Township Supervisors 187 Municipal Road – P.O. Box 57 Defiance, PA 16633

RE: Five Growing Greener Applications for AMD Remediation in the Six Mile Run and Sandy Run Watersheds

Dear Broad Top Township Supervisors:

The Bedford County Planning Commission supports the Township in their efforts to remediate AMD discharges in the Six Mile Run and Sandy Run Watersheds. We strongly endorse the five applications which you are submitting for Growing Greener Program funding. The Township has demonstrated for a number of years that it is committed to environmental improvement, and these proposed remediation projects represent a continuation of that commitment.

Thank you for the opportunity to voice our support for your projects. And, as with previous projects, the Planning Commission staff is available to provide technical support.

Sincerely,

Jeffry W. Kloss, AICP Executive Director

BROAD TOP TOWNSHIP

187 MUNICIPAL ROAD - PO BOX 57 DEFIANCE, PA 16633 814-928-5253

April 3, 2007

DEP Grants Center PO Box 8776 Harrisburg, PA 17105

RE:

Broad Top Township Growing Greener Grant Application for Sandy Run AMD

Conceptual Designs & Estimates

This project to prepare conceptual designs and cost estimates for treatment systems for the remaining untreated AMD discharges in the Sandy Run Watershed was approved by the Supervisors at our April Meeting. The Township is committed to perform the unreimbursed work listed to be done by the Township in this Grant Application.

Sincerely.

Donald Hedge, Jr

Chairman

2601 North Front Street Harrisburg, PA 17110-1185

E-mail: skellyloy@skellyloy.com



Phone: 717-232-0593

800-892-6532

Fax:

717-232-1799

Internet: www.skellyloy.com

April 13, 2007

Mr. Ernest Fuller Broad Top Township 187 Municipal Road Post Office Box 57 Defiance, Pennsylvania 16633

Re:

Sandy Run AMD Remediation Pro-

jects - Detailed Conceptual Designs

and Cost Estimates Evaluation

Dear Mr. Fuller:

Skelly and Loy, Inc. is committed to continue its support of Broad Top Township's efforts to design and construct passive treatment systems to address acid mine drainage (AMD) discharges within the Township. During the past several years, our firm has donated in-kind services in the form of project development activities, field investigations, and preliminary concept engineering design.

Skelly and Loy is willing to continue to provide in-kind services to Broad Top Township. If Broad Top Township is successful in securing the required funding, we will provide an additional \$750.00 of in-kind services for the Sandy Run AMD Remediation Projects - Detailed Conceptual Designs and Cost Estimates Evaluation.

Skelly and Loy appreciates the opportunity to work with you and Broad Top Township in developing solutions to the AMD problems in the Township. We look forward to the favorable review of your grant application.

Morgantown, WV

Sincerely yours,

SKELLY and LOY, Inc.

John W. Gunnett, P.G.

President, Chief Operating Officer

cc:

Kristi Poe

Sandi Bell/Margy Coyne

Jacque Foster Brad Shultz Terry Schmidt

P07-0161

File:

SupportLetter SandyRun.wpd

State College, PA

Hagerstown, MD

04/09/2007 11:10

BROAD TOP TOWNSHIP

8149285253

PAGE 02/03

BROAD TOP TOWNSHIP

EASEMENT FOR PROPERTY ACCESS TO CONSTRUCT AND MAINTAIN A WATER TREATMENT SYSTEM TO REMEDIATE ACID MINE DRAINAGE AND PERMISSION FOR PROPERTY ACCESS TO OBSERVE PROJECT ACTIVITIES

The Sally A Conley Trust, of PO Box 210, Clarksburg, MD 20871, gives Broad Top Township, Bedford County, Pennsylvania permission to come onto its property at Tax ID# I6-36B, in Broad Top Township, Bedford County to construct and maintain water treatment systems to remediate acid mine drainage in the area shown on the attached topographic map. Broad Top Township will have full responsibility for maintaining the water treatment systems as may be required by the Pennsylvania Department of Environmental Protection. We also give the Pennsylvania Department of Environmental Protection permission to come onto the property to observe project activities at Broad Top Township's projects to construct and maintain water treatment systems to remediate acid mine drainage. All disturbed areas will be properly stabilized in a timely manner according to PA Title 25, Chapter 102 Standards. The property owner is not liable for the actions of the participants in this project. Each party will assume all risk and liability to itself, its agents or employees. The Township, in accepting this easement, acknowledges for itself and those implementing the project, that it has been fully warned by the landowner of any known, latent or dangerous conditions which are located in the project area, and that the landowner has not charged for this release, and shall be entitled to all limitations on liability set forth in the Environmental Good Samaritan Act of 1999. By signing below, we confirm that we are authorized to do so on behalf of the owners of the property we represent.

