



# ARM Group Inc.

Earth Resource Engineers and Consultants

April 22, 2004

Mr. Andrew L. Shiels  
Pennsylvania Fish and Boat Commission  
450 Robinson Lane  
Bellefonte, PA 16823

Re: Proposed Rush Landfill-Stage 1, Rush and  
Snow Shoe Townships, Centre County  
Pennsylvania  
ARM Project 04117

Dear Mr. Shiels:

ARM Group Inc. is assisting Resource Recovery LLC prepare a Pennsylvania Department of Environmental Protection (PaDEP) permit application for a new landfill facility in Centre County, Pennsylvania. Attached is a United States Geological Survey (USGS) 7.5-minute topographic quadrangle map displaying the location of the proposed landfill area.

As part of the permitting process, PaDEP requires that numerous public agencies be contacted to address specific questions outlined within their Form D (Environmental Assessment Process for Municipal Waste Management Facilities). Therefore, we are requesting that your agency provide a written responses to the following Form D questions, pertaining to the proposed permit area shown on the enclosed map:

- Is the project located within an area which supports endangered, threatened, rare plant or animal species listed under the Federal Endangered Species Act, 16 U.S.C.A. § 1531 et seq. (1973); the Act of June 23, 1982 (P.L. 597, No. 170), as amended, known as the Wild Resources Conservation Act, 32 P.S. § 5301 et seq.; the Act of October 16, 1980 (P.L. 996, No. 175), as amended, known as the Pennsylvania Fish and Boat Code, 30 Pa. C.S.A. § 101 et seq. or the Act of July 8, 1986 (P.L. 442, No. 93), as amended, known as the Pennsylvania Game and Wildlife Code, 34 Pa. C.S.A. § 101 et seq. or located in exemplary natural communities as defined by the Pennsylvania Natural Diversity Inventory?
- Is the facility within 1/4 mile of a water resource listed as stocked waters by the Pennsylvania Fish and Boat Commission?
- Is the facility within 1/4 mile of a water resource designated as a wild trout stream by the Pennsylvania Fish and Boat Commission?
- Does the proposed project impact critical and unique wildlife habitats (deer wintering areas, caves, denning sites, rock outcrops, bog turtle or similar habitats)?

If any such habitats and/or water resources are identified within the vicinity of the proposed project, as established by the previous questions, please inform us of your finding. We also request that written acknowledgement be provided in the event that no such habitats or resources are identified.

Please contact the undersigned at (717) 533-8600 should you have any questions or require additional information. Thank you for your assistance with this matter.

Sincerely,

ARM Group Inc.

