

APPENDIX M

Wetlands Permit Info



Maryland

Department of the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

April 26, 2019

Mr. Stephen N. Fleischman
The Halle Companies
2900 Linden Lane
Suite 300
Silver Spring, Maryland 20190

Re: Chesapeake Terrace Rubble Landfill
Water Quality Certification No. 91-WQ-0516
AI No. 63592

Dear Mr. Fleischman:

The purpose of this letter is to confirm that the Water Quality Certification No. 91-WQ-0516, originally issued for the U.S. Army Corps of Engineers' Chesapeake Terrace Rubble Landfill Permit (No. CENAB-OP-RMN 1991-01204-M18), remains in effect until the December 31, 2023 expiration date of the federal permit. Should you have any questions, please feel free to contact me at 410-537-3766 or at amanda.sigillito@maryland.gov.

Sincerely,

Amanda Sigillito, Chief
Nontidal Wetlands Division

C: Richard Kibby (Maryland Section Northern, Regulatory Functions Branch, Baltimore District Army Corps of Engineers, 2 Hopkins Plaza, Baltimore, MD 21201)

✓ Milton L. McCarthy (Bay Environmental, Inc., 2661 Riva Road, Bldg. 800, Suite A, Annapolis, MD 21401)



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
ATTN: REGULATORY BRANCH
2 HOPKINS PLAZA
BALTIMORE, MD 21201

January 3, 2019

Operations Division

National Waste Manager, Inc.
Attn: Mr. Warren E. Halle
2900 Linden Lane, Suite #6
Silver Spring, Maryland 20910

Dear Mr. Halle:

This is in reference to your request for an extension of time to the Department of the Army Permit, **CENAB-OP-RMN (CHESAPEAKE TERRACE RUBBLE LANDFILL) 1991-01204-M18**. The property is located adjacent to the Little Patuxent River on Patuxent Road, Odenton, Anne Arundel County, Maryland.

As there have been no significant changes in the attendant circumstances since authorization was granted, the District has determined that it is not contrary to the public interest to grant an extension of time. Accordingly, the time limit for completing the work authorized ends on December 31, 2023. Please note, no additional extensions for the proposed work will be granted by this office.

All conditions of the original permit remain in effect. You may proceed with the construction indicated therein, provided you have obtained all other required state and/or local authorizations.

If you have any questions concerning this matter, please call Mr. Richard Kibby of this office at (410)962-0694.

By Authority of the Secretary of the Army:

Issued for and in Behalf of

John T. Litz, PMP
Colonel, U.S. Army
Commander and District Engineer

DAVIA.JOSEPH
.P.1229279170
Joseph P. DaVia
Chief, Maryland Section Northern

Digitally signed by
DAVIA.JOSEPH.P.1229279170
DN: c=US, o=U.S. Government,
ou=DoD, ou=PKI, ou=USA,
cn=DAVIA.JOSEPH.P.1229279170
Date: 2019.01.03 11:23:08 -05'00'

Enclosure

Cc: (via e-mail) Mr. Milt McCarthy, Bay Environmental, Inc. <info@bayenvinc.com>

To identify how we can better serve you, we need your help. Please take the time to fill out our new customer service survey at:
<http://www.nab.usace.army.mil/Wetlands%20Permits/survey.htm>



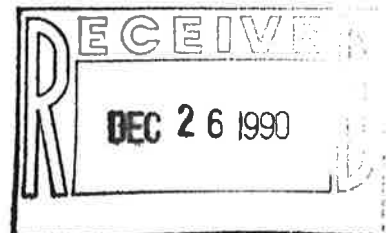
CHESAPEAKE TERRACE WETLAND DELINEATION REPORT

Prepared for:

National Waste Managers, Inc.

Prepared by:

EA Mid-Atlantic Regional Operations
EA Engineering, Science, and Technology, Inc.
15 Loveton Circle
Sparks, MD 21152



December 1990

EA Project 11767.01

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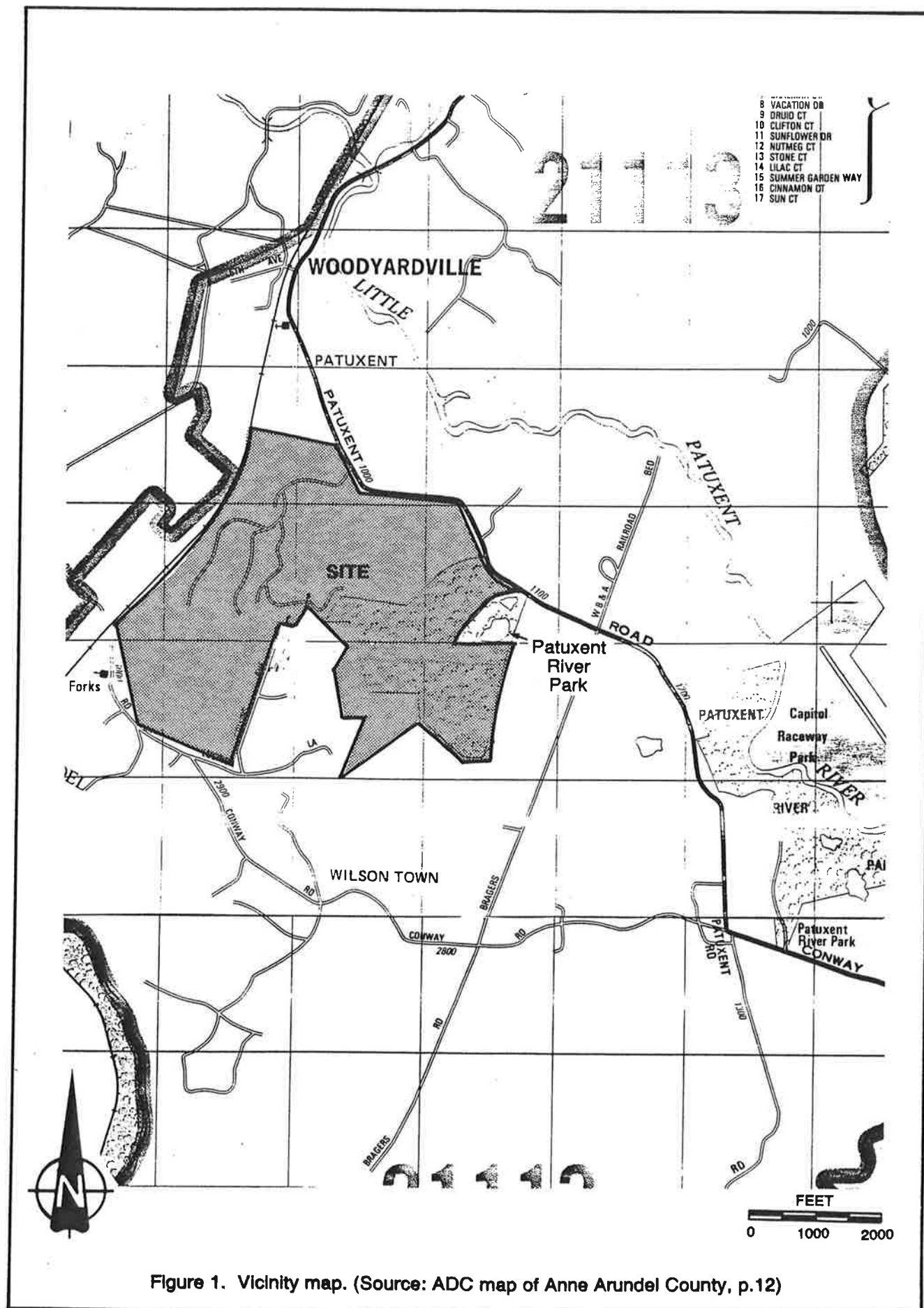
1. INTRODUCTION

EA Engineering, Science, and Technology was retained by National Waste Managers, Inc. to conduct a wetlands delineation and characterization at the Chesapeake Terrace site in Anne Arundel County, Maryland. The project area is in the Coastal Plain geologic province. The project site consists of an approximately 460-acre tract located south of Patuxent Road, east of the Amtrak railroad tracks, north of Conway Road and Lucinda Avenue and west of the Patuxent River Park (Figure 1).

The proposed project consists of the conversion of approximately 215 of those 460 acres into a rubble fill. Regulations regarding rubble fill operations, and restrictions associated with the 100-year floodplain of the Little Patuxent River were used to define the study area (Figure 2). In other words, that portion of the project site that could be utilized for rubble fill operations if appropriately permitted determined the boundaries of the study area.

The study site consists of approximately 215 acres of land, some of which had previously been subject to surface mining and various levels of reclamation efforts. The mined areas varied considerably in vegetative cover, topography, and soil characteristics. Some areas were vegetated primarily with pines growing on steeply sloped and severely eroded sand and gravel mounds, and other previously mined areas were primarily unvegetated, flat, or gently sloping with clay and sand substrates. Other areas of the study site that do not display characteristics of mining activities were vegetated primarily by upland hardwood species on steep and gentle slopes having sandy and silty loam soils.

The following report describes the methodology used in determining the presence and extent of wetlands on the study site, a findings section which more closely details the soils, hydrology and vegetation of the wetlands identified, a summary section, and references. Army Corps of Engineers (ACOE) datasheets are appended.



FEET
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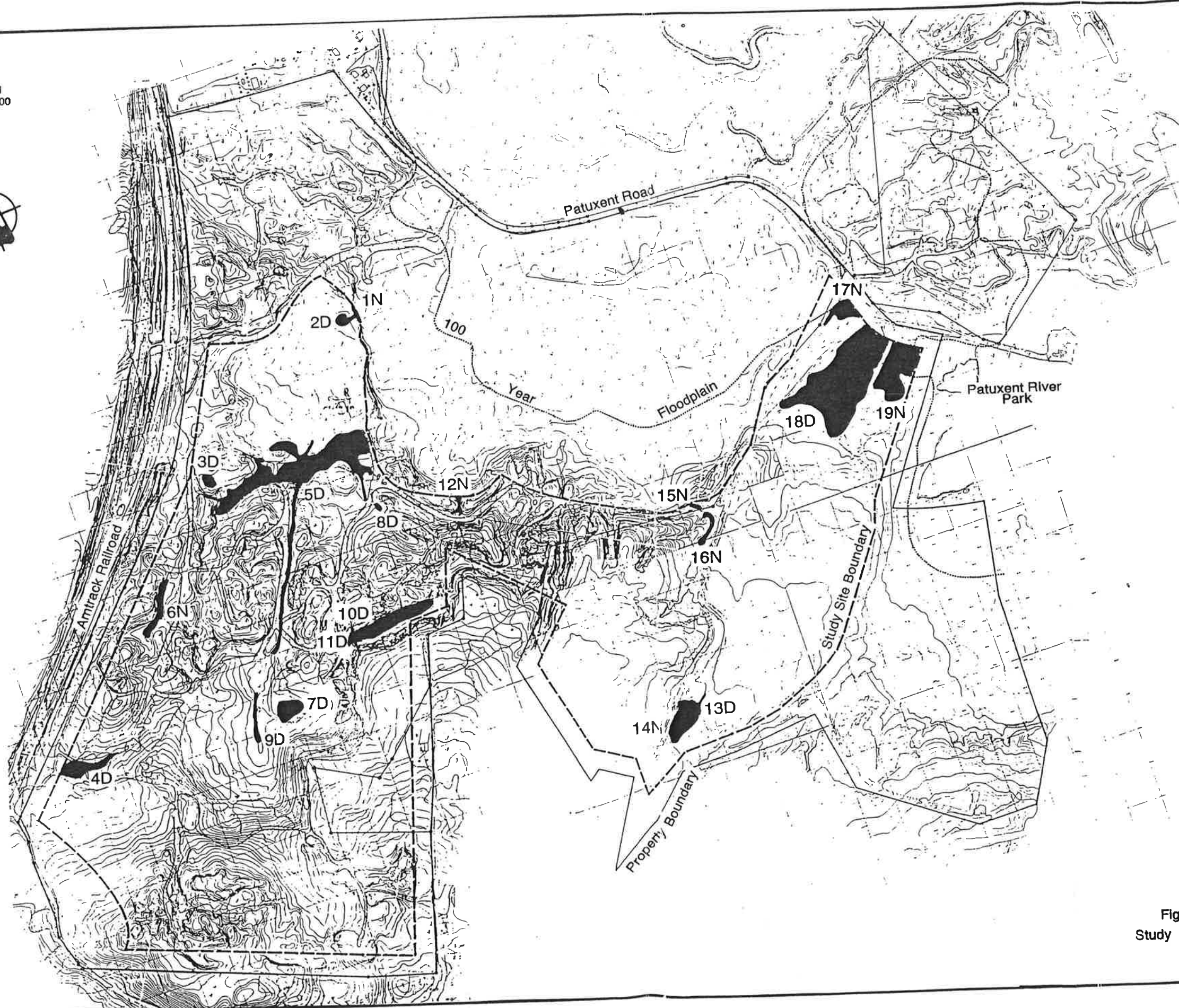


Figure 2. Chesapeake Terrace -
Study site and wetland areas (estimated).

2. METHODS

Wetlands are characterized and delineated according to the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands* (January 1989), on the basis of three main factors: hydrology, soils, and vegetation. The hydrology factor describes the duration and timing of surface inundation and the fluctuations in ground water. Hydrology is determined by reviewing topographic maps, soil surveys, and field indicators such as mud marks on trees, drift lines and stained leaves.

Hydric soils are the second indicator used to characterize wetlands. These are poorly drained soils which have held water long enough for chemical reactions to take place changing the color of the soil. Soil saturation leads to gleying and mottling, which are the field characteristics examined to determine whether a soil exhibits wetland conditions. Soil colors (hue, value, and chroma) are compared to the Munsell soil color chart, and soils with a chroma of 2 or less (e.g., 10YR 5/2), are considered to exhibit field characteristics of a hydric soil. The color and texture of the soil are used to determine how well it drains and whether it could support wetland vegetation. The Anne Arundel County Soil Survey provides an indication of where hydric soils may be located in the soil type map. Each soil type has been given a capability unit. Capability units are designations made by the Soil Conservation Service which describe limitations for cultivation and are also useful in locating potential wetland areas. Capability classes are designated by Roman numerals I through VIII. The numerals indicate progressively greater limitations. Capability subclasses are designated by small letters: e--for erosion, s--for stony, and w--for water in or on the soil which interferes with plant growth or cultivation. Soils with capability units of IIw may or may not have wetlands. Soils with capability units of IIIw generally support some wetlands. Wet capability units greater than IIIw nearly always support wetlands.

Finally, the vegetation of wetlands under natural conditions is composed of species adapted to wet soils and/or periodic flooding. Species which are commonly found in wetlands have been categorized by the U.S. Fish and Wildlife Service in the *National List of Plant Species That Occur in Wetlands: Northeast* (Reed 1988). Each plant listed is categorized by a regional indicator or "hydrophytic status" which describes the occurrence percentage of a given species in wetlands throughout its range.

There are four indicators:

OBL (Obligate Wetland) = greater than 99 percent of these plants are found in wetlands

FACW (Facultative Wetland) = 67-99 percent of these plants are found in wetlands

FAC (Facultative) = 34-66 percent of these plants are found in wetlands

FACU (Facultative Upland) = 1-33 percent of these plants are found in wetlands

Hydrophytes have been defined as species with indicators of OBL, FACW, and FAC for purposes of Army Corps of Engineers permitting. Wetlands are characterized by a predominance (>50 percent cover) of hydrophytic species.

Because the study site had been significantly altered during the surface mining operation, particular emphasis was placed on the Disturbed Area Delineation (pp. 50-55) section of the *Federal Manual for Identifying and Delineating Jurisdictional Wetlands*. Disturbed areas include situations where one or more of the three wetland field indicators are absent due to past or recent change. In order to facilitate identification, delineation, and description of the wetlands on the study site, EA biologists labeled wetlands and potential wetlands as one of three types: (1) non-disturbed, (2) disturbed, and (3) problem or questionable areas. The label "non-disturbed wetland" was used to identify those wetland areas that appeared to be unaltered by previous site activities. These areas

generally exhibited all three wetland field indicators. The label "disturbed wetland" was used to identify those areas that historically may have been wetlands but due to past activities one or more of the three wetland field indicators have been obliterated. The classification as "disturbed wetland" was also applied to areas which may not have historically been wetlands but, due to recent or past activities, now display one or more wetland characteristics. The label "problem or questionable areas" was used to indicate areas that were not flagged as wetlands but displayed one of the three wetland field characteristics. These "problem areas" typically displayed the hydrologic characteristic expected in wetlands. However, there was generally little to no vegetation in these areas and the soils were generally tightly packed clays which produced surface runoff and little infiltration.

3. FINDINGS

The wetlands in the study site were delineated and characterized by EA biologists on 4 through 7 and 11 through 13 December 1990. At the time of delineation, each wetland was categorized as non-disturbed or disturbed while problem/questionable areas were noted on a field copy of the site map.

Non-disturbed wetlands included eight areas: 1N, 6N, 12N, 14N, 15N, 16N, 17N, and 19N. Disturbed wetlands included eleven areas: 2D, 3D, 4D, 5D, 7D, 8D, 9D, 10D, 11D, 13D, and 18D. Problem/questionable areas were not assigned area numbers as they were not considered jurisdictional wetlands. Figure 2 shows the distribution of the wetlands on the study site. Appendix A includes copies of the Army Corps of Engineers' data sheets for wetlands used to characterize and delineate wetlands on the study site. The following findings section will detail each wetland field indicator as displayed by these three categories.

3.1 SOILS

The soils on the Chesapeake Terrace site have been significantly disturbed due to prior excavation of sand and gravel. The types of disturbances included: excavation and removal, excavation and grading, and stock piling. These past activities and the erosive effects of nature (wind, rain) have caused significant erosion and consequent deposition of the soils, sands, and gravels onsite. As a result, site topography displayed much more relief than is typically found in the Coastal Plain.