FOR THE SALLY A. CONLEY TRUST:

Jally Alonley WITNESS MED TRUSTEE 52LLY A COWLEY PRINT T. W. COMO

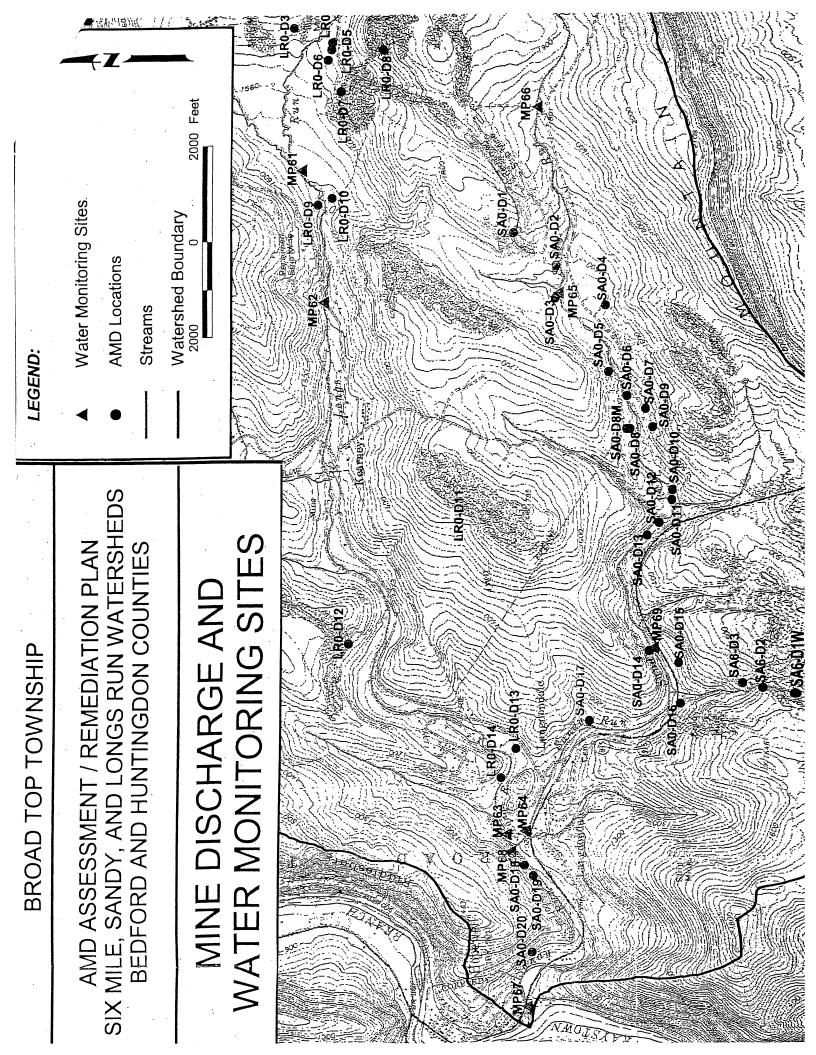
2000 Feet Water Monitoring Sites Watershed Boundary AMD Locations Streams LEGEND: SIX MILE, SANDY, AND LONGS RUN WATERSHEDS WATER MONITORING SITES BEDFORD AND HUNTINGDON COUNTIES AMD ASSESSMENT / REMEDIATION PLAN MINE DISCHARGE AND **BROAD TOP TOWNSHIP**

BROAD TOP TOWNSHIP

EASEMENT FOR PROPERTY ACCESS TO CONSTRUCT AND MAINTAIN WATER TREATMENT SYSTEMS TO REMEDIATE ACID MINE DRAINAGE AND PERMISSION FOR PROPERTY ACCESS TO OBSERVE PROJECT ACTIVITIES

New Enterprise Stone & Lime Co., Inc., successor corporation to Detwilers Industries, Incorporated, a corporation of the State of Delaware, having its principal place of business at New Enterprise, Bedford County, Pennsylvania 16644, gives Broad Top Township, Bedford County, Pennsylvania permission to come onto its properties in Broad Top Township, Bedford County to construct and maintain water treatment systems to remediate acid mine drainage in the areas shown on the attached topographic map. Broad Top Township will have full responsibility for maintaining the water treatment systems as may be required by the Pennsylvania Department of Environmental Protection. We also give the Pennsylvania Department of Environmental Protection permission to come onto the property to observe project activities at Broad Top Township's projects to construct and maintain water treatment systems to remediate acid mine drainage. All disturbed areas will be properly stabilized in a timely manner according to PA Title 25, Chapter 102 Standards. The property owner is not liable for the actions of the participants in this project. Each party will assume all risk and liability to itself, its agents or employees. The Township, in accepting this easement, acknowledges for itself and those implementing the project, that it has been fully warned by the landowner of any known, latent or dangerous conditions which are located in the project area, and that the landowner has not charged for this release, and shall be entitled to all limitations on liability set forth in the Environmental Good Samaritan Act of 1999. By signing below, I confirm that I am authorized to do so on behalf of the owners of the property I represent.

