



Not for Profit Acid Mine Drainage Reclamation Program



**Financial Assistance
in the form of a
Cooperative Agreement**

**between
the**

Office of Surface Mining

and

AMD & ART, Inc., N. P.

for

**Vintondale AMD Treatment
Phase II Project**

Standard Form 424

OMB Approval No. 0348-0043

APPLICATION FOR FEDERAL ASSISTANCE		2. DATE SUBMITTED 7/28/03	Applicant Identifier
TYPE OF SUBMISSION: Application <input checked="" type="checkbox"/> Preapplication		3. DATE RECEIVED BY STATE	State Application Identifier
<input checked="" type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	<input type="checkbox"/> Construction <input type="checkbox"/> Non-Construction	4. DATE RECEIVED BY FEDERAL AGENCY	Federal Identifier
5. APPLICANT INFORMATION			
Legal Name: AMD & ART, INC., N.P.		Organizational Unit: N/A	
Address (give city, county, state, and zip code): 411 THIRD AVENUE JOHNSTOWN, PA 15906		Name and telephone number of the person to be contacted on matters involving this application (give area code) GEORGE THOMAS, PROJECT COORDINATOR (814) 539-5357	
6. EMPLOYER IDENTIFICATION NUMBER (EIN): 25-1814169		7. TYPE OF APPLICANT (enter appropriate letter in box) <input checked="" type="checkbox"/> N	
8. TYPE OF APPLICATION: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision If revision, enter appropriate letter(s) in box(es): <input type="checkbox"/> <input type="checkbox"/> A. Increase Award B. Decrease Award <input type="checkbox"/> Increase Duration D. Decrease Duration Other (specify):		A. State H. Independent School District B. County I. State Controlled Institution of Higher Learning C. Municipal J. Private University D. Township K. Indian Tribe E. Interstate L. Individual F. Intermunicipal M. Profit Organization G. Special District N. Other (Specify) NON-PROFIT	
10. CATALOG OF FEDERAL DOMESTIC ASSISTANCE NUMBER: 15-253		9. NAME OF FEDERAL AGENCY: U.S. OFFICE OF SURFACE MINING	
12. AREAS AFFECTED BY PROJECT (cities, counties, states, etc.) BLACKLICK CREEK WATERSHED, VINTONDALE, PA (CAMBRIA AND INDIANA COUNTIES)		11. DESCRIPTIVE TITLE OF APPLICANT'S PROJECT: ENHANCEMENT OF ACID MINE DRAINAGE REMEDIATION SYSTEM WITHIN COMMUNITY-DESIGNED "REMEDIAION PARK"	
13. PROPOSED PROJECT:		14. CONGRESSIONAL DISTRICTS OF:	
Start Date AUGUST 2003	Ending Date MAY 2004	a. Applicant 12th	b. Project 12th
15. ESTIMATED FUNDING:		16. IS APPLICATION SUBJECT TO REVIEW BY STATE EXECUTIVE ORDER 12372 PROCESS? <input checked="" type="checkbox"/> YES. THIS PREAPPLICATION/APPLICATION WAS MADE AVAILABLE TO THE STATE EXECUTIVE ORDER 12372 PROCESS FOR REVIEW ON: DATE _____ b. NO <input type="checkbox"/> PROGRAM IS NOT COVERED BY E.O. 12372 <input type="checkbox"/> OR PROGRAM HAS NOT BEEN SELECTED FOR STATE REVIEW	
a. Federal	50,500	17. IS THE APPLICANT DELINQUENT ON ANY FEDERAL DEBT? <input type="checkbox"/> Yes If "Yes," attach an explanation <input checked="" type="checkbox"/> No	
b. Applicant	10,000		
c. State	0		
d. Local	15,500 (IN KIND)		
e. Other	5,000 (CASH)		
f. Program Income	0		
g. TOTAL	81,000 0.00		
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, ALL DATA IN THIS APPLICATION/PREAPPLICATION ARE TRUE AND CORRECT, THE DOCUMENT HAS BEEN DULY AUTHORIZED BY THE GOVERNING BODY OF THE APPLICANT AND THE APPLICANT WILL COMPLY WITH THE ATTACHED ASSURANCES IF THE ASSISTANCE IS AWARDED.			
a. Typed Name of Authorized Representative JEANNE GLEASON		b. Title PRESIDENT	c. Telephone number (814) 539-5357
d. Signature of Authorized Representative <i>Jeanne Gleason</i>		e. Date Signed 7/28/03	