Prior to excavation, the soils of the site were a combination of Sassafras fine sandy loams, Loamy and clayey land, Woodstown loams, and Bibb silt loams (Figure 3). Sassafras fine sandy loam appears to be the most common soil type onsite. Characteristics of these soils in the study area are presented in Table 1.

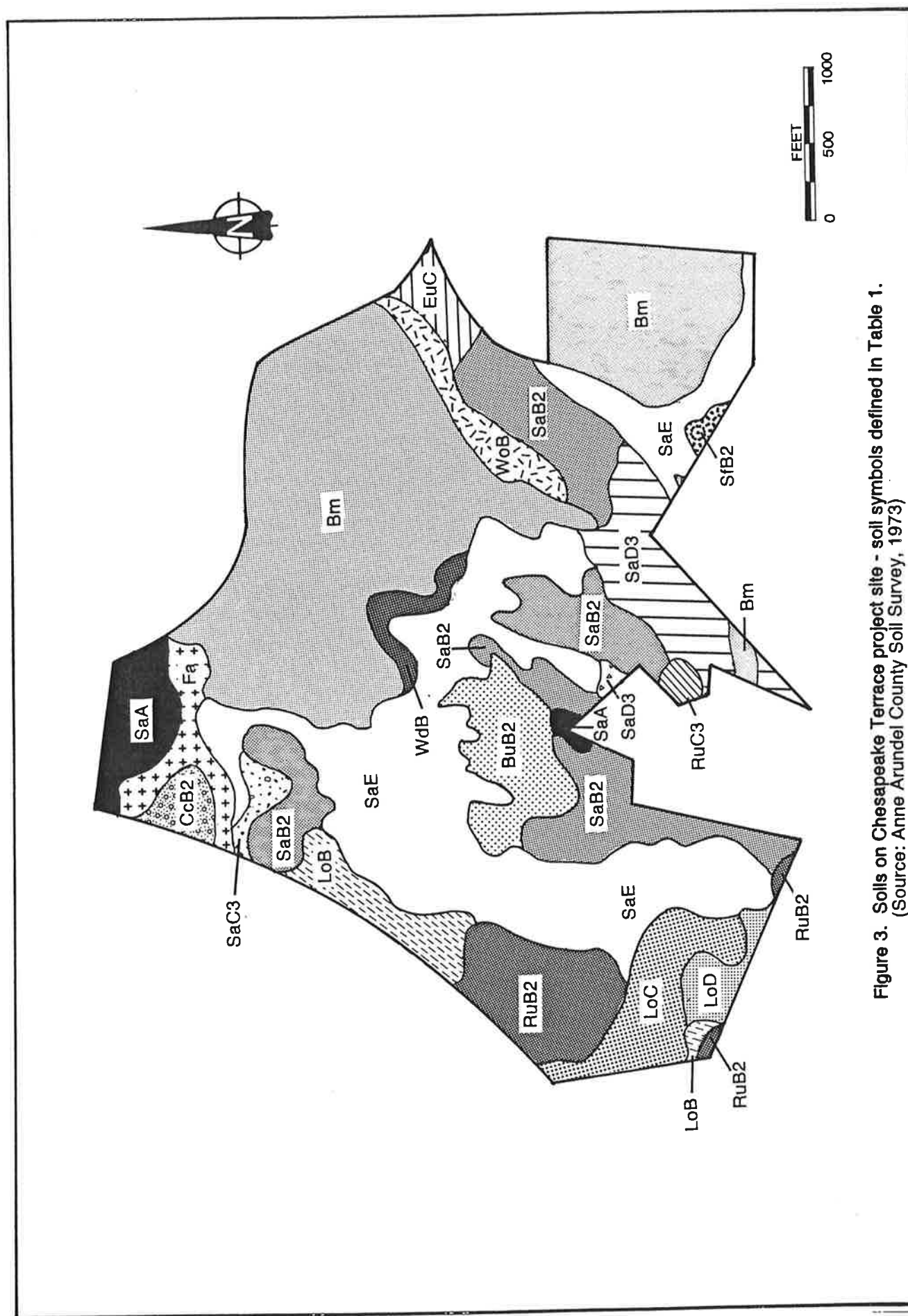


Figure 3. Soils on Chesapeake Terrace project site - soil symbols defined in Table 1.
(Source: Anne Arundel County Soil Survey, 1973)

TABLE 1 SOIL TYPES OF THE CHESAPEAKE TERRACE PROJECT SITE
FROM THE ANNE ARUNDEL COUNTY SOIL SURVEY, 1973

| <u>Symbol</u> | <u>Soil Type</u> | <u>Slope</u> | <u>Capability Unit</u> |
|---------------|-----------------------------|--------------|------------------------|
| Bm | Bibb silt loam | 2-5% | IIIw-7 |
| BuB2 | Butlertown silt loam | 2-5% | Ile-16 |
| CcB2 | Christiana silt loam | 2-5% | Ile-42 |
| EuC | Evesboro-Urban land complex | 0-15% | -- |
| Fa | Fallsington sandy loam | | IIIw-6 |
| LoB | Loamy and clayey land | 0-5% | IIIe-3 |
| LoC | Loamy and clayey land | 5-10% | IVe-2 |
| LoD | Loamy and clayey land | 10-40% | VIe-2 |
| RuB2 | Rumford loamy sand | 2-5% | IIs-4 |
| SaA | Sassafras fine sandy loam | 0-2% | I-5 |
| SaB2 | Sassafras fine sandy loam | 2-5% | Ile-5 |
| SaC3 | Sassafras fine sandy loam | 5-10% | IVe-5 |
| SaD3 | Sassafras fine sandy loam | 10-15% | VIe-2 |
| SaE | Sassafras fine sandy loam | 15-40% | VIe-2 |
| SfB2 | Sassafras loam | 2-5% | Ile-36 |
| WdB | Woodstown sandy loam | 2-5% | Ile-36 |
| WoB | Woodstown loam | 2-5% | Ile-16 |

Typically, most of these soils, with the exception of loamy and clayey land, have moderate to rapid infiltration rates. Loamy and clayey land is generally categorized as having a slow to moderate infiltration rate.

3.1.1 Non-Disturbed

Soils in the "non-disturbed" wetland areas were mapped (Anne Arundel County Soil Survey 1973) as Sassafras fine sandy loam with slopes ranging from 0 to 40 percent, Bibb silt loam with 2 to 5 percent slopes, Woodstown loam with 2 to 5 percent slopes, and Evesboro-Urban land complex with 0 to 15 percent slopes. Overall soil matrix colors in the non-disturbed wetland areas ranged from 10YR 3/2 to 10YR 7/1. Mottling in the soil was present at all non-disturbed wetland areas except 12N and 17N. The mottle colors ranged from 10YR 4/6 to 10YR 6/6. Significant gleying of the soils was also present in all non-disturbed wetland areas. In addition, most of the soils in the non-disturbed wetland areas displayed oxidized root rhizospheres. Soils in the uplands adjacent to the non-disturbed wetland areas were generally bright, sandy loams with an overall soil matrix color of 10YR 5/6.

3.1.2 Disturbed

Soils in the "disturbed" wetland areas were mapped as Bibb silt loam with 2 to 5 percent slopes, Sassafras sandy loams with 0 to 40 percent slopes, Rumford loamy sand with 2 to 5 percent slopes, and Butlertown silt loams with 2 to 5 percent slopes. In general, the areas identified as "disturbed" wetlands have undergone significant excavation of materials and/or filling and grading associated with reclamation efforts. Soils in these areas varied from tightly packed silty clays to sands underlain by clay. Due to the nature of soils in these disturbed areas, the determination of a wetland-upland interface line was based most often on the vegetative and hydrologic field indicators. It should be noted,

however, that overall soil matrix colors in the "disturbed" wetland areas ranged from what is typically considered bright upland at 10YR 6/6 to very definitely hydric at 5YR 5/1 and 10YR 4/2.

3.1.3 Problem/Question Areas

Soils in the "problem or questionable areas" were very similar to those of the disturbed areas. In some cases excavation and filling have left exposed clay or sand. Some of the exposed clay areas had surface waters traversing them in patterns determined primarily by the erosivity of the remaining substrate (i.e., no final grading or reclamation after cessation of mining activities).

3.2 HYDROLOGY

Hydrology on the study site had been significantly altered during past surface mining activities. Intermittent and perennial streambeds appeared to have been excavated to mine the underlying gravels and, in some cases, filled with sand and other soil materials or dammed to create ponds.

3.2.1 Non-Disturbed

Hydrology in the wetland areas categorized as "non-disturbed" ranged from surface water runoff and collection to intermittent streams and collection ponds. Some of the hydrologic indicators found include leaf staining, mud marks, debris dams, soil saturation, and standing water.

3.2.2 Disturbed

Hydrology in the wetland areas categorized as "disturbed" consisted primarily of surface water runoff channels and small ponds or puddles. Additional hydrologic indicators present in these "disturbed" areas included saturated soils, standing

water, and leaf staining. Some of the small ponded areas and puddles appeared to be caused by water collection in slowly permeable material crossed by heavy machinery (track ruts).

3.2.3 Problem/Questionable Areas

Hydrology was generally the most evident wetland characteristic in areas categorized as problematic or questionable. This wetland characteristic and evidence of channel erosion were identified in the largest open unvegetated area of the study site. However, due to a substantial rain event during the beginning of the field investigation, the sources of these hydrologic indicators were undetermined.

3.3 VEGETATION

Nineteen wetlands were delineated during the field survey. Eleven of these areas were described as disturbed, severely modified, or created by human activity. The remaining eight wetlands were in a relatively natural and more mature condition. Evidence of disturbance or modification to wetlands included abnormal clay substrates exposed from sand and gravel mining, road fills across wetlands, ditches, dikes, erosion channels, and sediment control ponds. Disturbed wetlands were generally in an early successional state of herbaceous species shrub/scrub, or young tree growth. Vegetation identified in the wetlands is listed by wetland in the ACOE Routine Wetland Determination Data Forms in Appendix A, and is also listed collectively in Table 2, including species identified in adjacent uplands.

Wooded wetlands included floodplain swamps, steeply sloped swales, and isolated bermed depressions. These wetlands were generally dominated by river birch and/or sweetgum. Other canopy species included red maple, sycamore, cottonwood, tulip poplar, beech, pin oak, white oak, willow oak, loblolly pine, and occasionally Virginia pine. Understory species included birch, ironwood, black

TABLE 2 VEGETATION IDENTIFIED AT THE CHESAPEAKE TERRACE
PROPERTY, DECEMBER 1990

| <u>Scientific Name</u> | <u>Common Name</u> | <u>Hydrophytic Status</u> ^(a) |
|--------------------------------|----------------------|--|
| TREES | | |
| <u>Acer rubrum</u> | Red maple | FAC |
| <u>Ailanthus altissima</u> | Tree-of-heaven | FACU |
| <u>Abilizia julibrissan</u> | Mimosa | UP* |
| <u>Betula nigra</u> | River birch | FACW |
| <u>Caprinus caroliniana</u> | Ironwood | FAC |
| <u>Carya glabra</u> | Pignut hickory | FACU |
| <u>Fagus grandifolia</u> | Beech | FACU |
| <u>Ilex opaca</u> | American holly | FACU |
| <u>Juniperus virginiana</u> | Eastern red cedar | FACU |
| <u>Liquidambar styraciflua</u> | Sweetgum | FAC |
| <u>Liriodendron tulipifera</u> | Tulip tree | FACU |
| <u>Magnolia virginiana</u> | Sweetbay magnolia | FACW |
| <u>Pinus taeda</u> | Loblolly pine | FAC |
| <u>Pinus virginiana</u> | Virginia pine | UP* |
| <u>Platanus occidentalis</u> | American sycamore | FACW |
| <u>Populus deltoides</u> | Eastern cottonwood | FAC |
| <u>Prunus serotina</u> | Black cherry | FACU |
| <u>Quercus alba</u> | White oak | FACU |
| <u>Quercus falcata</u> | Southern red oak | FACU |
| <u>Quercus palustris</u> | Pin oak | FACW |
| <u>Quercus phellos</u> | Willow oak | FAC |
| <u>Quercus prinus</u> | Chestnut oak | UP* |
| <u>Quercus rubra</u> | Northern red oak | FACU |
| <u>Robinia pseudoacacia</u> | Black locust | FACU |
| <u>Salix caroliniana</u> | Coastal plain willow | OBL |
| <u>Salix nigra</u> | Black willow | FACW |

- (a) Hydrophytic status follows Reed, P.B. Jr. (1988) The U.S. Fish and Wildlife National List of Plant Species that Occur in Wetlands unless indicated otherwise. Abbreviations:
 OBL = Obligate (found in wetlands in more than 99% of all findings)
 FACW = Faculative wetland (66-99%)
 FAC = Faculative (33-66%)
 FACU = Faculative upland (1-33%)
 UP = Upland (<1%)

Note: *Hydrophytic status not reported; status presented is based on professional judgement and is supported by appropriate literature.

TABLE 2 (Cont.)

SHRUBS

| | | |
|------------------------------|--------------------|------|
| <u>Alnus serrulata</u> | Alder | OBL |
| <u>Aralia spinosa</u> | Hercules club | FAC |
| <u>Aronia arbutifolia</u> | Red chokeberry | FACW |
| <u>Clethra alnifolia</u> | Pepperbush | FAC |
| <u>Euonymus americanus</u> | Strawberry bush | FAC |
| <u>Kalmia latifolia</u> | Mountain laurel | FACU |
| <u>Leucothoe racemosa</u> | Fetter-bush | FACW |
| <u>Pyrus coronaria</u> | Crab apple | UP* |
| <u>Rhus typhina</u> | Staghorn sumac | UP* |
| <u>Rosa multiflora</u> | Multiflora rose | FACU |
| <u>Rubus hispida</u> | Bristly blackberry | FACW |
| <u>Rubus occidentalis</u> | Black raspberry | UP* |
| <u>Sambucus canadensis</u> | American elder | FACW |
| <u>Vaccinium corymbosum</u> | Highbush blueberry | FACW |
| <u>Vaccinium macrocarpon</u> | Large cranberry | OBL |
| <u>Vaccinium vacillans</u> | Low blueberry | UP* |
| <u>Viburnum dentatum</u> | Arrow-wood | FAC |

VINES

| | | |
|----------------------------|----------------------|------|
| <u>Campsis radicans</u> | Trumpet vine | FAC |
| <u>Lonicera japonica</u> | Japanese honeysuckle | FAC |
| <u>Mitchella repens</u> | Partridge-berry | FACU |
| <u>Rhus radicans</u> | Poison ivy | FAC |
| <u>Smilax rotundifolia</u> | Greenbrier | FAC |
| <u>Vitis rotundifolia</u> | Muscadine grape | FAC |

FERNS AND FERN ALLIES

| | | |
|-----------------------------------|--------------------|------|
| <u>Asplenium platyneuron</u> | Ebony spleenwort | FACU |
| <u>Athyrium filix-femina</u> | Lady fern | FAC |
| <u>Athyrium thelypteroides</u> | Silvery spleenwort | FAC |
| <u>Botrychium dissectum</u> | Cutleaf grapefern | FAC |
| <u>Dryopteris spinulosa</u> | Spinulose woodfern | FAC |
| <u>Lycopodium fabelliforme</u> | Ground cedar | FACU |
| <u>Lycopodium obscurum</u> | Tree clubmoss | FACU |
| <u>Onoclea sensibilis</u> | Sensitive fern | FACW |
| <u>Osmunda cinnamomea</u> | Cinnamon fern | FACW |
| <u>Polystichum acrostichoides</u> | Christmas fern | FACU |
| <u>Pteridium aquilinum</u> | Bracken fern | FACU |
| <u>Sphagnum</u> spp. | Peat moss | OBL |

TABLE 2 (Cont.)

GRASSES, SEDGES, AND RUSHES

| | | |
|-----------------------------------|-------------------------|------|
| <u>Agrostis perennans</u> | Perennial Bentgrass | FACU |
| <u>Andropogon virginicus</u> | Broomsedge | FACU |
| <u>Aristida oligantha</u> | Prairie three-awn | UP* |
| <u>Bromus japonicus</u> | Japanese chess | FACU |
| <u>Carex lurida</u> | Lurid sedge | OBL |
| <u>Carex crinita</u> | Fringed sedge | OBL |
| <u>Carex intumescens</u> | Bladder sedge | FACW |
| <u>Chasmanthium laxum</u> | Slender spikegrass | FAC |
| <u>Dactylis glomerata</u> | Orchard grass | FACU |
| <u>Dichanthelium clandestinum</u> | Deer tongue witchgrass | FAC |
| <u>Echinochloa crusgalli</u> | Barnyard grass | FACU |
| <u>Eleocharis obtusa</u> | Blunt spikerush | OBL |
| <u>Eleocharis tuberculosa</u> | Long-tubercle spikerush | OBL |
| <u>Elymus virginicus</u> | Virginia wild-rye | FACW |
| <u>Festuca pratensis</u> | Meadow fescue | FACU |
| <u>Fimbristylis autumnalis</u> | Fimbristylis | FACW |
| <u>Glyceria striata</u> | Fowl mannagrass | OBL |
| <u>Juncus effusus</u> | Soft rush | FACW |
| <u>Juncus tenuis</u> | Slender rush | FAC |
| <u>Juncus debilis</u> | | |
| <u>Juncus scirpoides</u> | | |
| <u>Leersia oryzoides</u> | Rice cutgrass | OBL |
| <u>Panicum virgatum</u> | Switch grass | FAC |
| <u>Phleum pratense</u> | Timothy | FACU |
| <u>Phragmites australis</u> | Common reed | FACW |
| <u>Scirpus cyperinus</u> | Wool-grass | FACW |
| <u>Scirpus purshianus</u> | Alkali bulrush | OBL |
| <u>Setaria glauca</u> | Yellow bristle grass | FAC |
| <u>Setaria italica</u> | Foxtail | FACU |
| <u>Sorghastrum nutans</u> | Indian grass | UP* |
| <u>Tridens flavus</u> | Purple-top | FACU |
| <u>Zizania aquatica</u> | Annual wild rice | OBL |

TABLE 2 (Cont.)