DATE April 12 ,2	007		
SIGNED		WITNESS	mac & lige
TITLE Executive Vice Pres	sident		



BROAD TOP TOWNSHIP

187 MUNICIPAL ROAD - PO BOX 57 DEFIANCE, PA 16633 814-928-5253

February 28, 2006

DEP Grants Center PO Box 8776 Harrisburg, PA 17105

RE: Broad Top Township Growing Greener Grant Application for Sandy Run AMD

Conceptual Designs & Estimates

This project to design passive treatment systems for the AMD discharges along Sandy Run has been reviewed by the Township Supervisors and the Bedford County Planning Commission Staff which performs planning reviews for the Supervisors. This project is fully consistent with all local comprehensive land use plans and Zoning Ordinances under Acts 66 and 67 of 2000. If you have any questions on this matter please contact us.

Sincerely,

Ernest Fuller

Secretary/Treasurer

LONGS AND SANDY RUN WATERSHED FINAL TMDL Bedford County

Prepared for:

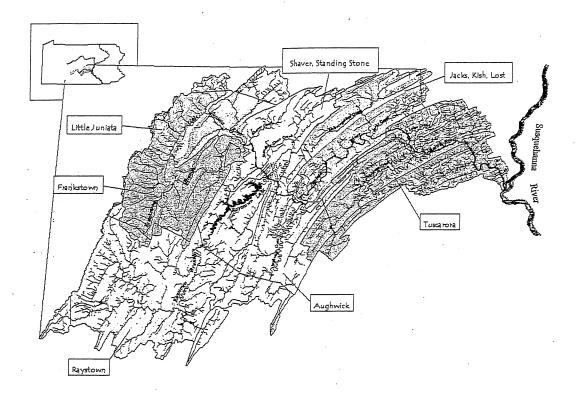
Pennsylvania Department of Environmental Protection



February 25, 2003

Juniata Watershed Management Plan

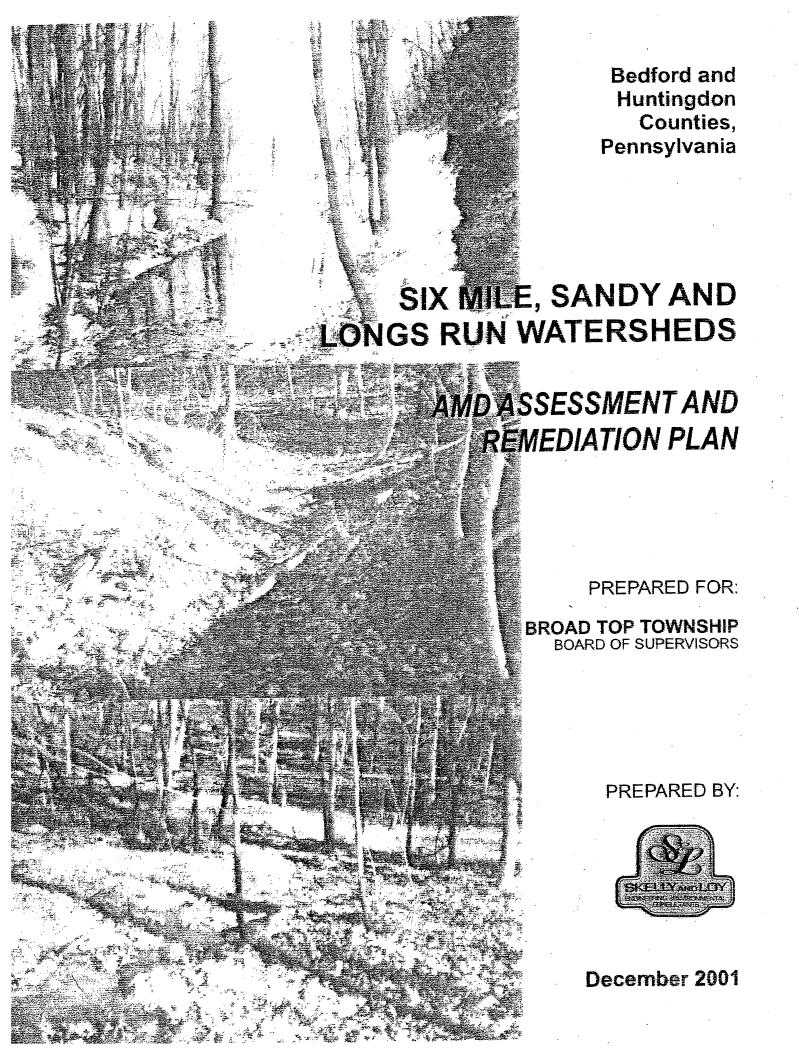
Juniata Clean Water Partnership Huntingdon, Pennsylvania