Item #2 - Program Narrative (3 pages)

AMD&ART Corrections and Enhancements to Vintondale System

1. Need for the Project.

The Vintondale AMD&ART remediation system is located on the South Branch of Blacklick Creek, Cambria County, Pennsylvania. The system treats a high-iron (average 20 mg/l), high-aluminum (average 30 mg/l) acid mine drainage discharge with a flow that fluctuates between 50-400 gpm. The pH averages 3.3 with the lowest readings (2.5 to 2.9) occurring during the low-flow season. The Blacklick (South Branch) is currently undergoing intensive remediation efforts upstream in Nanty Glo, and the 400,000 yd³ boney pile that leaches into the stream at this site is scheduled to be reclaimed within the next four years by RNS Services. Assuming that all of these efforts are successful, the construction of the Vintondale site concurrently with AMD and sewer projects upstream will aid the remediation of the South Branch, helping to return the river to health for the first time in over a century.

Besides cleaning up an environmental liability, this system is an integral component of a project that redefines traditional environmental remediation. By blending the rigor of treatment science with the contemplation of landscape design, the significance of history and the personal commitment of local residents this project will engage the community in a way that is unlike most other passive treatment systems. In a borough where over 60% of families with children live in poverty, Vintondale testifies to the fact that concerned citizens, despite their lack of municipal resources, can make a difference in the environment.

Location of this site along a heavily-traveled rail trail, and the nature of site design, provide excellent educational opportunities in this region where this century-old problem and its solutions are rarely taught in schools, or in the community at large. The system is in place and operational, but several problems (primarily leakage and poor re-vegetation), are preventing the system from functioning at its full capacity. We are requesting additional OSM funding to make improvements and enhancements to the system so that it can reach its full potential.

2. Purpose, goals and objectives.

The purpose of this application is to obtain final funding to allow for corrections and enhancements to the Vintondale AMD&ART treatment system. These tasks will result in the accomplishment of several goals:

1. Improve the quality of a significant AMD discharge into the South Branch of Blacklick Creek:
 - Ensure adequate flow of water through entire system and back into Blacklick Creek by lining the ponds that are leaking, lowering spillways, and redirecting pipes.
 - Improve overall water quality by establishing “pre-treatment” of the water for aluminum removal before it reaches the VFP.

- Repair and prevent erosion near and within the ponds by ditching surface water away, using manufactured soil to provide a growth medium, and seeding with a native seed mixture.
2. Fulfill community vision to complete the Vintondale Remediation Park:
 - Continue use of community volunteers to assist with construction & planting, further investing ownership of site with residents
 - Ultimately increase capacity of communities within the region to approach large problems, by providing an example of successful community action.
 3. Take advantage of excellent educational opportunities:
 - The existing Vintondale Environmental Education Center already provides information and training to students and teachers in the area. Improvement of the system will enhance their ability to provide a positive experience for these visitors.
 - Existing signage will be reinforced by a system that is operating at its best possible level.

3. One paragraph summary of the project.

In order to make the operation of the existing system more effective, several tasks need to be performed on site. These include lining of ponds 1, 4, and 6, the lowering of spillways to enhance treatment and flow, the use of manufactured soil to provide a good growth medium, and final re-vegetation. These improvements will make the system more efficient, and will strengthen the overall viability and power of the site. This will lead to lasting benefits to Blacklick Creek, the community of Vintondale, and environmental education in the region.

4. Work to be done and by whom.

AMD & ART will secure at least two bids from contractors to perform the tasks as described in Item #4 (Budget Justification Narrative). The contractor will be responsible for providing materials. The on-site construction will be supervised Earthtech, Inc.

5. Who owns or will own and manage the project lands/waters.

Vintondale Borough is the current landowner and will act as the long-term conservator of the site.

6. Does the applicant have the legal right of entry to the property for construction purposes.

Vintondale borough has provided AMD & ART with legal access to the site. CCCRA has granted permission to AMD & ART to travel on a portion of the Ghost Town Trail (as needed) to gain access to the property.