HERBS

| | | |
|--------------------------------|---------------------------|------|
| <u>Achillia millefolium</u> | Yarrow | FACU |
| <u>Allium vineale</u> | Field garlic | FACU |
| <u>Apocynum cannabinum</u> | Indian hemp | FACU |
| <u>Arctium minus</u> | Burdock | UP* |
| <u>Arisaema triphyllum</u> | Jack-in-the-pulpit | FACW |
| <u>Asclepias syriaca</u> | Pink milkweed | UP* |
| <u>Bidens polylepsis</u> | Devil's-beggarticks | FACW |
| <u>Cirsium vulgare</u> | Thistle | FACU |
| <u>Daucus carota</u> | Queen Anne's Lace | UP* |
| <u>Duchesnea indica</u> | Indian mock-strawberry | FACU |
| <u>Eupatorium fistulosus</u> | Hollow joe-pye weed | FACW |
| <u>Geum laciniatum</u> | Rough avens | FAC |
| <u>Hypericum mutilum</u> | Dwarf St. Johns wort | FAC |
| <u>Impatiens capensis</u> | Spotted touch-me-not | FACW |
| <u>Ludwigia alternifolia</u> | Bushy seedbox | FACW |
| <u>Lycopus americanus</u> | American bugleweed | OBL |
| <u>Oenothera biennis</u> | Evening primrose | FACU |
| <u>Phytolacca americana</u> | Pokeweed | FACU |
| <u>Plantago lanceolata</u> | English plantain | UP* |
| <u>Plantago rugelii</u> | Black-seed plantain | FACU |
| <u>Polygonum arifolium</u> | Arrow-leaf tear thumb | OBL |
| <u>Polygonum perfoliatum</u> | Asian tearthumb | FAC |
| <u>Potentilla simplex</u> | Oldfield cinquefoil | FACU |
| <u>Prunella vulgaris</u> | Heal-all | FACU |
| <u>Pycnanthemum flexuosum</u> | Narrow-leaf mountain mint | FACW |
| <u>Rumex crispus</u> | Curly dock | FACU |
| <u>Solanum carolinense</u> | Horse nettle | UP* |
| <u>Solidago spp.</u> | Goldenrods | UNK |
| <u>Spiranthes sp.</u> | Ladies tresses | UNK |
| <u>Taraxacum officinale</u> | Dandelion | FACU |
| <u>Typha latifolia</u> | Broad-leaf cattail | OBL |
| <u>Vernonia noveboracensis</u> | New York ironweed | FACW |
| <u>Xanthium strumarium</u> | Rough cocklebur | FAC |
| <u>Xyris caroliniana</u> | Yellow-eyed grass | FACW |

willow, sweetgum, maple, sweetbay, holly, and hercules club. Shrubs were dominated by arrow-wood and also included clethra, swamp dewberry, black raspberry, multiflora rose, highbush blueberry, elderberry, alder, strawberry bush, and chokeberry. Vines were often dense and were dominated by greenbrier and/or Japanese honeysuckle and also included muscadine grape, poison ivy, and partridge berry. Ground cover was often dominated by Japanese honeysuckle. Other herbaceous species included woolgrass, soft rush, fowl manna-grass, sphagnum moss, ferns, and ground pine.

Unforested wetlands were disturbed areas which included shrub-scrub, emergent and open water areas. Woolgrass and soft rush were the most common species found in these areas. Woody species included young birches, willows, maples, sweetgums, and sycamores. Shrub species included blackberry, sumac, elderberry, multiflora rose, alder, and highbush blueberry. Vines included trumpet vine, Japanese honeysuckle, and poison ivy. Herbaceous species were varied and numerous and included path rush, perennial bent grass, deer-tongue witchgrass, spike rush, switch grass, common reed, rice cutgrass, various sedges, field garlic, dwarf St. John's wort, seedbox, bugleweed, cattails, asters, goldenrods, beggars'-ticks, and Joe-pye weed.

The largest wetland system, located along the southern side of the largest mine area (5D), was a forested swamp and pond system modified by roads, ditches, and dikes. This wetland included several unique wetland associations, including a patch of cranberry, a man-made pond (with old beaver sign) dominated by rice cutgrass, and an approximately 800-ft-long roadside ditch dominated by woolgrass.

Another large wetland system was located along Patuxent Road (Route 170) and included three wooded floodplain wetlands (17N, 18D, and 19N) separated by roads and berms of old roads. These wetlands were codominated by loblolly pine and sweetgum and also included Virginia pine, river birch, red maple, willow oak, pin oak, cottonwood, holly, sycamore, and white oak. Shrubs and vines

included highbush blueberry, arrow-wood, clethra, elderberry, greenbrier, Japanese honeysuckle, poison ivy, and grape. Ground cover was dominated by soft rush and also included Japanese honeysuckle, seedbox, various sedges and rushes, sphagnum moss, spikegrass, bugleweed, deer-tongue witchgrass, goldenrod, and swamp dewberry. A similar floodplain wetland (1N) occurred along the northern edge of the largest open mine area. This wetland contained similar species, but with limited pine cover.

Five steeply sloped non-disturbed wooded swales (6N, 12N, 14N, 15N, 16N) were identified. These were dominated by sweetgum and/or river birch with limited understory, shrub layer, and ground cover. Other tree species included ironwood, cottonwood, holly, maple, and beech. Shrub, vine, and herbaceous species were similar to other wooded wetland areas described above, but were limited probably due to high energy storm events. Similar less steeply sloped, disturbed areas (4D, 7D, 8D) were dominated by younger birches and pine with marsh emergents as ground cover. Wetland area 4D, located in the western corner of the site, was dominated by birch and was associated with a ponded wetland at a road crossing. Species associated with the pond included woolgrass, cattails, soft rush, beggars'-ticks, and spike rush. The other two wetlands were located along roads.

Ponds and isolated wet areas occurring in the formerly mined areas included four wet depressions or ponds (2D, 3D, 10D, 11D) and two broad old field swales (9D, 13D). Sedges and rushes dominated ponds on exposed clay substrates. Old field swales contained a more diverse assemblage of species with saplings of woody species becoming established. Swales were dominated by phragmites and soft rush and also included asters, goldenrod, deer-tongue witchgrass, broomsedge, fescue, woolgrass, path rush, beggars'-ticks, cattails, seed box, and rice cutgrass.

4. SUMMARY

The project as proposed will require the filling of a total of approximately 9.83 acres of wetland. Of this area, approximately 7.72 acres have been characterized as disturbed wetlands and 2.11 acres have been characterized as non-disturbed wetlands. A large proportion (37 percent) of the disturbed wetlands appear to have resulted from the conversion of upland areas underlain by Sassafras soils following surface mining of sands and gravels. Non-disturbed wetlands are characterized as river birch and sweetgum dominated, with Virginia pine and miscellaneous Coastal Plain species comprising the community.

REFERENCES

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APPENDIX A

ARMY CORPS OF ENGINEERS (ACOE)
DATA SHEETS FOR WETLANDS

**DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹**

Wetland + N

Field Investigator(s): EW M KLD, JAB

Date: 12-4-98

Project/Site: Sho. Terrace

State: MD

County: AA Co

Applicant/Owner: _____

Plant Community Name: _____

Note: If a more detailed site description is necessary, use the back of data form or a field notebook

Do normal environmental conditions exist at the plant community?

Yes ☒ No _____ (If no, explain on back)

Has the vegetation, soils, and/or hydrology been significantly disturbed?

Yes _____ No _____ (If yes, explain on back) ?

VEGETATION see back

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|--------------------------------------|------------------|----------|------------------------------------|------------------|----------------|
| 1. <u>Red maple</u> | <u>FAC</u> | <u>C</u> | 11. <u>Polygonum arifolium</u> | <u>OBL</u> | <u>H</u> |
| 2. <u>Sweetgum</u> | <u>FAC</u> | <u>C</u> | 12. <u>Ludwigia alternifolia</u> | <u>FACW</u> | <u>H</u> |
| 3. <u>Green heron</u> | <u>FAC</u> | <u>V</u> | 13. <u>Vernonia noveboracensis</u> | <u>FACW</u> | <u>H</u> |
| 4. <u>River birch</u> | <u>FACW</u> | <u>C</u> | 14. <u>Carex lurida</u> | <u>OBL</u> | <u>H</u> |
| 5. <u>Juncus effusus</u> | <u>FACW</u> | <u>H</u> | 15. <u>Juncus effusus</u> | <u>OBL</u> | <u>H</u> |
| 6. <u>Scirpus c. perfoliatus</u> | <u>FACW</u> | <u>H</u> | 16. <u>Eupatorium fistulosum</u> | <u>FACW</u> | <u>H</u> |
| 7. <u>Opicanthelium clandestinum</u> | <u>FAC</u> | <u>V</u> | 17. <u>Carpinus caroliniana</u> | <u>FAC</u> | <u>C/Udist</u> |
| 8. <u>Juncus horreus</u> | <u>FAC</u> | <u>V</u> | 18. <u>Liriodendron tulipifera</u> | <u>FACU</u> | <u>C</u> |
| 9. <u>Sparganium angustifolium</u> | <u>OBL</u> | <u>H</u> | 19. _____ | _____ | _____ |
| 10. <u>Viburnum dentatum</u> | <u>FAC</u> | <u>S</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____

Is the hydrophytic vegetation criterion met? Yes _____ No _____

Rationale: _____

SOILS

Series/phase: SAE-Bm

Subgroup: 2

Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____

Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____

Is the soil: Mottled? Yes _____ No _____ Gleyed? Yes _____ No _____

Matrix Color: 10YR 4/2, 5YR 5/8 Mottle Colors: some gray mottles 5YR 5/2 4/2

Other hydric soil indicators: Same saturation

Is the hydric soil criterion met? Yes ☒ No _____ Bright 10" 10" + gleyed

Rationale: 10YR 4/2 + 5YR 5/8 (Flag 1N7)

HYDROLOGY

Is the ground surface inundated? Yes _____ No ☒ Surface water depth: _____

Is the soil saturated? Yes ☒ No _____

Depth to free-standing water in pit/soil probe hole: _____

List other field evidence of surface inundation or soil saturation. _____

Is the wetland hydrology criterion met? Yes ☒ No _____

Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No _____

Rationale for jurisdictional decision: Dom b, FAC, FACW species

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

Wetland areas: Coarse, sat. sand 5YR 5/8 (full core)
Adjacent uplands 10YR 5/4

12/4/90 Chesapeake Terrace Wetland N

- Red maple - Sweet gum - Ironwood
HHH III HHH I

- Tulip Poplar
IIII

Shrub layer

- greenbrier
- Jap. honeysuckle
- Viburnum

grasses

- fowl manna grass

Further into wetland

- Solitago sp. - Arrow leaved pig.
- Panicum Dichanthelium - Seed box
- Clam - Carex sp.
- Joe pye
- Soft rush
- New York ironweed

AT Flag 1N10

Soils 10YR 5/1 mottles 10YR 4/6 Entire core
tight silty very fine sand

2D

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

Field Investigator(s): JAS/MD CWM Date: 12/4/90
Project/Site: NO. 5 PEARCE'S State: MD County: AA
Applicant/Owner: HAILEY Plant Community #/Name: 2D WETLAND
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ☐ No ☒ (If no, explain on back) excavated pond between woods (downgradient) and stripmined area
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ☒ No ☐ (If yes, explain on back) all three - outfall riprap, inflow eroding strip mine

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-------------------------------|------------------|--------------|--------------------------|------------------|---------|
| 1. <u>Locust</u> | <u>FACW</u> | <u>shrub</u> | 11. <u>open water</u> | | |
| 2. <u>Rubus occidentalis</u> | <u>UP+</u> | <u>shrub</u> | 12. <u>open water</u> | | |
| 3. <u>Thistle</u> | | <u>herb</u> | 13. <u>open water</u> | | |
| 4. <u>Mostly open ground</u> | | | 14. <u>Shallow pond</u> | | |
| 5. <u>on LITTORAL edge of</u> | | | 15. <u>Sediment trap</u> | | |
| 6. <u>Pond</u> | | | 16. <u>Sediment trap</u> | | |
| 7. <u>Pond</u> | | | 17. <u>Sediment trap</u> | | |
| 8. <u>Pond</u> | | | 18. <u>Sediment trap</u> | | |
| 9. <u>Pond</u> | | | 19. <u>Sediment trap</u> | | |
| 10. <u>Pond</u> | | | 20. <u>Sediment trap</u> | | |

Percent of dominant species that are OBL, FACW, and/or FAC < 50
Is the hydrophytic vegetation criterion met? Yes ☐ No ☒
Rationale:

SOILS

Series/phase: sand silt Subgroup: Susstrass
Is the soil on the hydric soils list? Yes ☐ No ☒ Undetermined
Is the soil a Histosol? Yes ☐ No ☒ Histic epipedon present? Yes ☐ No ☒
Is the soil: Mottled? Yes ☐ No ☒ Gleyed? Yes ☐ No ☒
Matrix Color: 10YR 6/6 Mottle Colors:
Other hydric soil indicators: saturation - field data preceded by day off 12/11
Is the hydric soil criterion met? Yes ☐ No ☒
Rationale:

HYDROLOGY

Is the ground surface inundated? Yes ☒ No ☐ Surface water depth: < 1' - 1'
Is the soil saturated? Yes ☒ No ☐
Depth to free-standing water in pit/soil probe hole: POND AREA
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes ☒ No ☐
Rationale:

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No ☐
Rationale for jurisdictional decision: See reverse

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

Pond in an area probably upland
 prior to strip mining. Appears to
 be created to function as a sediment
 trap - appears to be working
 well. Not dominated by
 plants - few present in
 water or littoral zone. Upland
 plants and soils immediately
 adjacent to pond littoral zone

Appendix B

Examples of Data Sheets

Wetland 3 D

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

Field Investigator(s): J.W. J.B. KLD Date: 12-4-90
 Project/Site: CHS - 310002 State: MD County: AA
 Applicant/Owner: _____ Plant Community #/Name: _____
 Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
 Yes _____ No ☒ (If no, explain on back)
 Has the vegetation, soils, and/or hydrology been significantly disturbed?
 Yes ☒ No _____ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | | | Dominant Plant Species | | |
|---------------------------------|------------------|----------|-------------------------------|------------------|----------|
| | Indicator Status | Stratum | | Indicator Status | Stratum |
| 1. <u>Matted sedge</u> | | | 11. <u>Scirpus purshianus</u> | <u>OBL</u> | <u>H</u> |
| 2. <u>Juncus sp.</u> | | | 12. <u>Juncus debilis</u> | <u>OBL</u> | <u>H</u> |
| 3. <u>Eleocharis sp. obtusa</u> | <u>OK</u> | <u>H</u> | 13. _____ | | |
| 4. <u>Polygonum sp.</u> | <u>UNK</u> | <u>H</u> | 14. _____ | | |
| 5. <u>Scirpus cyperinus</u> | <u>FACW</u> | <u>H</u> | 15. _____ | | |
| 6. <u>Carex sp.</u> | <u>OBL</u> | <u>H</u> | 16. _____ | | |
| 7. _____ | | | 17. _____ | | |
| 8. _____ | | | 18. _____ | | |
| 9. _____ | | | 19. _____ | | |
| 10. _____ | | | 20. _____ | | |

Percent of dominant species that are OBL, FACW, and/or FAC _____
 Is the hydrophytic vegetation criterion met? Yes _____ No _____
 Rationale: _____

SOILS

Series/phase: SAB - Sab₂ Subgroup: 2
 Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____
 Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
 Is the soil: Mottled? Yes _____ No ☒ Gleyed? Yes ☒ No _____
 Matrix Color: 10YR 2/2 Mottle Colors: _____
 Other hydric soil indicators: gleyed, saturated
 Is the hydric soil criterion met? Yes _____ No _____
 Rationale: gleyed clay layer at 12" coarse sand

HYDROLOGY

Is the ground surface inundated? Yes ☒ No _____ Surface water depth: 2" to 1'
 Is the soil saturated? Yes ☒ No _____
 Depth to free-standing water in pit/soil probe hole: _____
 List other field evidence of surface inundation or soil saturation: _____
 Is the wetland hydrology criterion met? Yes ☒ No _____
 Rationale: ponded

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No _____
 Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

**DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹**

Wetland 4D

Field Investigator(s): EWM KLD HPL Date: 12-5-90
 Project/Site: Ches. Terrace State: MD County: AA
 Applicant/Owner: _____ Plant Community #/Name: _____
 Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Flora
1-25

Do normal environmental conditions exist at the plant community?
 Yes _____ No ✓ (If no, explain on back) reclaimed area
 Has the vegetation, soils, and/or hydrology been significantly disturbed?
 Yes ✓ No _____ (If yes, explain on back)

VEGETATION

| Indicator | | | Indicator | | |
|----------------------------------|-------------|----------|----------------------------------|-------------|----------|
| Dominant Plant Species | Status | Stratum | Dominant Plant Species | Status | Stratum |
| 1. <u>Typha Latifolia</u> | <u>OBL</u> | <u>H</u> | 11. <u>Sweet gum</u> | <u>FAC</u> | <u>C</u> |
| 2. <u>Panicum Virginum</u> | <u>FAC</u> | <u>H</u> | 12. <u>River Birch</u> | <u>FACW</u> | <u>C</u> |
| 3. <u>Bidens sp. polylopesis</u> | <u>FACW</u> | <u>H</u> | 13. <u>Virginia pine</u> | <u>UP</u> | <u>C</u> |
| 4. <u>Juncus effusus</u> | <u>FACW</u> | <u>H</u> | 14. <u>L. scult</u> | <u>FACW</u> | <u>C</u> |
| 5. <u>Barnyard grass</u> | <u>FACW</u> | <u>H</u> | 15. <u>Polygonum perfoliatum</u> | <u>FAC</u> | <u>H</u> |
| 6. <u>Seed box</u> | <u>FACW</u> | <u>H</u> | 16. _____ | _____ | _____ |
| 7. <u>Woolgrass</u> | <u>FACW</u> | <u>H</u> | 17. _____ | _____ | _____ |
| 8. <u>Echinochloa obtusa</u> | <u>OBL</u> | <u>H</u> | 18. _____ | _____ | _____ |
| 9. <u>Juncus tenuis</u> | <u>FACW</u> | <u>H</u> | 19. _____ | _____ | _____ |
| 10. <u>Cottonwood</u> | <u>FAC</u> | <u>C</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
 Is the hydrophytic vegetation criterion met? Yes _____ No _____
 Rationale: _____

SOILS

Series/phase: Rumford heavy sand 25% Subgroup: 2
 Is the soil on the hydric soils list? Yes _____ No _____ Undetermined ✓
 Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
 Is the soil: Mottled? Yes ✓ No _____ Gleyed? Yes ✓ No _____
 Matrix Color: 2.5Y 5/2 Mottle Colors: 7.5YR 5/4
 Other hydric soil indicators: white clay 2.5Y 8/1
 Is the hydric soil criterion met? Yes ✓ No _____
 Rationale: saturated, gleyed, no HIC, inundated Some 10R 9/6 clay

HYDROLOGY

Is the ground surface inundated? Yes ✓ No _____ Surface water depth: 3"
 Is the soil saturated? Yes ✓ No _____
 Depth to free-standing water in pit/soil probe hole: _____
 List other field evidence of surface inundation or soil saturation: _____
 Is the wetland hydrology criterion met? Yes ✓ No _____
 Rationale: Ponded

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No _____
 Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

WETLAND 51

Field Investigator(s): ENM KLA JPL Date: 12-5-90
 Project/Site: Chas. Price Spruce State: MD County: PA
 Applicant/Owner: _____ Plant Community #/Name: _____
 Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
 Yes ☒ No _____ (If no, explain on back)
 Has the vegetation, soils, and/or hydrology been significantly disturbed?
 Yes ☒ No _____ (If yes, explain on back) Bermet pond, excavated?