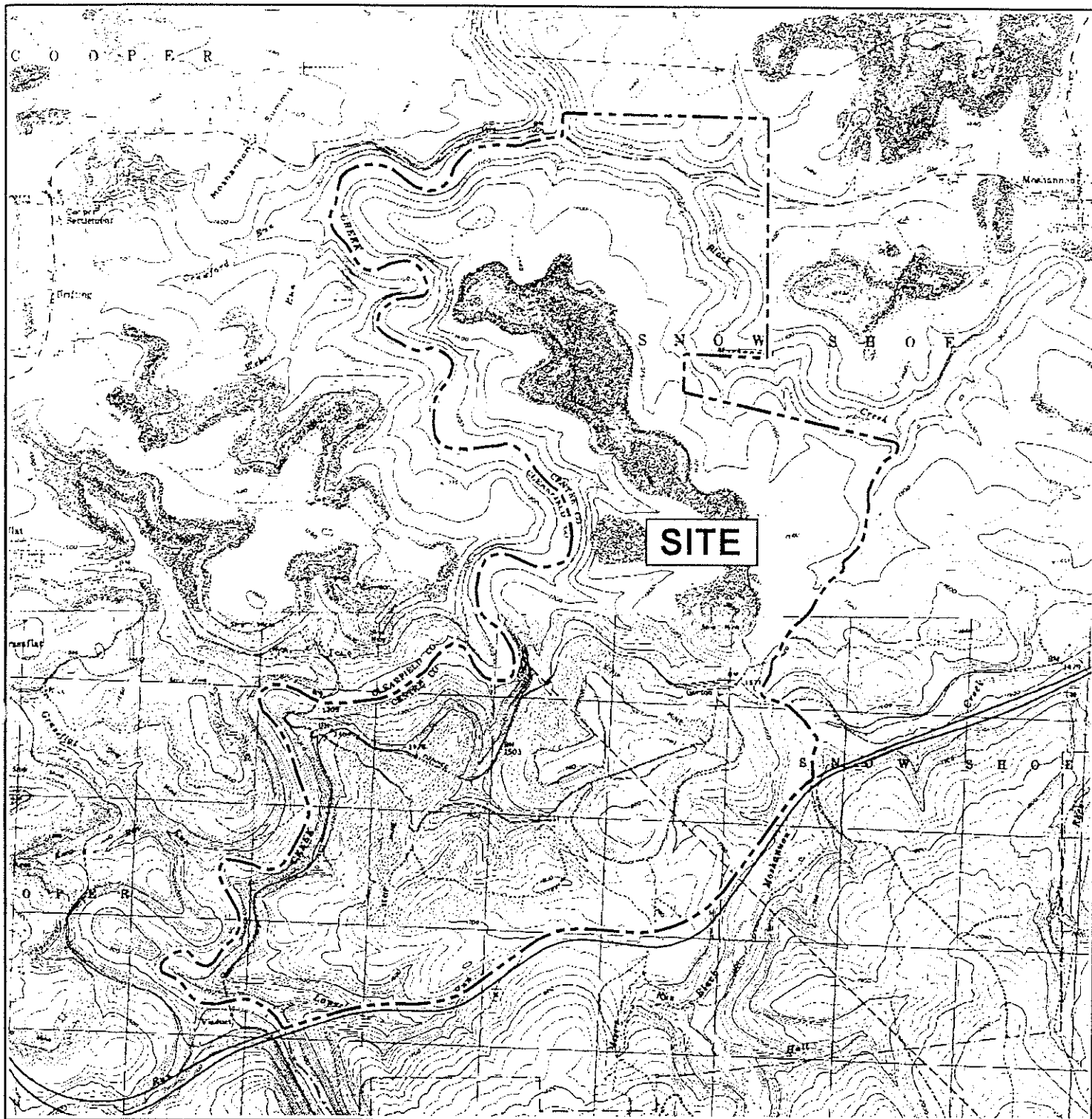


Kanishka Perera Ph.D.  
Staff Engineer

Attachments: Figure 1 – Site Location Map

cc: W. Tafuto P.E. (ARM Group Inc.)





Base map from Black Moshannon USGS 7½ minute quadrangle dated 1994; Philipsburg USGS 7½ minute quadrangle dated 1994; Frenchville USGS 7½ minute quadrangle dated 1959 and photorevised in 1983; Korthaus USGS 7½ minute quadrangle dated 1959 and photorevised in 1981; Snow Shoe USGS 7½ minute quadrangle dated 1996; and Bear Knob USGS 7½ minute quadrangle dated 1998.

**LEGEND**

--- SITE BOUNDARY



**Site Location Map**

Resource Recovery, LLC  
 Snow Shoe & Rush Townships  
 Centre County, Pa.

April 2004

Scale: 1" = 4000'

04117



**ARM Group Inc.**

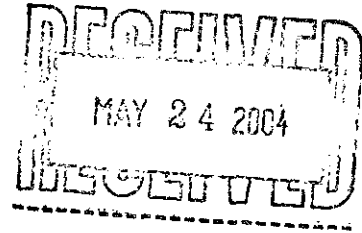
Earth Resource Engineers and Consultants  
 1129 West Governor Road • Hershey, PA 17033-0797

Figure

**1**



Commonwealth of Pennsylvania  
Pennsylvania Fish and Boat Commission  
Division of Environmental Services  
450 Robinson Lane  
Bellefonte, PA 16823  
814-359-5145



May 21, 2004

Kanishka Perera Ph.D.  
Staff Engineer  
1129 West Governor Road  
P.O. Box 797  
Hershey, PA 17033

Re: Proposed Rush Landfill – Stage 1, Rush and Snow Shoe Townships, Centre County

Dear Dr. Perera:

As follow-up to Chris Urban's Species Impact Review in response to your April 22, 2004 letter, also please be advised that only Black Moshannon Creek in the above-referenced project immediate area is known to support wild trout, upstream of the T-325 bridge, and also is stocked with trout upstream of Route 80. It's unclear to what extent mine drainage may affect the other streams within the project limits, but with good water quality they all could potentially support wild trout as well. In any event, they should be treated as viable aquatic resources for your planning purposes, and impacts minimized to the extent practicable.

It's expected that this office will eventually participate in any necessary waterway or wetland encroachment and waste management permitting processes, so please feel free to keep me informed of project development. Thank you for the opportunity to provide early input.