7. The technology to be used.

All repairs and enhancements to the ponds will use traditional construction methods to meet the goals established. The growth medium (manufactured soil) will be a combination of the process devised by the Army Corps of Engineers (Dick Lee), as well as other, more traditional methods, such as screening existing dirt piles. Re-vegetation will be accomplished using traditional hand-planting and hydro-seeding, where appropriate.

8. The expected tangible results and how they will be monitored.

Improved water quality, increased water quantity throughout the year, improved vegetative cover, and reduced erosion are the expected outcomes from the project. Water samples will be analyzed and compared with previous results to determine effectiveness. Water quantity will be monitored through a series of weirs, which will be installed at a number of locations within the system. The effectiveness of the soil will be determined by the success of the vegetative cover, which will be evaluated using standard methods.

9. An estimate of the number of days after the award of Office of Surface Mining funding that the project will begin (eg. contract signed)

We anticipate soliciting bids on the day of the award, and choosing a contractor within two weeks of bid solicitation. Depending on the contractor availability (which will be a factor in selection) we anticipate that the project will begin within four weeks of the award

10. A timetable for accomplishment of major project activities during the cooperative agreement performance period (maximum 2 years)

We anticipate that the construction aspects of the project will be completed by the end of 2003. If construction encounters no delays, much of the topsoil placement, and re-vegetation could also be completed this year. However, some of the planting aspects will probably extend into the spring of 2004. The major project activities should be completed by the end of May, 2004.

11. The plan for taking care of any ongoing operational maintenance requirements.

To fund routine maintenance, \$30,000 from the sale of the wetland area to PennDOT, has been set aside. This will be employed by Vintondale Borough to ensure that the system is cared for.

BUDGET INFORMATION - Construction Programs					
Project Activity/Costs	OSM Funding	Partners In-Kind Contribution	Non-Federal Partners Funding	Other Federal Agency Funding	Total Cost
1. Administrative		2,000	5,000		7,000
1. Design		4,000	2,500		6,500
2. Construction	45,500	6,500	4,500		56,500
3. Project Inspection/monitoring	5,000	3,000	3,000		11,000
4. Other major costs (Itemize)					0
5. TOTAL PROJECT COSTS	50,500	15,500	15,000		81,000

Task List and Cost for Vintondale Pond Enhancements	
	Cost
Prior to repairs	
Divert water away from system at T joint	-
Rent pump to dewater ponds 5 days @ \$50	\$250
Equipment Mobilization & Demobilization	\$1,000
Mine Discharge	
Install weir (weir provided)	\$150
Bentonite to seal weir in place	\$150
Rip-rap ditch	\$200
Pipe to Pond 1	
Repair and stabilize pipe bend	\$300
Total	\$2,050
Pond 1: Acid Pond	
Problems:	
1. Pond 1 is leaking, probably through the side-slopes	
2. Limestone does not extend upward on the pond sides to prevent erosion.	
3. Pond should be 1' deep and clear of vegetation	
4. Upper side un-vegetated & eroding.(see seeding spreadsheet)	
Recommendations	
Remove rock from bottom - place on east side of pond	\$500
Compact existing pond bottom & side slopes	\$1,000
Get bottom material from Pond 6	\$2,000
Apply bottom material, and compact new bottom & side slopes	\$2,000
Re-line pond with rock leaving stilling pond in front of weir	\$500
Additional rock (#4 Limestone)	\$1,000
Bentonite	\$1,000
Total	\$8,000
Pond 2: Wetland Cell #1	
Problems:	
1. The spillway elevation is too high. Pond should be 6"-18" deep.	
2. No vegetation in wetland due to deep water	
3. Upper side un-vegetated & eroding.(see seeding spreadsheet)	
Recommendations	
Install weir and lower spillway elevation (weir provided)	\$300
Bentonite to seal weir in place	\$100
Plant wetland (see seeding spreadsheet)	
Total	\$400
Pond 3: Wetland Cell #2	
Analysis:	
1. The spillway elevation is too high. Pond should be 6"-18" deep.	
2. No vegetation in wetland due to deep water	
3. Upper side un-vegetated & eroding.(see seeding spreadsheet)	
Recommendations	
Install weir and lower spillway elevation (weir provided)	\$300
Bentonite to seal weir in place	\$100
Plant wetland (see seeding spreadsheet)	
Total	\$400