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|------------------------------|------------------|----------|-------------------------------|------------------|----------|
| 1. <u>Orchid, Spiranthes</u> | <u>UNK</u> | <u>H</u> | 11. <u>Manberry Parag</u> | <u>OBL</u> | <u>H</u> |
| 2. <u>Yellow eyed grass</u> | <u>OBL</u> | <u>H</u> | 12. <u>Simons' dogfish</u> | <u>OBL</u> | <u>H</u> |
| 3. <u>Golden rod</u> | <u>UNK</u> | <u>H</u> | 13. <u>Soft rush</u> | <u>FACW</u> | <u>H</u> |
| 4. <u>River Birch</u> | <u>FACW</u> | <u>C</u> | 14. <u>Sagebrush</u> | <u>OBL</u> | <u>H</u> |
| 5. <u>Virginia pine</u> | <u>UP</u> | <u>C</u> | 15. <u>Highland blueberry</u> | <u>FACW</u> | <u>S</u> |
| 6. <u>Red maple</u> | <u>FAC</u> | <u>C</u> | 16. <u>Cattail</u> | <u>OBL</u> | <u>S</u> |
| 7. <u>Sweet gum</u> | <u>FAC</u> | <u>C</u> | 17. <u>Chokeberry</u> | <u>FACW</u> | <u>S</u> |
| 8. <u>Cattail</u> | <u>OBL</u> | <u>H</u> | 18. <u>Lonicera japonica</u> | <u>FAC</u> | <u>V</u> |
| 9. <u>Rice cut grass</u> | <u>OBL</u> | <u>H</u> | 19. <u>Widens-devils</u> | <u>FACW</u> | <u>H</u> |
| 10. <u>Woolgrass</u> | <u>FACW</u> | <u>H</u> | 20. <u>Woolgrass</u> | <u>OBL</u> | <u>H</u> |

Percent of dominant species that are OBL, FACW, and/or FAC
 Is the hydrophytic vegetation criterion met? Yes ☒ No _____
 Rationale: dominated by hydrophytes

SOILS

Series/phase: Sac - Sac3 Subgroup:² _____
 Is the soil on the hydric soils list? Yes _____ No ☒ Undetermined ☒
 Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
 Is the soil: Mottled? Yes _____ No ☒ Gleyed? Yes _____ No _____
 Matrix Color: 10YR 6/4 Mottle Colors: _____
 Other hydric soil indicators: Fe-Oxide Phases = Y 3/1
 Is the hydric soil criterion met? Yes ☒ No _____
 Rationale: Along ditch - large 10/12 5/12
evidence of ponding

HYDROLOGY

Is the ground surface inundated? Yes _____ No _____ Surface water depth: Pond 1 - several feet deep
 Is the soil saturated? Yes ☒ No _____
 Depth to free-standing water in pit/soil probe hole: _____
 List other field evidence of surface inundation or soil saturation: _____
 Is the wetland hydrology criterion met? Yes ☒ No _____
 Rationale: pond with inflow channel

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No _____
 Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

NO H₂O - ? to Swamp

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

Wetland N 6

Field Investigator(s): EWM JAB API
Project/Site: Chesapeake Terrace State: MD Date: 12-6-90
Applicant/Owner: Plant Community #/Name: Flag 4
1-19

Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?

Yes ☒ No ☐ (If no, explain on back)

Has the vegetation, soils, and/or hydrology been significantly disturbed?

Yes ☐ No ☐ (If yes, explain on back) ?

| Dichanthelium clandestinum | | | VEGETATION | | |
|----------------------------|------------------|----------|----------------------------|------------------|----------|
| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
| 1. <u>Panicum sp.</u> | <u>FAC</u> | <u>H</u> | 11. <u>sweetgum</u> | <u>FAC</u> | <u>C</u> |
| 2. <u>Elderberry</u> | <u>FACW</u> | <u>S</u> | 12. <u>Rubus strigosus</u> | <u>FACW</u> | <u>S</u> |
| 3. <u>Goldenrod sp.</u> | <u>UNK</u> | <u>H</u> | 13. <u>Greenbrier</u> | <u>FAC</u> | <u>V</u> |
| 4. <u>River Birch</u> | <u>FACW</u> | <u>C</u> | 14. <u>Multiflora rose</u> | <u>FAC</u> | <u>S</u> |
| 5. <u>Black willow</u> | <u>FACW</u> | <u>C</u> | 15. <u>Sycamore</u> | <u>FACW</u> | <u>C</u> |
| 6. <u>Impatiens</u> | <u>FACW</u> | <u>C</u> | 16. _____ | _____ | _____ |
| 7. <u>Honeysuckle</u> | <u>FAC</u> | <u>V</u> | 17. _____ | _____ | _____ |
| 8. <u>Red Maple</u> | <u>FAC</u> | <u>C</u> | 18. _____ | _____ | _____ |
| 9. <u>Polygonum sp.</u> | <u>UNK</u> | <u>H</u> | 19. _____ | _____ | _____ |
| 10. <u>Pokeberry</u> | <u>FACW</u> | <u>H</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____

Is the hydrophytic vegetation criterion met? Yes ☒ No ☐

Rationale: dominated by hydrophytes

Series/phase: Sandplain sandy loam **SC3 SOILS**
Subgroup: 2
Is the soil on the hydric soils list? Yes ☐ No ☐ Undetermined ☒
Is the soil a Histosol? Yes ☐ No ☐ Histic epipedon present? Yes ☐ No ☐
Is the soil: Mottled? Yes ☒ No ☐ Gleyed? Yes ☒ No ☐
Matrix Color: 8-14 10YR 3/2 Mottle Colors: 10YR 5/6
Other hydric soil indicators: root rhizomes, saturated
Is the hydric soil criterion met? Yes ☒ No ☐
Rationale: gleyed, saturated, clay

HYDROLOGY

Is the ground surface inundated? Yes ☐ No ☒ Surface water depth: _____
Is the soil saturated? Yes ☒ No ☐
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation:
stained vegetation in basin
Is the wetland hydrology criterion met? Yes ☒ No ☐
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No ☐
Rationale for jurisdictional decision: Wetland

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
² Classification according to "Soil Taxonomy."

Ponded in fire pits

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

7D

Flag 1-15

Field Investigator(s): EWM TAC API Date: 12-5-90
Project/Site: Cheapeake Terrace State: MD County: AA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?

Yes _____ No ☒ (If no, explain on back)

Has the vegetation, soils, and/or hydrology been significantly disturbed?

Yes ☒ No _____ (If yes, explain on back)

Irregular depressions
with standing water
evidence of vehicle
traffic disturbing soil

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|----------------------------------|------------------|----------|----------------------------|------------------|----------|
| 1. <u>Typha latifolia</u> | <u>OBL</u> | <u>H</u> | 11. _____ | _____ | _____ |
| 2. <u>Spartan rush</u> | <u>FACW</u> | <u>H</u> | 12. _____ | _____ | _____ |
| 3. <u>Woolgrass</u> | <u>FACW</u> | <u>H</u> | 13. _____ | _____ | _____ |
| 4. <u>Goldenrod</u> | <u>UNK</u> | <u>H</u> | 14. _____ | _____ | _____ |
| 5. <u>Rubus sp. occidentalis</u> | <u>UP</u> | <u>S</u> | 15. _____ | _____ | _____ |
| 6. <u>Aster sp.</u> | <u>UNK</u> | <u>H</u> | 16. _____ | _____ | _____ |
| 7. <u>Juncus sp. scirpoides</u> | <u>FACW</u> | <u>H</u> | 17. _____ | _____ | _____ |
| 8. <u>Black willow</u> | <u>FACW</u> | <u>C</u> | 18. _____ | _____ | _____ |
| 9. <u>Hawthorn</u> | _____ | _____ | 19. <u>Pyrus coronaria</u> | <u>UP</u> | <u>S</u> |
| 10. <u>Meadow fescue</u> | <u>FACW</u> | <u>H</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____

Is the hydrophytic vegetation criterion met? Yes ☒ No _____

Rationale: Dominance of FACW plants

SOILS

Series/phase: Butterhorn silt loam Subgroup: 2

Is the soil on the hydric soils list? Yes _____ No ☒ Undetermined ☒

Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____

Is the soil: Mottled? Yes ☒ No _____ Gleyed? Yes ☒ No _____

Matrix Color: 7.5 YR 6/6 Mottle Colors: _____ (in areas of standing water)

Other hydric soil indicators: concretions

Is the hydric soil criterion met? Yes ☒ No ☒ clayey silt

Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ☒ No _____ Surface water depth: 3" - 2' deep in deeper hole

Is the soil saturated? Yes ☒ No _____

Depth to free-standing water in pit/soil probe hole: _____

List other field evidence of surface inundation or soil saturation. _____

Is the wetland hydrology criterion met? Yes ☒ No _____

Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No _____

Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

Wetland - 8D
8-Flags

Field Investigator(s): EWM, APL
Project/Site: Chesapeake Terrace State: MD Date: 12-7-90
Applicant/Owner: _____ Plant Community #/Name: AA
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes _____ No ☒ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ☒ No _____ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-----------------------------------|------------------|----------|------------------------|------------------|---------|
| 1. <u>Woolgrass</u> | <u>FACW</u> | <u>H</u> | 11. _____ | _____ | _____ |
| 2. <u>Panicum sp. (Vergetum?)</u> | <u>FACW</u> | <u>H</u> | 12. _____ | _____ | _____ |
| 3. <u>Rubus sp. hispidus</u> | <u>FACW</u> | <u>S</u> | 13. _____ | _____ | _____ |
| 4. <u>Golden Rod sp</u> | <u>UNIC</u> | <u>H</u> | 14. _____ | _____ | _____ |
| 5. <u>Broom Sedge</u> | <u>FACW</u> | <u>H</u> | 15. _____ | _____ | _____ |
| 6. <u>Virginia pine</u> | <u>UP</u> | <u>C</u> | 16. _____ | _____ | _____ |
| 7. _____ | _____ | _____ | 17. _____ | _____ | _____ |
| 8. _____ | _____ | _____ | 18. _____ | _____ | _____ |
| 9. _____ | _____ | _____ | 19. _____ | _____ | _____ |
| 10. _____ | _____ | _____ | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ☒ No _____
Rationale: Dominated by FACW species

SOILS

Series/phase: Bassafras fine sandy loam - Bultartown Subgroup: 2
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined ☒
Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
Is the soil: Mottled? Yes ☒ No _____ Gleyed? Yes ☒ No gleyed mottles
Matrix Color: 10YR 6/4 Mottle Colors: 10YR 6/2 and 10YR 5/2
Other hydric soil indicators: saturation
Is the hydric soil criterion met? Yes ☒ No _____
Rationale: Soil is coarse sand from 6-10'

HYDROLOGY

Is the ground surface inundated? Yes _____ No ☒ Surface water depth: _____
Is the soil saturated? Yes ☒ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation: _____

Is the wetland hydrology criterion met? Yes ☒ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No _____
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

The depression of this wetland has been created by excavating activities which have removed Soil/gravel and altered the hydrology.

NO Ponding -

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

D9 9D-1 → 9D-2
22 Flaps

Field Investigator(s): EWIM, APL Date: 12-7-90
Project/Site: Chesapeake Trace State: MD County: AA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes _____ No ☒ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ☒ No _____ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-----------------------------|------------------|----------|------------------------|------------------|---------|
| 1. <u>Phragmites</u> | <u>FACW</u> | <u>H</u> | 11. _____ | _____ | _____ |
| 2. <u>Goldenrod (2 sp.)</u> | <u>UNK</u> | <u>H</u> | 12. _____ | _____ | _____ |
| 3. <u>Black willow</u> | <u>FACW</u> | <u>C</u> | 13. _____ | _____ | _____ |
| 4. <u>Woolgrass</u> | <u>FACW</u> | <u>H</u> | 14. _____ | _____ | _____ |
| 5. <u>Bachlor buttons</u> | <u>UP</u> | <u>H</u> | 15. _____ | _____ | _____ |
| 6. <u>Meadow fescue</u> | <u>FACW</u> | <u>H</u> | 16. _____ | _____ | _____ |
| 7. <u>Rice cutgrass</u> | <u>OBL</u> | <u>H</u> | 17. _____ | _____ | _____ |
| 8. _____ | _____ | _____ | 18. _____ | _____ | _____ |
| 9. _____ | _____ | _____ | 19. _____ | _____ | _____ |
| 10. _____ | _____ | _____ | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ☒ No _____
Rationale: _____

SOILS

Series/phase: Sassafras fine sandy loam Subgroup: 2 Vic
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined ☒
Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
Is the soil: Mottled? Yes _____ No ☒ Gleyed? Yes ☒ No _____
Matrix Color: 10YR 5/6 Mottle Colors: _____
Other hydric soil indicators: saturated silty clay
Is the hydric soil criterion met? Yes _____ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No ☒ Surface water depth: _____
Is the soil saturated? Yes ☒ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation: _____

Is the wetland hydrology criterion met? Yes _____ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No _____
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

Ponded

veg. 100-100-6
100

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

Field Investigator(s): APL, EWM Date: 12/7/90
Project/Site: 1. nescapake Tenore State: MD County: AA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes _____ No ☒ (If no, explain on back) 4 wheel traffic through trail side ponding
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No _____ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|---|------------------|----------|------------------------|------------------|---------|
| 1. <u>woolgrass</u> | <u>FACW</u> | <u>H</u> | 11. _____ | _____ | _____ |
| 2. <u>giant sp. debilis</u> | <u>OBL</u> | <u>H</u> | 12. _____ | _____ | _____ |
| 3. <u>soft rush</u> | <u>FACW</u> | <u>H</u> | 13. _____ | _____ | _____ |
| 4. <u>brodiaea</u> | <u>FACW</u> | <u>H</u> | 14. _____ | _____ | _____ |
| 5. <u>golden rod sp.</u> | <u>UNK</u> | <u>H</u> | 15. _____ | _____ | _____ |
| 6. <u>red maple</u> | <u>FAC</u> | <u>C</u> | 16. _____ | _____ | _____ |
| 7. <u>river birch</u> | <u>FACW</u> | <u>C</u> | 17. _____ | _____ | _____ |
| 8. <u>fall of leaves / nescapake FACW</u> | <u>FACW</u> | <u>C</u> | 18. _____ | _____ | _____ |
| 9. <u>loblolly pine</u> | <u>FAC</u> | <u>C</u> | 19. _____ | _____ | _____ |
| 10. <u>minosa</u> | <u>UP</u> | <u>C</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ☒ No _____
Rationale: _____

SOILS

Series/phase: Butlerstown silt loam Subgroup: 2 clayey-sandy silt saturated
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
Is the soil: Mottled? Yes _____ No _____ Gleyed? Yes _____ No _____
Matrix Color: 10 YR 6/6 Mottle Colors: 10 YR 6/3
Other hydric soil indicators: saturated ponding
Is the hydric soil criterion met? Yes _____ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ☒ No _____ Surface water depth: 1-6" small pond/puddle
Is the soil saturated? Yes _____ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation: _____
Is the wetland hydrology criterion met? Yes ☒ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No _____
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

12/15

Ponded in fire pit depressions

DATA FORM ROUTINE ONSITE DETERMINATION METHOD¹

HD

Field Investigator(s): APL, EUM Date: 12/7/90
 Project/Site: Chesapeake Bay State: MD County: AA
 Applicant/Owner: _____ Plant Community #/Name: Festus Lane
 Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?

Yes _____ No / (If no, explain on back)

Has the vegetation, soils, and/or hydrology been significantly disturbed?