Sincerely,

*Ron Tibbott*

Ron Tibbott, Fisheries Biologist  
Division of Environmental Services

RT:srh



Commonwealth of Pennsylvania  
Pennsylvania Fish and Boat Commission  
Division of Environmental Services  
450 Robinson Lane  
Bellefonte, PA 16823  
814-359-5237  
May 4, 2004

**IN REPLY REFER TO  
SIR #15224**

ARM Group Inc.  
Kanishka Perera  
1129 West Governor Road  
P.O. Box 797  
Hershey, PA 17033-0797

**RE: Species Impact Review (SIR) - Rare, Candidate, Threatened and Endangered Species  
Proposed Rush Landfill- State 1  
Snow Shoe Townships, Centre County, Pennsylvania**

Dear Mr. Perera:

I have examined the map accompanying your recent correspondence which shows the location for the proposed above referenced project. Based on records maintained in the Pennsylvania Natural Diversity Inventory (PNDI) database and the Pennsylvania Fish & Boat Commission (PFBC) files and databases, the following rare or protected species are known from the vicinity of the project site:

<u>Common Name</u>	<u>Scientific Name</u>	<u>PA Status</u>
Timber rattlesnake	<i>Crotalus horridus</i>	candidate

Timber rattlesnakes occur in the forested, mountainous regions of the Commonwealth. They prefer forested areas to forage for small mammals (e.g., mice and chipmunks) and talus, south to south-eastern facing rocky slopes for hibernating and other thermoregulatory activities. The timber rattlesnake is threatened by overhunting, poaching and habitat alteration.

Given the proximity of the project to known timber rattlesnake den areas, we recommend that a timber rattlesnake habitat assessment be conducted in the project area by a *recognized/qualified timber rattlesnake surveyor*. We have included a list of PFBC qualified/recognized surveyors and habitat assessment protocol for your convenience. Upon completion of the habitat survey, the recognized/qualified rattlesnake biologist is to submit a report to this office (Natural Diversity Section) for review and comment. The habitat survey report should include color and aerial photographs of the project area and a description of habitats occurring within the immediate area to be developed, as well as the surrounding area. Potential timber rattlesnake foraging, denning and/or basking areas should be photographed and mapped accordingly. In addition, the report should also include detailed project plans and maps with a description of the proposed work (including access roads), project impacts and alternatives. Pending the review of this information, a survey targeting the presence of the timber rattlesnake in the project area and/or other project modifications may be requested.

SIR #14706  
JOHNSTON  
PAGE 2

In any future correspondence with us regarding this specific project, please refer to the SIR number above. Thank you for your cooperation and attention to this matter of timber rattlesnake conservation.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chris Urban', written in a cursive style.

Christopher A. Urban, Chief  
Natural Diversity Section

Enclosures (2)

**PENNSYLVANIA FISH & BOAT COMMISSION**  
**Division of Environmental Services**  
**Natural Diversity Section**  
**450 Robinson Lane**  
**Bellefonte, PA 16823-9620**

---

**QUALIFIED TIMBER RATTLESNAKE BIOLOGISTS**

The following list includes persons known to the Pennsylvania Fish and Boat Commission whom possess skills and have experience in properly searching for and finding timber rattlesnakes (*Crotalus horridus*) and in identifying their critical habitat. This information is not to be construed as an endorsement of individuals or firms by the Pennsylvania Fish and Boat Commission or any of its employees. Persons not on this list but who have documented experience in conducting scientific studies of, or successful searches for, timber rattlesnakes and their critical habitat may submit their qualifications to the Natural Diversity Section for review and possible inclusion as a recognized biologist/surveyor. Each person added to or deleted from this list shall be at the sole discretion of the Pennsylvania Fish and Boat Commission. This list is subject to revision at any time without prior notice. Any individuals handling, collecting, or otherwise removing timber rattlesnakes from their natural habitat, even if on a temporary basis for relocation, must first obtain a Scientific Collector's Permit from the Pennsylvania Fish and Boat Commission. All permitted collector's encounters with timber rattlesnakes must be reported in writing to the Pennsylvania Fish and Boat Commission's Natural Diversity Section.