Prepared by:

The Juniata Clean Water Partnership RD #1, Box 7E, Huntingdon, PA 16652 www.jcwp.org

September, 2000



July 6, 2005

Six Mile Run, Sandy Run and Longs Run Restoration Plan Update Broad Top Township, Bedford County, PA, 2004

Introduction

Broad Top Township has been working for more than twenty years to improve the quality of life for its citizens through support of environmental restoration efforts. The Township is heavily impacted by abandoned mine lands (AMLs) and abandoned mine discharges (AMDs). In 2000, the Township used Growing Greener funds to perform an assessment of the mine drainage affecting Six Mile Run and Sandy/Longs Run watersheds for the purpose of updating outdated water quality information and to establish a priority list for AMD remediation projects. Skelly and Loy, consultant to the Township, completed the AMD remediation plan in December 2001.

The watersheds have also been severely impacted by failing on-lot and wildcat sewage systems many of which drain directly into the streams and by illegal garbage dumping. The Township has worked since 1990 to solve these problems as well. To deal with illegal garbage dumping, a collection system has been implemented along with an education program and strict enforcement of Township ordinances.

The Township in cooperation with Coaldale Borough completed an Act 537 Sewage Plan in 1995 that addresses all of the sewage systems in the two municipalities. The Plan provides for four community sewage collection and treatment systems in the existing villages and the repair or replacement of the remaining on-lot septic systems. The Plan also provides for continuing Township maintenance of the on-lot septic systems to ensure that they do not pollute the watersheds in the future. Construction using Township employees and equipment started in 1997 with primary funding from the US Army Corps of Engineers Section 313 program. As of 2004 approximately half of the homes are being served by the new systems.

The 2001 watershed plan focused on field survey and water quality sampling in the Six Mile, Sandy, and Longs Run watersheds covering a total of 28 square miles. A field survey of the watersheds by volunteers and Skelly and Loy, Inc. staff identified a total of 80 discharges: 42 discharges located along Six Mile Run; 23 discharges along Sandy Run; and 15 along Longs Run. Volunteers took part in a year long sampling effort developed to monitor flow and water quality parameters typical for AMDs for all discharges, except for 5 AMDs undergoing remediation.

Flow and water quality data were then used to help develop priorities for the remediation plan. Stream sampling data collected by Penn State University on the watersheds for the Total Maximum Daily Loadings (TMDLs) was also incorporated into the water quality evaluation. Data indicated that cumulatively, the monitored AMDs contribute a total of 63 tons per year of iron, 42 tons per year of aluminum, and 542 tons per year of acidity.

Data were also used to identify passive treatment options at each site and roughly estimate costs

Department of Environmental Protection Environmental Stewardship and Watershed Protection Grant Application

CHECKLIST FOR APPLICATION COMPLETENESS

(Complete and submit as the <u>last page</u> of your grant submittal.)

Applicant/Sponsor:
Broad Top Township
Project Title:
Sandy Run AMD Conceptual Designes Est.
Use a check if contained in your application. Indicate N/A if "Not Applicable".
<u>GENERAL</u>
Discussed project with DEP Regional Watershed Manager, Mineral Resources Watershed Manager or Bureau of Watershed Management staff person by March 16, 2007. The project addresses pollution through local, watershed-based planning, restoration or protection.
The project participants/responsible parties are identified. All tasks required to implement project are identified and assigned. The project deliverables are clearly identified.
APPLICATION
The application, including Detailed Budget Worksheet and Task and Deliverable Worksheet, is complete and signed by the Applicant and Sponsor (if applicable) for funding consideration. The application includes the original and four copies (a total of five). A copy of the application has been sent to the county conservation district where the project is located (not applicable for Flood Protection Grant Program).
The proposal body and attachments include:
Project Location Map. Document how proposal will implement recommendations of an existing watershed plan. Detailed Project Description, including a breakout of costs for each work element. Signed Landowner Access Authorization Form Signed Letter of Commitment from landowner(s) or executed Landowner-Grantee Agreement. Current Letters of Commitment from project partners for match identified are included. Current, project-specific Letters of Support. Letter of Acknowledgement (Mining projects only) from the WPCAMR or EPCAMR. Land Use Planning Form (LPF) or approval letter / Multi-Municipal Planning Form or letters from the municipality or appropriate planning office, if applicable (not applicable for Flood Protection Grant program). For Flood Protection Grants, copy of previous year's inspection report conducted by DEP or the U.S. Army Corps of Engineers.
Late submissions will not be considered . Faxes will not be accepted. Use staples only, <u>no</u> binding or cover pages, please. Application materials must be submitted in the order

established by the instructions.