Yes _____ No _____ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|--|------------------|----------|--|------------------|----------|
| 1. <u>River birch</u> | <u>FACW</u> | <u>C</u> | 11. <u>Shrub oaks</u> | | |
| 2. <u>Woodgrass</u> | <u>FACW</u> | <u>H</u> | 12. <u>St. John's wort</u> | <u>FAC</u> | <u>H</u> |
| 3. <u>fraxinus sp. debilis</u> | <u>DBL</u> | <u>C</u> | 13. <u>Hypericum multilur</u> | | |
| 4. <u>dog tooth</u> | <u>FACW</u> | <u>H</u> | 14. _____ | | |
| 5. <u>small eastern button bush</u> | <u>FACW</u> | <u>H</u> | 15. <u>Bidens poly lepis</u> | | |
| 6. <u>black willow</u> | <u>FACW</u> | <u>C</u> | 16. _____ | | |
| 7. <u>red maple</u> | <u>FAC</u> | <u>C</u> | 17. _____ | | |
| 8. <u>barometer</u> | <u>FACW</u> | <u>H</u> | 18. _____ | | |
| 9. <u>panic grass</u> | <u>FAC</u> | <u>H</u> | 19. <u>Dichanthelium clandestinum</u> | | |
| 10. <u>goldenrod sp</u> | <u>UNK</u> | <u>H</u> | 20. _____ | | |

Percent of dominant species that are OBL, FACW, and/or FAC _____

Is the hydrophytic vegetation criterion met? Yes _____ No _____

Rationale: _____

SAA - submerged aquatic automobile SOILS - removed 12/11/90

Series/phase: Buttertown silt loam 2-590 Subgroup: 2 IIc

Is the soil on the hydric soils list? Yes _____ No _____ Undetermined /

Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____

Is the soil: Mottled? Yes / No _____ Gleyed? Yes / No _____

Matrix Color: 10YR 6/14 Mottle Colors: 10YR 5/2

Other hydric soil indicators: root rhizoids

Is the hydric soil criterion met? Yes / No _____

Rationale: silty clay

HYDROLOGY

Is the ground surface inundated? Yes / No _____ Surface water depth: undetermined

Is the soil saturated? Yes / No _____

Depth to free-standing water in pit/soil probe hole: _____

List other field evidence of surface inundation or soil saturation. _____

Is the wetland hydrology criterion met? Yes / No _____

Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No _____

Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

12N

12N-1 → 12N-24

DATA FORM ROUTINE ONSITE DETERMINATION METHOD¹

Field Investigator(s): APL EWM, KLO Date: 12/11/90
 Project/Site: _____ State: _____ County: AA
 Applicant/Owner: _____ Plant Community #/Name: 12N
 Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
 Yes ☒ No ☐ (If no, explain on back)
 Has the vegetation, soils, and/or hydrology been significantly disturbed?
 Yes ☒ No ☐ (If yes, explain on back) by heavy runoff - erosion

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-------------------------------------|------------------|----------|--------------------------------|------------------|----------|
| 1. <u>unidentified</u> | <u>FACW</u> | <u>H</u> | 11. <u>lady's tresses</u> | <u>UNK</u> | <u>H</u> |
| 2. <u>marsh grass - Glycyrrhiza</u> | <u>OBL</u> | <u>H</u> | 12. <u>river birch</u> | <u>FACW</u> | <u>C</u> |
| 3. <u>st. john's wort, dwarf</u> | <u>FAC</u> | <u>H</u> | 13. <u>red maple</u> | <u>FAC</u> | <u>C</u> |
| 4. <u>purple witch tongue grass</u> | <u>FAC</u> | <u>H</u> | 14. <u>sweet gum</u> | <u>FAC</u> | <u>C</u> |
| 5. <u>path mow</u> | <u>FACW</u> | <u>H</u> | 15. <u>high bush blueberry</u> | <u>FACW</u> | <u>S</u> |
| 6. <u>woods 40</u> | <u>UNK</u> | <u>H</u> | 16. _____ | _____ | _____ |
| 7. <u>virginiana</u> | <u>JP</u> | <u>C</u> | 17. _____ | _____ | _____ |
| 8. <u>podiceps deltoidea</u> | <u>FAC</u> | <u>C</u> | 18. _____ | _____ | _____ |
| 9. <u>leaves walking otch</u> | <u>FAC</u> | <u>S</u> | 19. _____ | _____ | _____ |
| 10. <u>golden rod (sp)</u> | <u>UNK</u> | <u>H</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
 Is the hydrophytic vegetation criterion met? Yes ☒ No ☐ dom. wet grass, lady's tresses, birch
 Rationale: _____

SOILS

Series/phase: Sassafras fine sandy loam Subgroup: 2
 Is the soil on the hydric soils list? Yes ☐ No ☒ Undetermined _____
 Is the soil a Histosol? Yes ☐ No ☒ Histic epipedon present? Yes ☐ No ☒
 Is the soil: Mottled? Yes ☐ No ☒ Gleyed? Yes ☒ No ☐ color 10YR 5/2
 Matrix Color: 10YR 5/3 Mottle Colors: _____
 Other hydric soil indicators: _____
 Is the hydric soil criterion met? Yes ☒ No ☐ orange
 Rationale: all types

HYDROLOGY

Is the ground surface inundated? Yes ☐ No ☒ Surface water depth: _____
 Is the soil saturated? Yes ☐ No ☒ in channel
 Depth to free-standing water in pit/soil probe hole: _____
 List other field evidence of surface inundation or soil saturation.
leaf stony, debris down, active erosion
 Is the wetland hydrology criterion met? Yes ☒ No ☐
 Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No ☐
 Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
² Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

13D
flag #3
13D1 →
13D-

Field Investigator(s): APL EMM KLD Date: 12/11/90
Project/Site: Chesapeake Tenon State: _____ County: AA
Applicant/Owner: _____ Plant Community #/Name: _____
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes _____ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No _____ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|---------------------------------------|------------------|-----------|-----------------------------------|------------------|-----------------|
| 1. <u>Rubus - coccineus h. sp. 10</u> | <u>FACW</u> | <u>S</u> | 11. <u>path rush</u> | <u>FACU</u> | <u>H</u> |
| 2. <u>bidens polylophus</u> | <u>FACW</u> | <u>IT</u> | 12. <u>cattail</u> | <u>AGW</u> | <u>IT</u> |
| 3. <u>sweet gum</u> | <u>FAC</u> | <u>C</u> | 13. <u>juniper sp.</u> | <u>FACW</u> | <u>IT</u> |
| 4. <u>goldenrod sp.</u> | <u>UNK</u> | <u>IT</u> | 14. <u>stachys arifolia</u> | <u>UP</u> | <u>S</u> |
| 5. <u>river birch</u> | <u>FACW</u> | <u>C</u> | 15. <u>torreya japonica</u> | <u>FAC</u> | <u>V</u> |
| 6. <u>devil's begonia</u> | <u>FACW</u> | <u>H</u> | 16. <u>eastern cottonwood</u> | <u>FAC</u> | <u>C</u> |
| 7. <u>soft rush</u> | <u>FACW</u> | <u>IT</u> | 17. <u>multiflora rose</u> | <u>FAC</u> | <u>S</u> |
| 8. <u>deer tongue</u> | <u>FAC</u> | <u>IT</u> | 18. <u>sweet bay magnolia</u> | <u>FAC</u> | <u>Underst.</u> |
| 9. <u>pepper / salt box</u> | <u>FACW</u> | <u>IT</u> | 19. <u>gambel</u> | <u>FAC</u> | <u>V</u> |
| 10. <u>beaked edge</u> | <u>UNK</u> | <u>H</u> | 20. <u>eleocharis obtusa dom.</u> | <u>FAC</u> | <u>H</u> |

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ✓ No _____
Rationale: _____

SOILS

Series/phase: Sassafras fine sandy loam 10-15% Subgroup: 2
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
Is the soil: Mottled? Yes _____ No _____ Gleyed? Yes _____ No _____
Matrix Color: 10 YR 7/2 Mottle Colors: 10 YR 6/3
Other hydric soil indicators: root zone
Is the hydric soil criterion met? Yes ✓ No _____
Rationale: large concretions

HYDROLOGY

Is the ground surface inundated? Yes _____ No ✓ Surface water depth: _____
Is the soil saturated? Yes _____ No ✓
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation.

Is the wetland hydrology criterion met? Yes _____ No _____
Rationale: ponding - most likely due to storm runoff

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No _____
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

NO 1420
Va Pine

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

14N
14N-1 → 14N-6
14N-7 - 14N-2

Field Investigator(s): APL EWM KLD Date: 12/11/90
Project/Site: Neapack Tenace State: _____ County: AA
Applicant/Owner: _____ Plant Community #/Name: 14N
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ☒ No _____ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ☒ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|---|------------------|----------|----------------------------|------------------|-----------------|
| 1. <u>River birch</u> | <u>FACW</u> | <u>C</u> | 11. <u>Willow oak</u> | <u>FAC</u> | <u>C</u> |
| 2. <u>Loblolly pine</u> | <u>UP</u> | <u>C</u> | 12. <u>sweet gum</u> | <u>FAC</u> | <u>C</u> |
| 3. <u>green briar smilax</u> | <u>FAC</u> | <u>V</u> | 13. <u>swath, magnolia</u> | <u>FACW</u> | <u>Underst.</u> |
| 4. <u>carpinus caroliniana</u> | <u>FAC</u> | <u>C</u> | 14. <u>laurel (cyprip)</u> | <u>FACW</u> | <u>S</u> |
| 5. <u>eastern cottonwood</u> | <u>FAC</u> | <u>C</u> | 15. _____ | _____ | _____ |
| 6. <u>red maple</u> | <u>FAC</u> | <u>C</u> | 16. _____ | _____ | _____ |
| 7. <u>deride wading chick</u> | <u>FAC</u> | <u>S</u> | 17. _____ | _____ | _____ |
| 8. <u>blackberry blueberry</u> | <u>FACW</u> | <u>S</u> | 18. _____ | _____ | _____ |
| 9. <u>elderberry</u> <u>Purshia hispida</u> | <u>FACW</u> | <u>S</u> | 19. _____ | _____ | _____ |
| 10. <u>viburnum dentatum</u> | <u>FAC</u> | <u>S</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____

Is the hydrophytic vegetation criterion met? Yes _____ No _____

Rationale: _____

SOILS

Series/phase: SaD3 Subgroup: ² _____
Is the soil on the hydric soils list? Yes _____ No _____ Undetermined _____
Is the soil a Histosol? Yes _____ No _____ Histic epipedon present? Yes _____ No _____
Is the soil: Mottled? Yes ☒ No _____ Gleyed? Yes ☒ No _____
Matrix Color: 10YR 6/2 Mottle Colors: 10YR 6/6 10YR 7/1
Other hydric soil indicators: _____
Is the hydric soil criterion met? Yes _____ No _____
Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes _____ No _____ Surface water depth: _____
Is the soil saturated? Yes _____ No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation: _____
Is the wetland hydrology criterion met? Yes _____ No _____
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No _____
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.

² Classification according to "Soil Taxonomy."

15N

15N-1 → 15N-3 3A,B
→ 15N-6

DATA FORM ROUTINE ONSITE DETERMINATION METHOD¹

Field Investigator(s): APL, DWM, KLD Date: 12/12/70
 Project/Site: Pease Lake Terrace State: md County: AA
 Applicant/Owner: _____ Plant Community #/Name: _____
 Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
 Yes ☒ No ☐ (If no, explain on back)
 Has the vegetation, soils, and/or hydrology been significantly disturbed?
 Yes ☐ No ☒ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-------------------------------|------------------|----------|------------------------|------------------|---------|
| * 1. <u>Smilax</u> | <u>FAC</u> | <u>V</u> | 11. _____ | _____ | _____ |
| * 2. <u>Sweet gum</u> | <u>FAC</u> | <u>C</u> | 12. _____ | _____ | _____ |
| * 3. <u>red maple</u> | <u>FAC</u> | <u>C</u> | 13. _____ | _____ | _____ |
| * 4. <u>slaw berry</u> | <u>FACW</u> | <u>S</u> | 14. _____ | _____ | _____ |
| 5. <u>virginian datura</u> | <u>FAC</u> | <u>S</u> | 15. _____ | _____ | _____ |
| 6. <u>unwin fern, Osmunda</u> | <u>FACW</u> | _____ | 16. _____ | _____ | _____ |
| 7. <u>high bush blueberry</u> | <u>FACW</u> | <u>S</u> | 17. _____ | _____ | _____ |
| 8. <u>beech</u> | <u>FACW</u> | <u>C</u> | 18. _____ | _____ | _____ |
| 9. <u>poplar</u> | <u>FAC</u> | <u>C</u> | 19. _____ | _____ | _____ |
| 10. _____ | _____ | _____ | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
 Is the hydrophytic vegetation criterion met? Yes ☒ No ☐
 Rationale: _____

SOILS

Series/phase: Bm-SAE-SaBZ Subgroup: 2
 Is the soil on the hydric soils list? Yes ☐ No ☐ Undetermined ☐
 Is the soil a Histosol? Yes ☐ No ☐ Histic epipedon present? Yes ☐ No ☒ after eluv
 Is the soil: Mottled? Yes ☒ No ☐ Gleyed? Yes ☒ No ☐
 Matrix Color: 10YR 5-12" 5/1 12" 4/2 Mottle Colors: 10YR 5/6 - 5/8 25Y 6/4
 Other hydric soil indicators: _____
 Is the hydric soil criterion met? Yes ☐ No ☐
 Rationale: _____

HYDROLOGY

Is the ground surface inundated? Yes ☐ No ☒ Surface water depth: _____
 Is the soil saturated? Yes ☐ No ☒
 Depth to free-standing water in pit/soil probe hole: _____
 List other field evidence of surface inundation or soil saturation: _____
 Is the wetland hydrology criterion met? Yes ☒ No ☐
 Rationale: below drain pipe - small bowlled area

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☐ No ☐
 Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
² Classification according to "Soil Taxonomy."

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

16N

16N-1 76N-16

Field Investigator(s): APL, ENM, KLD Date: 12/12/90
Project/Site: Chesapeake Bay State: MD County: AA
Applicant/Owner: _____ Plant Community #/Name: 16N
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community? more or less - logging road
Yes _____ No _____ (If no, explain on back) crossing w/ pipe to transfer
Has the vegetation, soils, and/or hydrology been significantly disturbed? down H₂O
Yes _____ No / (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-------------------------------|------------------|----------------|-------------------------------|------------------|----------------|
| 1. <u>Lonicera japonica</u> | <u>FAC</u> | <u>V</u> | 11. <u>Chamaenerion</u> | <u>FACU</u> | <u>H</u> |
| 2. <u>greenbrier</u> | <u>FAC</u> | <u>V</u> | 12. <u>shield fern</u> | <u>FAC</u> | <u>H</u> |
| 3. <u>sweet bay magnolia</u> | <u>FACU</u> | <u>Underst</u> | 13. <u>elderberry</u> | <u>FACU</u> | <u>S</u> |
| 4. <u>low manna grass</u> | <u>OBL</u> | <u>H</u> | 14. <u>Rubus occidentalis</u> | <u>UP</u> | <u>S</u> |
| 5. <u>muscadine grape</u> | <u>FAC</u> | <u>V</u> | 15. <u>hercules club</u> | <u>FAC</u> | <u>S</u> |
| 6. <u>fig</u> | <u>FAC</u> | <u>C</u> | 16. <u>lady fern</u> | <u>FAC</u> | <u>H</u> |
| 7. <u>cinna fern</u> | <u>FACU</u> | <u>H</u> | 17. <u>beech</u> | <u>FACU</u> | <u>C</u> |
| 8. <u>caspian caroliniana</u> | <u>FAC</u> | <u>Underst</u> | 18. <u>moss</u> | <u>UNK</u> | <u>H</u> |
| 9. <u>brick vine</u> | <u>FACU</u> | <u>C</u> | 19. <u>holly leaf edge</u> | <u>FACU</u> | <u>Underst</u> |
| 10. <u>red maple</u> | <u>FAC</u> | <u>C</u> | 20. _____ | | |

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes _____ No _____
Rationale: _____

SOILS

Series/phase: Bm-SAP-UsB Subgroup: 2
Is the soil on the hydric soils list? Yes _____ No / Undetermined
Is the soil a Histosol? Yes _____ No _____
Is the soil: Mottled? Yes / No _____
Matrix Color: 10YR 6/1 2-6" Histic epipedon present? Yes _____ No _____
Mottle Colors: 10YR 5/6-5/8
Other hydric soil indicators: 0-6" 10YR 6/1
Is the hydric soil criterion met? Yes / No _____
Rationale: 6-11" 10YR 4/1
11" and 10YR 7/1
10YR 5/6
10YR 5/4 ditch

HYDROLOGY

Is the ground surface inundated? Yes _____ No / Surface water depth: _____
Is the soil saturated? Yes / No _____
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation: _____
Is the wetland hydrology criterion met? Yes / No _____
Rationale: ponding before under road
culvert/drain

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes / No _____
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
² Classification according to "Soil Taxonomy."