---

Charles W. Bier  
Director, Natural Heritage Program  
Western Pennsylvania Conservancy  
209 Fourth Avenue  
Pittsburgh, PA 15222  
Office: (412) 281-1487

Arthur Hulse, Ph.D.  
Professor, Department of Biology  
Indiana University of Pennsylvania  
Indiana, PA 15705-1080  
Office: (412) 357-2279

Glenn Johnson, Ph.D.  
Professor, Department of Biology  
State University of New York at Potsdam  
44 Pierrepont Road  
Potsdam, NY 13676  
Office: (315) 267-2710  
Home: (315) 268-1649  
E-mail: johnsong@potsdam.edu

Howard Reinert, Ph.D.  
Professor, Department of Biology  
Trenton State College  
Hillwood Lake - CN 4700  
Trenton, NJ 08650-4700  
Office: (609) 771-2371

Gian Rocco, Ph.D. Candidate  
322 Amblewood Way  
State College, PA 16803  
Home: (814) 237-2313  
E-mail: gxr124@psu.edu

Randy Stechert  
Timber Rattlesnake Consultant  
50 School Street  
Narrowsburg, NY 12764-6432  
Home: (845) 252-3517

Robert Zappalorti  
Herpetological Associates, Inc.  
575 Toms River Road  
Jackson, NJ 08527  
Office: (732) 833-8600  
E-mail: RZappalort@aol.com

PENNSYLVANIA FISH & BOAT COMMISSION  
NATURAL DIVERSITY SECTION

Timber Rattlesnake Habitat Assessment

Habitat Evaluation performed by (Name, Title, Consulting Firm/Agency):

Name: \_\_\_\_\_

Date: \_\_\_\_\_ Time of Assessment: \_\_\_\_\_

Project Information

Project Name: \_\_\_\_\_

Project Description: \_\_\_\_\_

\*Project Size (acreage): \_\_\_\_\_

\* The surveyor should use his/her judgement on the size of the area that a single assessment encompasses. Additional forms may be necessary to accurately describe and evaluate large contiguous areas.

Site Locational Information

\*USGS Topo. Quad Map (s): \_\_\_\_\_

County (s): \_\_\_\_\_

Township (s): \_\_\_\_\_

Watershed (s): \_\_\_\_\_

Latitude: \_\_\_\_\_ N (degrees-minutes-seconds format)

Longitude: \_\_\_\_\_ W

\* Attach a copy of topographic map and a site sketch showing survey site and natural features on each

Weather Conditions

Air temperature (°F) \_\_\_\_\_ % Cloud Cover \_\_\_\_\_

Habitat Description

General description: \_\_\_\_\_

Size (acreage): \_\_\_\_\_

Level of remoteness/nearby disturbance: (roads, homes, buildings, utility right-of-ways, etc.) \_\_\_\_\_

Presence or proximity to streams, springs, wetlands, or other water source: \_\_\_\_\_

Topographical description: \_\_\_\_\_

Slope (%) \_\_\_\_\_

Aspect \_\_\_\_\_ (compass orientation, i.e., direction hillside faces)

Elevation \_\_\_\_\_

Ground Cover:

% rocky ground cover \_\_\_\_\_

% rocky ground cover that receives direct sunlight \_\_\_\_\_

List size range and shape of rocks (round, flat, etc.) \_\_\_\_\_

Average size of rocks present. \_\_\_\_\_

Are there rock outcrops or ledges present? \_\_\_\_\_

Are boulder fields, and/or talus slopes present? \_\_\_\_\_

Is leaf litter present? Approximate depth of leaf litter present. \_\_\_\_\_

**Species information**

Vegetative Composition:  
% Canopy Cover \_\_\_\_\_  
Dominant species present  
Trees: \_\_\_\_\_  
Shrubs: \_\_\_\_\_  
Herbaceous plants: \_\_\_\_\_  
Grasses: \_\_\_\_\_  
Other plant species observed:  
\_\_\_\_\_

Were herpetofauna species or their signs (e.g., sheds, scat, "forms") observed on-site? If so, what species?  
\_\_\_\_\_

Were small mammals or their signs observed during the site visit? List the species observed.  
\_\_\_\_\_

What other wildlife was observed during the site visit?  
\_\_\_\_\_

**Overall Habitat Assessment**

In your opinion, how suitable is the habitat for timber rattlesnakes?  
Circle one: unsuitable ; marginal ; good potential ; excellent

What timber rattlesnake activities might this habitat support?  
Circle as many as applicable:  
denning/hibernacula ; feeding/foraging ; basking ; birthing/rookery

**Additional Observations/Notes**

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Reporting**

The following items need to be submitted for review:

- (1) Timber rattlesnake habitat assessment form.
- (2) Color photographs of surveyed area showing: general panorama, rocky areas, and specimens observed.
- (3) Site sketch showing the location and direction of photos taken.
- (4) Topographic map showing location of area surveyed and proposed project boundaries.

Please mail these items to:

**Natural Diversity Section  
PA Fish & Boat Commission  
450 Robinson Lane  
Bellefonte, PA 16823**