Task List and Cost for Vintondale Pond Enhancements (Page 2)	
Pond 4: Wetland Cell #3	Cost
Problems:	
1. Pond is leaking, probably through side slopes	
2. The spillway elevation is too high. Pond should be 6"-18" deep.	
3. No vegetation in wetland due to deep water	
4. Upper side un-vegetated & eroding.(see seeding spreadsheet)	
Recommendations	
Install weir and lower spillway elevation (weir provided)	\$300
Bentonite to seal weir in place	\$100
Plant wetland (see seeding spreadsheet)	
Remove compost from side slope areas	\$1,000
Get bottom material from Pond 6	\$2,000
Apply bottom material and compact new bottom	\$3,000
Re-line side-slopes with compost	\$1,000
Bentonite	\$1,500
Total	\$8,900
Pond 5: Vertical Flow Pond	
Problems:	
1. Upper side un-vegetated & eroding (see seeding spreadsheet)	
No Other Recommendations	
Pond 6: Settling Pond	
Problems:	
1. Pond is leaking, probably through side slopes	
2. All sides un-vegetated & eroding.	
Recommendations	
Install weir and lower spillway elevation (weir provided)	\$300
Bentonite to seal weir in place	\$100
Generate side slope material from pond bottom	\$1,000
Apply to side slopes and compact bottom & side slopes	\$4,000
Bentonite	\$2,000
Rip-rap (limestone) lined diversion ditches	\$4,000
Total	\$11,400
Clarification Marsh & Emergent Wetland	
Readjust pipe from Clarification Marsh to Emergent Wetland	\$1,000
Regrade wetland area so there is more standing water	\$1,000
Total	\$2,000
Total Cost	\$32,150

Dirt & Seeding for Vintondale Pond Enhancements			
	minimal	good	best
Cost	A	B	C
Transportation for dirt	\$ 3,500	\$ 3,500	\$ 3,500
limestone	\$ 300	\$ 300	\$ 300
dirt	Corps	Corps	Corps
mulch-hay	\$ 300	\$ 300	\$ 300
six gravel rakes @ \$30	\$ 180	\$ 180	\$ 180
equipment to move dirt (\$60/hr x 15 days x 8 hrs)	\$ 7,200	\$ 7,200	\$ 7,200
Total	\$ 11,480	\$ 11,480	\$ 11,480
Pond 1: Acid Pond			
Problems:			
1. Upper side un-vegetated & eroding			
Recommendations			
place manufactured dirt around pond 1 and up south hill	prisoners	prisoners	prisoners
low growing wildflower mix	\$ 145	\$ 45	\$ 45
grass mix (15 lbs/acre @ \$7.35)	-	\$ 90	\$ 90
pond 1 red @ .2 acre (\$138/lb @ 1lb)=\$138.00	-	\$ 138	\$ 138
Total	\$ 145	\$ 273	\$ 273
Ponds 2 & 3: Wetland Cell #1 & #2			
Problems:			
1. No vegetation in wetland due to deep water			
2. Upper side un-vegetated & eroding.			
Recommendations			
place manufactured dirt around ponds and up south hill	prisoners	prisoners	prisoners
low growing wildflower mix	\$ 145	\$ 45	\$ 45
pond 2 & 3 orange @ 1.2 acre (\$79/lb @ 5lbs)	-	\$ 395	\$ 395
grass mix (15 lbs/acre @ \$7.35)	-	\$ 90	\$ 90
obligate wetland mix 1 ft around edging	-	-	\$ 30
aquatic vegetation for pond floor (cattails/rushes)	cattails	cattails	\$ 40
Total	\$ 145	\$ 530	\$ 600