17N

DATA FORM ROUTINE ONSITE DETERMINATION METHOD¹

17N-19
17N-23

Field Investigator(s): APL, BWM, KLD Date: 12/12/90
Project/Site: Chesapeake Tidewater State: MD County: AA
Applicant/Owner: _____ Plant Community #/Name: 17N
Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
Yes ☒ No _____ (If no, explain on back)

Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes _____ No ☒ (If yes, explain on back)

workgrass
peppercorn

| Dominant Plant Species | | | VEGETATION | | | Dominant Plant Species | | |
|------------------------|--------|---------|--------------------------------|--------|----------|------------------------|--------|---------|
| Indicator | Status | Stratum | Indicator | Status | Stratum | Indicator | Status | Stratum |
| 1. Pin Oak | FACW | C | 11. brush weed | OBL | IF | | | |
| 2. willow oak | FAC | C | 12. soft rush | FACW | IF | | | |
| 3. white oak | FACW | C | 13. goldenrod | UNK | IF | | | |
| 4. Red MAPLE | FAC | C | 14. dech tongue umbelgrass | FAC | IF | | | |
| 5. smilax | FAC | V | 15. sparganium | OBL | IF | | | |
| 6. river bunch | FACW | C | 16. large pine & loblolly pine | O | UP + FAC | | | |
| 7. low manna grass | OBL | IF | 17. undolia laxa | FAC | IF | | | |
| 8. Carex fluminea | OBL | IF | 18. high bush blueberry | FACW | S | | | |
| 9. clostera alnifolia | FAC | S | 19. hirsutella | FAC | S | | | |
| 10. seed box ludwigia | FACW | IF | 20. interrum dentatum | FAC | S | | | |

Percent of dominant species that are OBL, FACW, and/or FAC
Is the hydrophytic vegetation criterion met? Yes ☒ No _____
Rationale: _____

SOILS

Series/phase: Bibb silt loam - Woodburn 10m Subgroup: 2
Is the soil on the hydric soils list? Yes _____ No ☒ Undetermined
Is the soil a Histosol? Yes _____ No ☒ Histic epipedon present? Yes _____ No _____
Is the soil: Mottled? Yes _____ No ☒ Gleyed? Yes ☒ No _____
Matrix Color: 10YR 5/1 - 6/1 Mottle Colors: _____
Other hydric soil indicators: root rhizomes
Is the hydric soil criterion met? Yes ☒ No _____
Rationale: clayey-silt

HYDROLOGY

Is the ground surface inundated? Yes _____ No ☒ Surface water depth: _____
Is the soil saturated? Yes _____ No ☒
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation: _____

Is the wetland hydrology criterion met? Yes ☒ No _____
Rationale: old road bed/trail burned by
brush; maintain road and
road to prop. boundary

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☒ No _____
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
² Classification according to "Soil Taxonomy."

18D

EA 18N-1-18N.3
tied to ends of
McCarthy's
white
grass do

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

Field Investigator(s): APL KRM KLD Date: 12/12/90
 Project/Site: Chesapeake Tamar State: MD County: AA
 Applicant/Owner: _____ Plant Community #/Name: 18N
 Note: If a more detailed site description is necessary, use the back of data form or a field notebook.

Do normal environmental conditions exist at the plant community?
 Yes ☒ No _____ (If no, explain on back)
 Has the vegetation, soils, and/or hydrology been significantly disturbed?
 Yes _____ No ☒ (If yes, explain on back)

*picked up flagging from
white w/ orange pole look
McCarthy - see note on
map*

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-----------------------------------|------------------|----------|-------------------------------|------------------|----------|
| 1. <u>river birch</u> | <u>FACW</u> | <u>C</u> | 11. <u>highbush blueberry</u> | <u>FACW</u> | <u>D</u> |
| 2. <u>sweet gum</u> | <u>FAC</u> | <u>C</u> | 12. <u>coarctate panicum</u> | <u>FACW</u> | <u>H</u> |
| 3. <u>swamp white oak</u> | <u>FACW</u> | <u>H</u> | 13. <u>soft rush</u> | <u>FACW</u> | <u>H</u> |
| 4. <u>loblolly pine</u> | <u>FAC</u> | <u>C</u> | 14. <u>black willow</u> | <u>FACW</u> | <u>C</u> |
| 5. <u>white pine</u> | <u>UP</u> | <u>C</u> | 15. <u>smilax</u> | <u>FAC</u> | <u>V</u> |
| 6. <u>dark purple witch grass</u> | <u>FAC</u> | <u>H</u> | 16. <u>pin oak</u> | <u>FACW</u> | <u>C</u> |
| 7. <u>sparganium</u> | <u>OBL</u> | <u>H</u> | 17. <u>saxifrage</u> | <u>FACW</u> | <u>C</u> |
| 8. <u>red maple</u> | <u>FAC</u> | <u>C</u> | 18. <u>buttonwood</u> | <u>FAC</u> | <u>C</u> |
| 9. <u>ycornus</u> | <u>FACW</u> | <u>C</u> | 19. _____ | _____ | _____ |
| 10. <u>Ulex</u> | <u>FAC</u> | <u>S</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
 Is the hydrophytic vegetation criterion met? Yes ☒ No _____
 Rationale: _____

SOILS

Series/phase: Udo detrm loam Everbore Urban land Complex Subgroup: _____
 Is the soil on the hydric soils list? Yes _____ No ☒ Undetermined
 Is the soil a Histosol? Yes _____ No ☒ Histic epipedon present? Yes _____ No _____
 Is the soil: Mottled? Yes ☒ No _____ Gleyed? Yes ☒ No _____
 Matrix Color: 10YR 5/1 to 8" 10YR 7/1 Mottle Colors: _____
 Other hydric soil indicators: _____
 Is the hydric soil criterion met? Yes ☒ No _____
 Rationale: _____

*0-6" 10YR 7/2
6-8" 10YR 7/1 w/ ant
of 5,
then red/*

HYDROLOGY

Is the ground surface inundated? Yes _____ No ☒ Surface water depth: berming by road & near
 Is the soil saturated? Yes 40% No 100% drop water.
 Depth to free-standing water in pit/soil probe hole: depends on soil sample #3
 List other field evidence of surface inundation or soil saturation: stained leaves
 Is the wetland hydrology criterion met? Yes _____ No _____
 Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes _____ No ☒
 Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
² Classification according to "Soil Taxonomy."

19N

19N-1 → 19N-29

DATA FORM
ROUTINE ONSITE DETERMINATION METHOD¹

Field Investigator(s): APL RLD cum Date: 12/12/90
Project/Site: Chappaquiddick State: MA County: 19N
Applicant/Owner: _____ Plant Community: 19N
Note: If a more detailed site description is necessary, use the back of data form or a field notebook

Do normal environmental conditions exist at the plant community?
Yes ☒ No ☐ (If no, explain on back)
Has the vegetation, soils, and/or hydrology been significantly disturbed?
Yes ☐ No ☒ (If yes, explain on back)

VEGETATION

| Dominant Plant Species | Indicator Status | Stratum | Dominant Plant Species | Indicator Status | Stratum |
|-----------------------------|------------------|----------|-------------------------------|------------------|----------|
| 1. <u>juncus effusus</u> | <u>FACW</u> | <u>H</u> | 11. <u>highbush blueberry</u> | <u>FACW</u> | <u>S</u> |
| 2. <u>sweet gum</u> | <u>FAC</u> | <u>C</u> | 12. <u>sycamore</u> | <u>FACW</u> | <u>C</u> |
| 3. <u>red maple</u> | <u>FAC</u> | <u>C</u> | 13. <u>pin oak</u> | <u>FACW</u> | <u>C</u> |
| 4. <u>rice cut grass</u> | <u>UP</u> | <u>C</u> | 14. <u>sphagnum</u> | <u>OBL</u> | <u>H</u> |
| 5. <u>rubus hispidus</u> | <u>FACW</u> | <u>S</u> | 15. <u>black willow</u> | <u>FACW</u> | <u>C</u> |
| 6. <u>large leaved dock</u> | <u>FAC</u> | <u>H</u> | 16. _____ | _____ | _____ |
| 7. <u>cottonwood</u> | <u>FAC</u> | <u>C</u> | 17. _____ | _____ | _____ |
| 8. <u>cherry</u> | <u>FACW</u> | <u>C</u> | 18. _____ | _____ | _____ |
| 9. <u>green heron</u> | <u>FAC</u> | <u>V</u> | 19. _____ | _____ | _____ |
| 10. <u>moss</u> | <u>UNK</u> | <u>H</u> | 20. _____ | _____ | _____ |

Percent of dominant species that are OBL, FACW, and/or FAC _____
Is the hydrophytic vegetation criterion met? Yes ☐ No ☒
Rationale: _____

SOILS

Series/phase: Woodstown/ham - Evesboro Urban Land Group Subgroup: 2
Is the soil on the hydric soils list? Yes ☐ No ☒ Undetermined _____
Is the soil a Histosol? Yes ☐ No ☒ Histic epipedon present? Yes ☐ No ☒
Is the soil: Mottled? Yes ☒ No ☐ Gleyed? Yes 10YR 5/3 No ☐
Matrix Color: 10YR 5/3 - 5/1 Mottle Colors: 10YR 4/6
Other hydric soil indicators: on
Is the hydric soil criterion met? Yes ☒ No ☐
Rationale: _____

0-2' organic A
2-5' peat and
of moss
10YR 4/6
5-7' gley 10YR 5/2
7-8' gley coarse and
grail
10YR 5/1

HYDROLOGY

Is the ground surface inundated? Yes ☐ No ☒ Surface water depth: _____
Is the soil saturated? Yes ☒ No ☐
Depth to free-standing water in pit/soil probe hole: _____
List other field evidence of surface inundation or soil saturation: _____
Is the wetland hydrology criterion met? Yes ☐ No ☐
Rationale: _____

JURISDICTIONAL DETERMINATION AND RATIONALE

Is the plant community a wetland? Yes ☐ No ☐
Rationale for jurisdictional decision: _____

¹ This data form can be used for the Hydric Soil Assessment Procedure and the Plant Community Assessment Procedure.
² Classification according to "Soil Taxonomy."



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

Operations Division

MAY 23 2000

Mr. Warren E. Halle
National Waste Manager, Inc.
c/o McCarthy & Associates, Inc.
Attn: Mr. Milt McCarthy
14458 Old Mill Road, Suite 201
Upper Marlboro, Maryland 20772

Dear Mr. McCarthy:

This is in reference to your request for re-authorization of your Department of the Army(DA) permit, **NAB-1991-01204-M18 (CHESAPEAKE TERRACE)** dated March 18, 1993. Enclosed is an initial proffered permit and an approved jurisdictional determination.

You are requested to indicate your acceptance of the terms and conditions set forth in the enclosed permit by placing your signature and the date on the permit where indicated. Please note that on March 28, 2000, the final rule was established for an administrative appeal process for the Regulatory Program of the Corps of Engineers for approved jurisdictional determinations (JD), permit denials, and declined individual permits. Enclosed you will find a Notification of Administrative Appeal Options and Process (NAO/NAP) fact sheet and Request for Appeal (RFA) form. You may accept or object to this initial proffered permit.

To accept this initial proffered permit and the approved jurisdictional determination associated with this permit, you may sign the permit document and return the signed and dated permit to this office with the required fee noted below for final authorization. A self-addressed, franked envelope is enclosed for this purpose. **You are also requested to submit a check or money order in the amount of \$100.00 made payable to the Finance and Accounting Officer, U.S. Army Engineer District, Baltimore (FAO, USAED, Baltimore).** Please write your application number, as shown in the first paragraph of this letter, and name on your remittance and mailing envelope. Your signature on this permit means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and the approved JD associated with this permit.

Upon receipt of the signed permit and fee, the permit will be validated with the appropriate District signature and returned to you. Failure to submit a copy of the signed permit and fee, if required, and initiating the work before receiving the validated permit from the District, could result in Federal enforcement proceedings. You are also advised that you are responsible for obtaining all other required state and/or local authorizations before starting construction on any of the work approved by this DA permit.

To object to the permit because of certain terms and conditions therein, a letter outlining your objections to this initial proffered permit, including any additional information to clarify your objections, must be received by our District Engineer at the address below within 60 days of the date of this letter, or you will forfeit your right to appeal the permit in the future. The letter must be mailed to the following address:

Commander, Baltimore District
U.S. Army Corps of Engineers
Attn: CENAB-OP-R
P.O. Box 1715
Baltimore, Maryland 21203-1715

Please note that if you decline this initial proffered individual permit, you do not have a valid permit to conduct regulated activities in waters of the United States, and must not begin construction of the work requiring a Corps permit unless and until you receive and accept a valid Corps permit.

If we do not receive the signed permit with the fee, if required, or a letter indicating your objections to the DA permit within 60 days of the date of this letter, we will assume you are no longer interested in the project and we will withdraw your application. The original application and plans will be returned to you and, if at a later date, you want to pursue the project again, you may resubmit your application. A copy of this letter is also being forwarded to Maryland Department of the Environment for informational purposes.

This letter also contains an approved jurisdictional determination. Those areas indicated as waters of the United States, including jurisdictional wetlands shown within the "Area of Review" on the enclosed drawing dated 26 June 1989 are regulated by this office pursuant to Section 10 of the River and Harbor Act of 1899 and/or Section 404 of the Clean Water Act. Enclosed is an Approved Jurisdictional Determination form that outlines the basis of our determination of jurisdiction over the "Area of Review" noted above. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR 331. If you request to appeal this determination, you must submit a completed RFA form to the North Atlantic Division Office at the following address:

Regulatory Appeals Review Officer
North Atlantic Division
U.S. Army Corps of Engineers
Fort Hamilton Military Community
General Lee Avenue, Building 301
Brooklyn, NY 11252-6700

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address within 60 days of the date of this letter.

It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This approved jurisdictional determination associated with this permit is valid for five years from the date of this letter or until the Corps permit expiration date, whichever is less, unless new information warrants a revision before the expiration date, or a District Engineer has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

Enclosed is a compliance self-certification form. Upon completion of the authorized work and required mitigation, you are required to complete the enclosed compliance certification form and return it to the address indicated thereon.

If you have any questions concerning this matter, please call Mr. Richard Kibby of this office at 410-962-0694.

Sincerely,



Vance G. Hobbs
Chief, Maryland Section Northern

Enclosures

APPROVED JURISDICTIONAL DETERMINATION FORM
U.S. Army Corps of Engineers

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

SECTION I: BACKGROUND INFORMATION

- A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD):** MAY 23 2008
- B. DISTRICT OFFICE, FILE NAME, AND NUMBER:** Baltimore; CHESAPEAKE TERRACE (NAB-1991-01204-M18)
- C. PROJECT LOCATION AND BACKGROUND INFORMATION:**
State: MD County/parish/borough: Anne Arundel City: Odenton
Center coordinates of site (lat/long in degree decimal format): Lat. 39.125° N, Long. 76.725° W.
Universal Transverse Mercator:
Name of nearest waterbody: Little Patuxent River
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: Little Patuxent River
Name of watershed or Hydrologic Unit Code (HUC): 02060004
☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.
- D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**
☐ Office (Desk) Determination. Date:
☒ Field Determination. Date(s): May 1, 2008

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

There **Pick List** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

- ☐ Waters subject to the ebb and flow of the tide.
☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.
Explain:

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

There **Pick List** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

1. Waters of the U.S.

a. Indicate presence of waters of U.S. in review area (check all that apply):¹

- ☐ TNWs, including territorial seas
☐ Wetlands adjacent to TNWs
☐ Relatively permanent waters² (RPWs) that flow directly or indirectly into TNWs
☐ Non-RPWs that flow directly or indirectly into TNWs
☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
☐ Impoundments of jurisdictional waters
☒ Isolated (interstate or intrastate) waters, including isolated wetlands

b. Identify (estimate) size of waters of the U.S. in the review area:

Non-wetland waters: linear feet: width (ft) and/or acres.
Wetlands: .1/2 acres.

c. Limits (boundaries) of jurisdiction based on: **Pick List**

Elevation of established OHWM (if known):

2. Non-regulated waters/wetlands (check if applicable):³

- ☐ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.
Explain:

¹ Boxes checked below shall be supported by completing the appropriate sections in Section III below.

² For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

³ Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

1. **TNW**

Identify TNW:

Summarize rationale supporting determination:

2. **Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is "adjacent":

B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are "relatively permanent waters" (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody⁴ is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

1. **Characteristics of non-TNWs that flow directly or indirectly into TNW**

(i) **General Area Conditions:**

Watershed size: Pick List

Drainage area: Pick List

Average annual rainfall: _____ inches

Average annual snowfall: _____ inches

(ii) **Physical Characteristics:**

(a) **Relationship with TNW:**

☐ Tributary flows directly into TNW.

☐ Tributary flows through Pick List tributaries before entering TNW.

Project waters are Pick List river miles from TNW.

Project waters are Pick List river miles from RPW.

Project waters are Pick List aerial (straight) miles from TNW.

Project waters are Pick List aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain:

Identify flow route to TNW⁵:

Tributary stream order, if known:

⁴ Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

⁵ Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain:
☐ Manipulated (man-altered). Explain:

Tributary properties with respect to top of bank (estimate):

Average width: feet
Average depth: feet
Average side slopes: **Pick List**.

Primary tributary substrate composition (check all that apply):

☐ Silts ☐ Sands ☐ Concrete
☐ Cobbles ☐ Gravel ☐ Muck
☐ Bedrock ☐ Vegetation. Type/% cover:
☐ Other. Explain:

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:

Presence of run/riffle/pool complexes. Explain:

Tributary geometry: **Pick List**

Tributary gradient (approximate average slope): %

(c) Flow:

Tributary provides for: **Pick List**

Estimate average number of flow events in review area/year: **Pick List**

Describe flow regime:

Other information on duration and volume:

Surface flow is: **Pick List**. Characteristics:

Subsurface flow: **Pick List**. Explain findings:

☐ Dye (or other) test performed:

Tributary has (check all that apply):

☐ Bed and banks
☐ OHWM⁶ (check all indicators that apply):
☐ clear, natural line impressed on the bank ☐ the presence of litter and debris
☐ changes in the character of soil ☐ destruction of terrestrial vegetation
☐ shelving ☐ the presence of wrack line
☐ vegetation matted down, bent, or absent ☐ sediment sorting
☐ leaf litter disturbed or washed away ☐ scour
☐ sediment deposition ☐ multiple observed or predicted flow events
☐ water staining ☐ abrupt change in plant community
☐ other (list):

☐ Discontinuous OHWM.⁷ Explain:

If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):

☐ High Tide Line indicated by: ☐ Mean High Water Mark indicated by:
☐ oil or scum line along shore objects ☐ survey to available datum;
☐ fine shell or debris deposits (foreshore) ☐ physical markings;
☐ physical markings/characteristics ☐ vegetation lines/changes in vegetation types.
☐ tidal gauges
☐ other (list):

(iii) Chemical Characteristics:

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain:

Identify specific pollutants, if known:

⁶A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

⁷Ibid.

(iv) **Biological Characteristics. Channel supports (check all that apply):**

- ☐ Riparian corridor. Characteristics (type, average width):
- ☐ Wetland fringe. Characteristics:
- ☐ Habitat for:
 - ☐ Federally Listed species. Explain findings:
 - ☐ Fish/spawn areas. Explain findings:
 - ☐ Other environmentally-sensitive species. Explain findings:
 - ☐ Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size: acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: Pick List. Explain:

Surface flow is: Pick List

Characteristics:

Subsurface flow: Pick List. Explain findings:

☐ Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

☐ Directly abutting

☐ Not directly abutting

☐ Discrete wetland hydrologic connection. Explain:

☐ Ecological connection. Explain:

☐ Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are Pick List river miles from TNW.

Project waters are Pick List aerial (straight) miles from TNW.

Flow is from: Pick List.

Estimate approximate location of wetland as within the Pick List floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- ☐ Riparian buffer. Characteristics (type, average width):
- ☐ Vegetation type/percent cover. Explain:
- ☐ Habitat for:
 - ☐ Federally Listed species. Explain findings:
 - ☐ Fish/spawn areas. Explain findings:
 - ☐ Other environmentally-sensitive species. Explain findings:
 - ☐ Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: Pick List

Approximately () acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)

Size (in acres)

Directly abuts? (Y/N)

Size (in acres)

Summarize overall biological, chemical and physical functions being performed:

C. SIGNIFICANT NEXUS DETERMINATION

A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.

Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D:

D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
☐ TNWs: linear feet width (ft), Or, acres.
☐ Wetlands adjacent to TNWs: acres.
2. **RPWs that flow directly or indirectly into TNWs.**
☐ Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial:
☐ Tributaries of TNW where tributaries have continuous flow "seasonally" (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally:

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. Non-RPWs⁸ that flow directly or indirectly into TNWs.

- ☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.

- ☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .
☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.

- ☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.

- ☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

7. Impoundments of jurisdictional waters.⁹

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- ☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):¹⁰

- ☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☐ Other factors. Explain: .

Identify water body and summarize rationale supporting determination: .

⁸See Footnote # 3.

⁹To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

¹⁰Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.

Provide estimates for jurisdictional waters in the review area (check all that apply):

- ☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):

- ☐ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☐ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☐ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain: .
☐ Other: (explain, if not covered above): .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- ☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

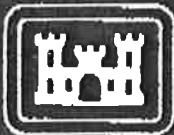
- ☐ Non-wetland waters (i.e., rivers, streams): linear feet, width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):

- ☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: McCarthy & Associates.
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☒ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☐ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☐ USGS 8 and 12 digit HUC maps.
☐ U.S. Geological Survey map(s). Cite scale & quad name: .
☐ USDA Natural Resources Conservation Service Soil Survey. Citation: .
☐ National wetlands inventory map(s). Cite name: .
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodetic Vertical Datum of 1929)
☐ Photographs: ☐ Aerial (Name & Date): .
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☐ Other information (please specify): .

B. ADDITIONAL COMMENTS TO SUPPORT JD:



This notice of authorization must be
conspicuously displayed at the site of work.

United States Army Corps of Engineers
Baltimore District

MAR : 8 1993
19

A permit to construct a rubble landfill by filling and grading
5.0 acres of non-tidal wetlands.

~~at~~ In non-tidal wetlands adjacent to the floodplain of the Little
Patuxent River, Odenton, Anne Arundel County, Maryland.

has been issued to Mr. Warren Halle on MAR 18 1993
National Waste Managers, Inc.

Address of Permittee 2900 Linden Lane, Ste 300, Silver Spring, MD

Permit Number

CENAB-OP-RW (Chesapeake
Terrace) 91-1204-3

Donald W. Roeseke
DONALD W. ROESEKE
Ch, Regulatory Branch

for the District Engineer



REPLY TO
ATTENTION OF
Operations Division

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

MAR 18 1993

Subject: CENAB-OP-RW(Chesapeake Terrace)91-1204-3

Mr. Warren Halle
National Waste Managers, Inc.
2900 Linden Lane, Suite 300
Silver Spring, Maryland 20910

Dear Mr. Halle:

I am replying to your application for a Department of the Army permit. Enclosed is the original and one copy of permit form NAB-FC-1000.

You are requested to indicate your acceptance of the terms and conditions set forth in the enclosed permit by placing your signature and the date on the permit where indicated. Upon your acceptance of the terms and conditions and your return of a copy of the original permit signed by you to the Baltimore District, you are authorized to proceed with the construction indicated therein. Failure to submit a copy of the signed permit before initiating the work could result in Federal enforcement proceedings.

A self-addressed, franked envelope is enclosed for this purpose. Also, enclosed is your NOTICE OF AUTHORIZATION, ENG FORM 4336, which must be conspicuously displayed at the site of work prior to commencement of construction.

If you have any questions concerning this matter, please call Mr. Steve Harman of this office at (410)962-4253.

Sincerely,

Donald W. Roeske
Chief, Regulatory Branch

Enclosure

Copy Furnished:

NOAA, Norfolk and Rockville
DOI, Annapolis
NMFS, Oxford
EPA, Philadelphia
CENAB-OP-R

*Chesapeake
Terrace
PUM*

DEPARTMENT OF THE ARMY PERMIT

Application Name and Permit Number: CENAB-OP-RV(Chesapeake Terrace)91-1204-3

Issuing Office:

U.S. Army Engineer District, Baltimore
Corps of Engineers
P.O. Box 1715
Baltimore, MD 21203

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description:

To construct a rubble landfill by filling and grading 5.00 acres of non-tidal wetlands. All work is to be completed in accordance with the enclosed plan(s).

Project Location:

In non-tidal wetlands adjacent to the floodplain of the Little Patuxent River, Odenton, Anne Arundel County, Maryland.

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2000. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

-2-

5. If a conditioned Water Quality Certification has been issued for your project, you must comply with conditions specified in the Certification as special conditions to this permit. For your convenience, a copy of the Certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

Special Conditions:

1. The permittee shall successfully create 3.22 acres of emergent non-tidal wetlands and 3.56 acres of forested non-tidal wetlands in accordance with the enclosed mitigation concept plan prepared by J.A. Chisholm, Inc., and McCarthy and Associates, Inc., dated October, 1992. An executed performance bond in the format of the enclosed approved draft shall be submitted to this office by June 30, 1993, to insure the successful creation of the above described wetland creation work. The performance bond in the amount of \$174,660.60 shall cover the cost of the grading work, planting work, environmental consultant design, supervision and monitoring work, and any required re-grading or re-planting work.
2. The wetland project shall be either performed or supervised by an environmental consultant with documented success in wetland creation, and in accordance with final grading and planting plans submitted to this office by June 30, 1993, and approved by the Corps prior to commencement of any of the authorized work in Waters of the United States, including jurisdictional wetlands. Final mitigation plans shall be prepared and submitted in accordance with the enclosed "Compensatory Mitigation, SUBJECT: Required Information for Site Development Plan." A schedule of the grading and planting activities shall be provided by June 30, 1993 to the Corps for approval.
3. The environmental consultant shall monitor the groundwater hydrology of the site for at least one growing season prior to and three growing seasons after completion of the grading of the mitigation area to the elevation of the two year floodplain of the Little Patuxent River (elevation 62.0'). If the consultant documents that the groundwater level is different from this elevation, the mitigation area, with the prior approval of the Corps, shall be either regraded or backfilled to the documented groundwater elevation. The site shall then be covered with a 12 to 18 inch layer planting substrate material comprised of topsoil and rootmat from on-site and Leaf Pro and Com Pro soil amendments from off-site. This substrate must be saturated to the surface or there must be water on the surface or a combination of surface water and saturated soils for at least 5% of the growing season.
4. The approved environmental consultant shall survey the wetland creation site prior to any planting to insure the elevations of the existing wetland or newly graded surfaces are correct for successful growth of the wetland plants selected. All fill materials must be clean, free of contaminants, and suitable for growth and establishment of wetland plants. Should settlement of the fill materials occur after planting, resulting in too low an elevation for wetland establishment, the elevation shall be corrected and the area shall be replanted.
5. The emergent mitigation site shall be seeded with plant species seeds indicated on the approved mitigation concept plan. Natural colonization in the emergent wetland area by herbaceous wetland species shall be allowed to proceed. The performance standard that shall be met is as follows:
 - a. Second Growing Season -- Achieve 45% areal cover of emergent wetland species (herbaceous) at a minimum density of 43,560 living stems per acre, consisting of a minimum of three (3) wetland species.
 - b. Third Growing Season -- Achieve 70% areal cover of emergent wetland species (herbaceous) at a minimum density of 43,560 living stems per acre, consisting of a minimum of three (3) wetland species. No individual wetlands species shall comprise more than 40% of the 70% areal cover achieved.

-3-

c. Fifth Growing Season -- Achieve 85% areal cover of emergent wetland species (herbaceous) at a minimum density of 43,560 living stems per acre, consisting of a minimum of three (3) wetland species. No individual wetland species shall comprise more than 50% of the 85% areal cover achieved.

6. The forested wetlands with the scrub-shrub understory shall be planted with species specified on the approved mitigation concept plan. The following performance standards shall be met:

a. Scrub-Shrub Plantings:

1. Second Growing Season -- Achieve a minimum density of 435 living planted and naturally regenerated wetland shrubs per acre and 85% survivability of the planted individuals. (Note: Nursery tags may be used to identify planted individuals.)

2. Third Growing Season -- Achieve a minimum density of 534 living planted and naturally regenerated wetland shrubs per acre and 75% survivability of planted individuals. (Note: The survivability measurement will account for replacement plantings that occurred after the second growing season. No individual wetland shrub species shall comprise more than 70% of the total density achieved.)

3. Fifth Growing Season -- Achieve a minimum density of 600 living planted and naturally regenerated wetland shrubs per acre and 70% survivability of planted individuals. (Note: The survivability measurement will account for replacement plantings that occurred after the second growing season. No individual wetland shrub species shall comprise more than 70% of the total density achieved.)

b. Tree Plantings:

1. Second Growing Season -- Achieve a minimum density of 538 living planted and naturally regenerated wetland trees and shrubs per acre and 85% survivability of the planted individuals. (Note: Nursery tags may be used to identify planted individuals.)

2. Third Growing Season -- Achieve a minimum density of 538 living planted and naturally regenerated wetland trees and shrubs per acre and 75% survivability of planted individuals. (Note: The survivability measurement will account for replacement plantings that occurred after the second growing season. No individual wetland tree or shrub species shall comprise more than 50% of the total density achieved.)

3. Fifth Growing Season -- Achieve a minimum density of 600 living planted and naturally regenerated wetland trees and shrubs per acre and 70% survivability of planted individuals. (Note: The survivability measurement will account for replacement plantings that occurred after the second growing season. No individual wetland tree or shrub species shall comprise more than 50% of the total density achieved.)

7. The environmental consultant shall monitor the mitigation site for a 10-year period after completion of the planting and seeding work. The monitoring shall occur on a bi-annual basis for a period of three years, annual monitoring for an additional three years, and annual monitoring for year 7 and 10 after the wetland creation is complete. The monitoring reports submitted to the Corps shall include the names and companies of all participants, field data sheets, detailed plant community structure analysis (including quantitative monitoring data in accordance with the performance standards), and photographic documentation. An as-built plan and photographs shall be submitted to the Corps within 30 days following the required monitoring, including topography/contours, planting locations and photo locations based upon surveys and measurements on the site.

-4-

8. All seeds and plants shall be obtained from sources genetically adapted to saturated conditions or having been propagated and grown in saturated conditions.
9. The permittee will construct gate(s) or use other restrictive measures to limit unauthorized vehicular access into the mitigation site.
10. That all earthwork operations shall be carried out in a manner as to minimize erosion of the material into wetlands or waterways.
11. That upon completion of earthwork operations, all fills and other areas disturbed during construction shall be seeded, riprapped, or given some other type of protection for subsequent soil erosion.
12. That the permittee shall employ measures during construction to prevent spills of fuels or lubricants. If a spill occurs, it shall be controlled to prevent its entry into the waterway.
13. The approved Conservation Easements (enclosed), shall be recorded with the Land Records of Anne Arundel County in accordance with the terms set forth in the easements and a copy of the executed easements sent to this office. The provisions of these easements are considered to be covenants running with and binding to the property containing the wetland mitigation site and the remaining undisturbed waters of the United States, including jurisdictional wetlands on the property (Boundary Plat Herbert Plummer property). The recordation of the Conservation Easements shall be concluded within 30 days of the date of this permit and prior to any further conveyance of any part or parcel of this property. The permittee shall refer to the Conservation Easements in each transfer or conveyance of any part of parcel of the property that contains the mitigation site or Waters of the United States, including jurisdictional wetlands included in the easement.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 404 of the Clean Water Act (33 U.S.C.1344).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law or to comply with the appropriate local critical area regulations.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

-5-

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).

c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.


(PERMITTEE)

(DATE)

-6-

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Issued for and in behalf of
Colonel J. Richard Capka
District Engineer

 18 Mar 93
Donald W. Roeseke Date
Chief, Regulatory Branch

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

TRANSFEEE

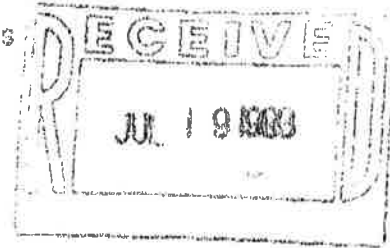
DATE



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

JUL 14 1993



Operations Division

Subject: CENAB-OP-RW(Chesapeake Terrace)91-1204-3

Mr. J. A. Chisholm
The Halle Companies
2900 Linden Lane
Suite 300
Silver Spring, Maryland 20910

Dear Mr. Chisholm:

I am replying to your letter dated June 23, 1993, concerning the conservation easement, performance bond, and mitigation plans submitted in accordance with the conditions of the above referenced Department of the Army permit issued March 18, 1993.

The performance bond and easement will be retained in our files. You are reminded that the easement must be recorded in the Land Records Office of Anne Arundel County.

Our review of the final mitigation plan is satisfactory. However, in accordance with special condition #2, a schedule of the grading and planting work was required to be submitted by June 20, 1993. Please prepare a calendar schedule of the proposed wetland grading and planting work for our review. Special condition #2 also requires that the wetland creation work be completed prior to commencement of any wetland or other waters of the United States.

If you have any questions, please call Mr. Steven Harman of this office at (410)962-4252.

Sincerely,

Linda A. Morrison
Chief, Western Shore Permits Section



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, CORPS OF ENGINEERS
ATTN: REGULATORY BRANCH
2 HOPKINS PLAZA
BALTIMORE, MD 21201

January 3, 2019

Operations Division

National Waste Manager, Inc.
Attn: Mr. Warren E. Halle
2900 Linden Lane, Suite #6
Silver Spring, Maryland 20910

Dear Mr. Halle:

This is in reference to your request for an extension of time to the Department of the Army Permit, **CENAB-OP-RMN (CHESAPEAKE TERRACE RUBBLE LANDFILL) 1991-01204-M18**. The property is located adjacent to the Little Patuxent River on Patuxent Road, Odenton, Anne Arundel County, Maryland.

As there have been no significant changes in the attendant circumstances since authorization was granted, the District has determined that it is not contrary to the public interest to grant an extension of time. Accordingly, the time limit for completing the work authorized ends on December 31, 2023. Please note, no additional extensions for the proposed work will be granted by this office.

All conditions of the original permit remain in effect. You may proceed with the construction indicated therein, provided you have obtained all other required state and/or local authorizations.

If you have any questions concerning this matter, please call Mr. Richard Kibby of this office at (410)962-0694.

By Authority of the Secretary of the Army:

Issued for and in Behalf of

John T. Litz, PMP
Colonel, U.S. Army
Commander and District Engineer

DAVIA.JOSEPH
.P.1229279170
Joseph P. DaVia
Chief, Maryland Section Northern

Digitally signed by
DAVIA.JOSEPH.P.1229279170
DN: c=US, o=U.S. Government,
ou=DoD, ou=PKI, ou=USA,
cn=DAVIA.JOSEPH.P.1229279170
Date: 2019.01.03 11:23:08 -05'00'

Enclosure

Cc: (via e-mail) Mr. Milt McCarthy, Bay Environmental, Inc. <info@bayenvinc.com>

To identify how we can better serve you, we need your help. Please take the time to fill out our new customer service survey at:
<http://www.nab.usace.army.mil/Wetlands%20Permits/survey.htm>



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

MAY 20 2013

Operations Division

Mr. Warren E, Halle
National Waste Manager, Inc.
c/o McCarthy & Associates, Inc.
Mr. Milt McCarthy
14458 Old Mill Road, Suite 201
Upper Marlboro, Maryland 20772

Dear Mr. Halle:

This is in reference to your letter dated January 30, 2013, requesting an extension of time for Department of the Army permit, **CENAB-OP-RMN (CHESAPEAKE TERRACE) 1991-01204-M18** issued on May 23, 2008. The property is located adjacent to the Little Patuxent River on Patuxent Road, Odenton, Anne Arundel County, Maryland.

As there have been no significant changes in the attendant circumstances since authorization was granted, the District has determined that it is not contrary to the public interest to grant an extension of time. Accordingly, general condition (1) of the permit is revised to read as follows:


"The time limit for completing the work authorized ends on December 31, 2018. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached."

All other conditions of the original permit remain in effect. All required State and local authorizations must be secured prior to commencement of construction. A copy of this letter is being forwarded to Mr. Milt McCarthy with McCarthy & Associates, Inc. for informational purposes.

If you have any questions concerning this matter, please call Mr. Richard Kibby, of this office, at (410) 962-0694.

By Authority of the Secretary of the Army:

Issued For and in Behalf of
J. Richard Jordan, III
Colonel, Corps of Engineers
District Engineer


Joseph P. DaVia
Chief, Maryland Section Northern



**DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715**

DEPARTMENT OF THE ARMY PERMIT

Application Name and Permit Number: CENAB-1991-01204-M18(CHESAPEAKE TERRACE)

Issuing Office:

**U.S. Army Engineer District, Baltimore
Corps of Engineers
P.O. Box 1715
Baltimore, MD 21203**

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

Project Description: The applicant, Mr. Warren Halle of National Waste Managers, Inc., proposes to construct a rubble landfill on approximately 215 acres of the 460 acre tract of land. The creation of the rubble landfill will result in the discharge of fill material into approximately 3.66 acres of wetlands. Previous proposals would have resulted in the filling of 9.83 acres of WUS. Changes in project design and a more accurate delineation in the limits of WUS have resulted in a reduction of 6.17 acres of impacts to WUS. This is a reduction of nearly 63% of the original area of WUS proposed for impact. The rubble land-fill will accept large, bulky, non-toxic items such as residential and industrial construction debris.