Dirt & Seeding for Vintondale Pond Enhancements (Page 2)			
Pond 4 & 5: Wetland Cell #3 & VFP			
Problems:			
1. No vegetation in wetland cell #3 due to deep water			
2. Upper side (Pond 4) un-vegetated & eroding.			
3. Upper side (Pond 5) un-vegetated & eroding			
Recommendations			
place manuf. dirt around ponds and up south hill-ditches	prisoners	prisoners	prisoners
low growing wildflower mix	\$145.00	\$45.00	\$45.00
pond 4 & 5 yellow @ 3/4 acre (\$35/lb @ 4lb)	-	\$140.00	\$140.00
grass mix (15 lbs/acre @ \$7.35)	-	\$90.00	\$90.00
obligate wetland mix 1 ft around edging	-	-	\$30.00
aquatic vegetation for pond floor (cattails/rushes)	cattails	cattails	\$81.00
Total	\$ 145	\$ 275	\$ 386
Pond 6: Settling Pond			
Problems:			
1. All sides un-vegetated & eroding.			
Recommendations			
place manuf. dirt around pond 6 with diversion ditches	prisoners	prisoners	prisoners
low growing wildflower mix	\$145.00	\$45.00	\$45.00
pond 6 blue/green @ 1 acre (\$61/lb @ 6lb)	-	\$366.00	\$366.00
grass mix (15lbs/acre @ \$7.35)	-	\$90.00	\$90.00
obligate wetland mix 1 ft around edging	-	-	\$30.00
aquatic vegetation for pond floor (cattails/rushes)	cattails	cattails	\$80.00
Total	\$ 145	\$ 501	\$ 611
Total Cost	\$12,060.00	\$13,059.00	\$13,350.00

Cost Summary for Vintondale Enhancements	
	Cost
Pond Repairs / Improvements	\$32,150
Dirt & Seeding (using "best" alternative)	\$13,350
Construction Management (Earthtech, Inc.)	\$5,000
Total	\$50,500

5. AMD & ART ORGANIZATION

AMD & ART is a non-profit, 501(c)3 organization started in 1995 within the Southwestern Pennsylvania Heritage Preservation Commission. The organization brings together nationally-recognized scientists, artists, and historians together with local residents to transform a century-old environmental liability into community assets.

Board of Directors: E. Jeanne Gleason, President – (814) 472-3927
Mary Lavine – (814) 269-2992/269-2990
William Barbin, Counsel – (814) 535-5561
William Daniels, Secretary/Treasurer – (814) 445-3094
Tim Phillips – (814) 443-4668 ext. 214

Vintondale Design Team: T Allan Comp, Ph.D. Senior Advisor, Office of Surface Mining (started February 1999). Allan founded AMD&ART in 1995. Public historian.
Robert Deason, P.G. Partner, Earthtech, Inc. Hydrogeologist
Stacy Levy, M.F.A. Founder and Director of SERE Native Landscape Restoration. Landscape artist.

6. FINANCIAL MANAGEMENT

AMD & ART banks with U.S. Bank of Johnstown, PA. We administer a Pennsylvania DEP Watershed Restoration and Protection grant, a Western Pennsylvania Watershed Protection Program grant, a Pennsylvania Council on the Arts grant, and PennDOT monies. To maintain accuracy, AMD & ART employs a professional bookkeeper. Construction expenditures cannot be made without the approval of an Executive Board Member (in this case, Jeanne Gleason, President, or William Daniels, Treasurer). As we are required by our Articles of Incorporation and our EPA contract, AMD & ART issues quarterly reports of activities and financial spending.



United States Department of the Interior

OFFICE OF SURFACE MINING
Reclamation and Enforcement
Oversight and Inspection Office

4605 Morse Road, Rm. 102
Columbus, Ohio 43230

Three Parkway Center
Pittsburgh, Pennsylvania 15220

August 14, 2003

E. Jeanne Gleason, President
AMD & ART, Inc., N. P.
411 Third Avenue
Johnstown, Pennsylvania 15906

Dear Ms. Gleason:

On August 13, 2003, the Office of Surface Mining's Harrisburg Field Office awarded AMD & ART, Inc., N. P.'s Vintondale Phase II AMD Treatment Watershed Cooperative Agreement (CA370314) in the amount of \$50,500. The approved project's performance period is August 15, 2003 through August 14, 2005.

I have enclosed two signed Cooperative Agreements approving this action. Please have the appropriate officials sign both copies and return one to Sheila Hartless, Grants Specialist located in our Pittsburgh Office.

If you have any questions regarding this award, please do not hesitate to contact Dave Hamilton at 717-782-2285 or Sheila Hartless at 412-937-3007.

Sincerely,



George J. Rieger
Acting Field Office Director

Enclosures