Project Location: Town of Odenton
Patuxent Road
Fourth Tax Assessment District
Anne Arundel County, Maryland
N 39° 02' 32"/W 76° 44' 07"

Permit Conditions:

General Conditions:

1. The time limit for completing the work authorized ends on December 31, 2013. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.

2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.

3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and state coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.

5. If a conditioned water quality certification has been issued for your project, you must comply with conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.

6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

7. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

The U.S. Code of Federal Regulations, Title 33, Subpart 64 states that all structures erected in navigable waters require obstruction lights unless the applicant is advised to the contrary by the Coast Guard District Commander. If the structures authorized by this permit are to be built in navigable waters, then you must contact the Commander (oan), Fifth Coast Guard District, 431 Crawford Street, Portsmouth, Virginia, 23704, to ascertain the need for obstruction lights.

Special Conditions:

1. All activities must be accomplished in accordance with special conditions and best management practices associated with the original Department of the Army permit dated March 18, 1993.

2. Prior to the start of construction, the permittee shall identify and demarcate with high visibility fencing or super-silt fence all waters of the U.S. not authorized to be filled and immediately adjacent to construction, staging, and access areas. Super silt fence or its equivalent will be used in and along streams and wetlands.
3. Construction staging areas will be located in upland areas and shall not impact waters of the U.S., including jurisdictional wetlands.
4. No construction material, excavated or dredged material shall be stockpiled in or stored in a manner that would affect waters of the U.S. including jurisdictional wetlands unless authorized by this permit.
5. All construction work is to be conducted in the dry. Construction activity, equipment and or machinery shall not impact waters of the U.S. including jurisdictional wetlands beyond the limit of disturbance as shown on the construction plans.
6. Wetlands and waters of the U.S. shall not be used as access ways to the construction site by construction vehicles or equipment unless authorized by this permit and indicated on the construction plans.
7. The permittee shall employ measures during construction to prevent spills of fuels or lubricants, etc. If a spill occurs, it will be controlled to prevent its entry into wetlands and /or waterways.
8. The permittee will construct gates or use other restrictive measures to limit unauthorized vehicular access into the mitigation site.
9. The environmental consultant shall install groundwater wells prior to excavation and after completion of the mitigation site.
10. Best management practices shall be employed to minimize temporary impacts to wetlands and waterways. Temporary disturbance to wetlands and waterways will be restored to preconstruction conditions. Should it be determined that any of the temporarily disturbed wetlands are no longer jurisdictional due to changed vegetation or hydrology, mitigation will be assessed for the additional impacts.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

- () Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).
- (X) Section 404 of the Clean Water Act (33 U.S.C. 1344).
- () Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law or to comply with the appropriate local critical area regulations.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.

d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.

b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

d. Design or construction deficiencies associated with the permitted work.

e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data. The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

a. You fail to comply with the terms and conditions of this permit.

b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).


c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be

required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

 May 29, 2008

(PERMITTEE) (DATE)
STEPHEN N. FLEISCHMAN
VICE PRESIDENT

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

Issued for and in behalf of Colonel Peter W. Mueller

Vance G. Hobbs Date
Chief, Maryland Section Northern
Regulatory Branch

When the structures or work authorized by this permit are still in existence at the time the property is transferred, the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.

(TRANSFeree) (DATE)

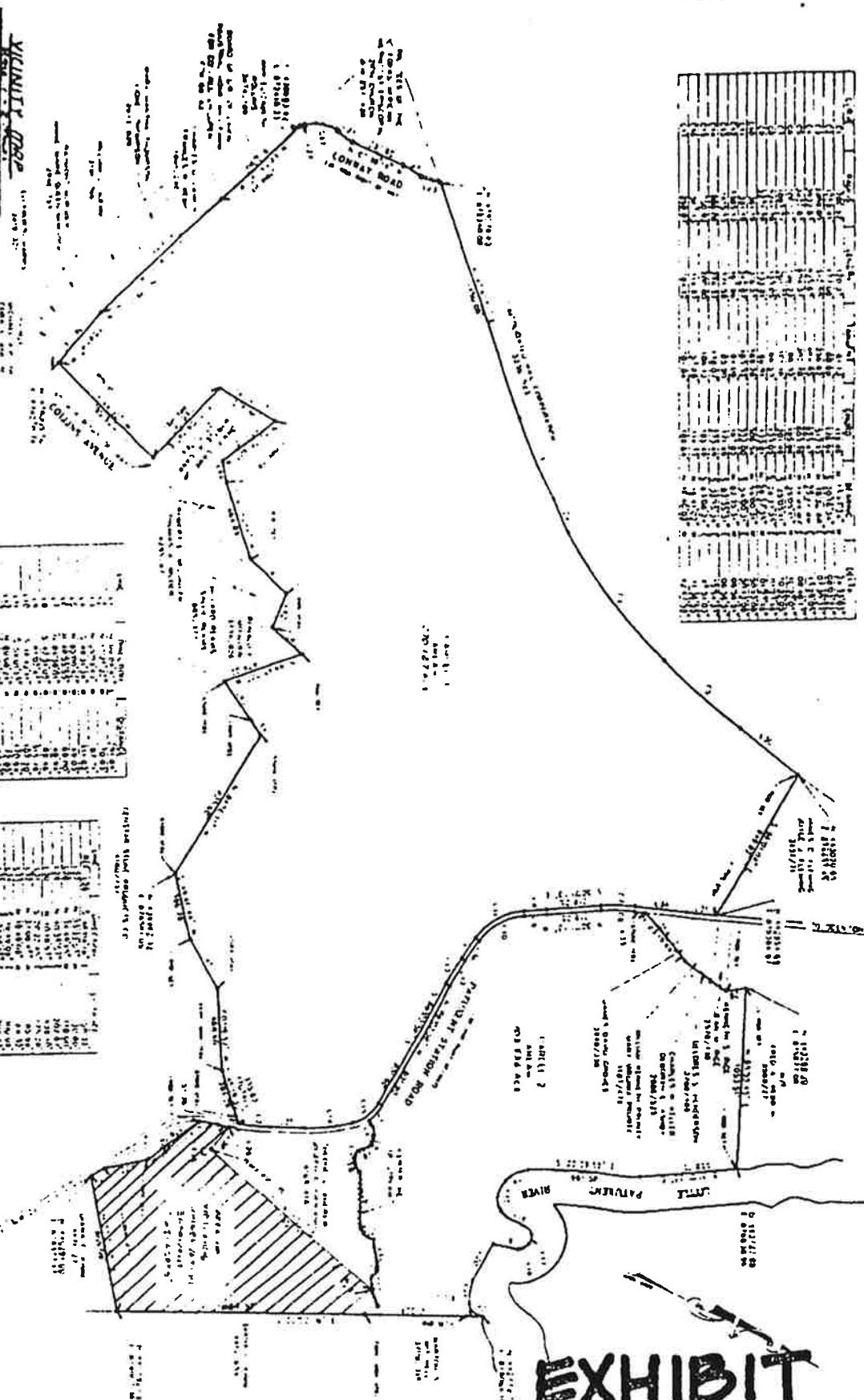


EXHIBIT 1

THE LAND OF
CHESAPEAKE TERRACE INC

Rauch, Walls and Lane, Inc.

Engineers • Design Planning • Surveyors



EASTON • MARYLAND



6-24-89

SHEET NO. 1

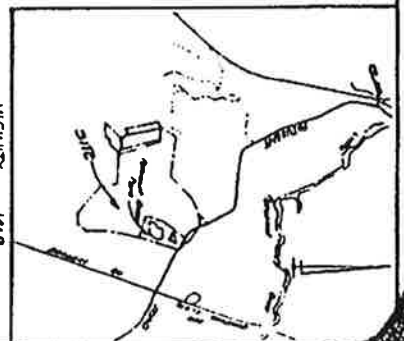
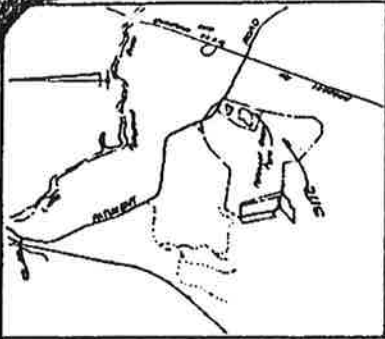


EXHIBIT 2

BOUNDARY PLAT
NEAREST THE PROPERTY
ON FATH ROAD
3RD DISTRICT AND KANE COUNTY, AZ
SCALE 1"=600
DEC 1981

EXHIBIT 5



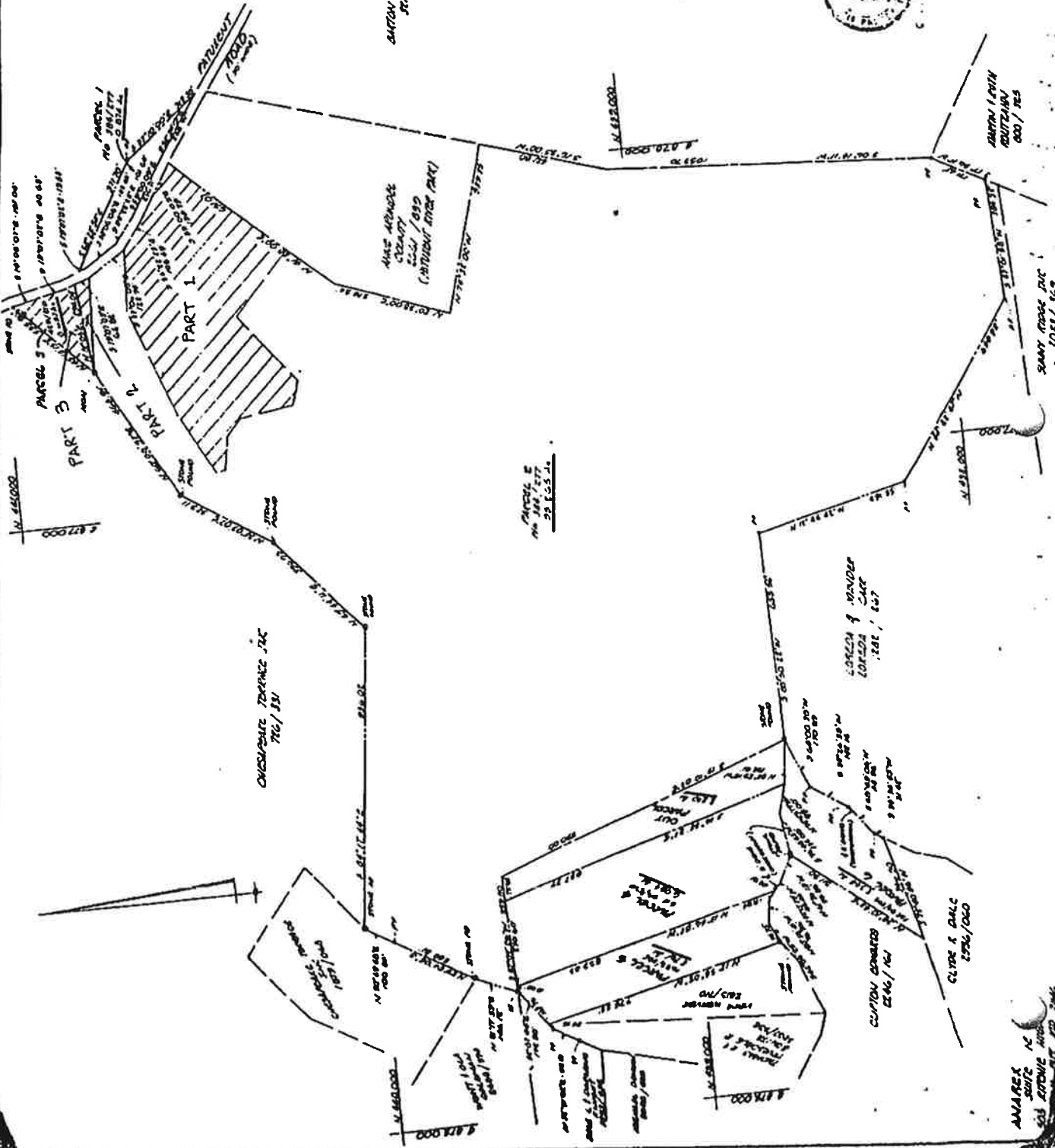
SECTION 5, TOWNSHIP 25 N.
RANGE 10 E.

AREA'S

| | |
|--------------|--------------------|
| PARCEL 1 | 0.074 AC. |
| PARCEL 2 | 93.265 AC. |
| PARCEL 3 | 0.637 AC. |
| PARCEL 4 | 6.084 AC. |
| PARCEL 5 | 2.767 AC. |
| PARCEL 6 | 2.348 AC. |
| TOTAL | 107.282 AC. |

BOUNDARY PLAT

HEADQUARTERS
ON PITCH
4TH DISTRICT
SCALE 1"=100'



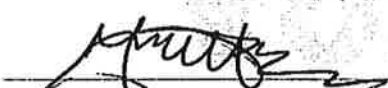
| 4819 FINANCE AND ACCOUNTING OFFICER | | 05/29/2008 | | 0001582 |
|-------------------------------------|----------|------------|---------------------|----------|
| Description | Invoice | Date | Account | Amount |
| CORPS PERMIT | MAY 2008 | 5/29/2008 | 0004-0004-6205-0000 | \$100.00 |

| | | |
|--|--|----------------|
| NATIONAL WASTE MANAGERS, INC. OPERATING ACCOUNT 2900 LINDEN LANE, SUITE 300 SILVER SPRING, MD 20910 | PROVIDENT BANK OF MARYLAND BALTIMORE, MD 21203-1681 | NO: 0001582 |
| | | 7-7301 2520 |

| Check No. | Date | Amount |
|-----------|------------|----------|
| 0001582 | 05/29/2008 | \$100.00 |

One Hundred and 0/100 Dollars*****
Pay to the order of

FINANCE AND ACCOUNTING OFFICER
U.S. ARMY ENGINEER DISTRICT
BALTIMORE (FOA, USAED)



ENDORSE HERE:

X

DO NOT SIGN / WRITE / STAMP BELOW THIS LINE
FOR FINANCIAL INSTITUTION USAGE ONLY



*FEDERAL RESERVE BANK REGULATION CC
Security features on this document include a
Microprint Sign Line and Security Screen.
Absence of these features may indicate alteration.



DEPARTMENT OF THE ARMY
BALTIMORE DISTRICT, U.S. ARMY CORPS OF ENGINEERS
P.O. BOX 1715
BALTIMORE, MD 21203-1715

REPLY TO
ATTENTION OF

SEP 23 1995

Operations Division

Subject: CENAB-OP-RW(Chesapeake Terrace)91-1204-3

Mr. Milt McCarthy
McCarthy and Associates
14458 Old Mill Road, Suite #201
Upper Marlboro, Maryland 20772

Dear Mr. McCarthy:

I am providing a written reply, as a follow-up to previous field meetings, to your March 4, 1994 letter, and the February 8, 1995 map submittal. You requested that the isolated wetland areas be reconsidered as non-jurisdictional and the subject issued Department of the Army permit be modified accordingly. The subject permit was issued on March 18, 1993, for fill associated with a proposed rubble landfill site on Patuxent Road, Anne Arundel County, Maryland.

Based upon our site investigations we have determined that wetlands 6N, 4D, and 9D are not regulated because they either do not meet the technical parameters of a wetland in accordance with the 1987 Wetland Delineation Manual or do not meet the definition of Waters of the United States. Enclosed is a map which shows these areas that are not regulated. The remaining wetlands are "Waters of the United States", the use, degradation or destruction of which could affect interstate or foreign commerce. The definition of "Waters of the United States" in the current DA regulations (33 CFR 328.3(a)(3)) was promulgated through the Administrative Procedures Act rulemaking process and remains in effect, notwithstanding the Tabb Lakes or Hoffman Homes decisions. While the remaining wetlands on-site are actually adjacent to Waters of the United States and not isolated, even "isolated" waters are encompassed in the definition of Waters of the United States. Specific examples cited in the definition include prairie potholes, wet meadows and playa lakes.

We will modify the mitigation requirements when we receive a correct listing of the acreage of these sites not regulated and of the remaining regulated wetlands to be impacted.

Any future application submittal outside the study cited boundaries of the proposed landfill, must include a delineation of the waters of the United States (to be confirmed by the Corps) and all the waters of the United States within the property boundaries that are not correctly shown on the February 1995 map submission.

-2-

If you have any questions concerning this letter, please call Mr. Steven Harman of this office at (410)962-4522.

Sincerely,

A handwritten signature in cursive script, reading "Linda A. Morrison". The signature is written in dark ink and is positioned above the printed name and title.

Linda A. Morrison
Chief, Western Shore Permits Section

McCARTHY & ASSOCIATES, INC.

REGULATORY and ENVIRONMENTAL
CONSULTANTS

March 4, 1994

Mrs. Linda Morrison
U.S. Army Corps of Engineers
Baltimore District
City Crescent Building
10 S. Howard Street, 8TH FLOOR
P.O. Box 1715
Baltimore, Maryland 21201

Re: Chesapeake Terrace
(RW 91-1204-3)

Dear Mrs. Morrison:

I am writing in reference to the above referenced permit, which was issued by the Baltimore District, Corps of Engineers on March 18, 1993. The Federal 404 Permit authorizes the discharge of fill material into 5.0 acres of non-tidal wetlands for the construction of the Chesapeake Terrace Rubble Landfill. The fill authorized by your agency is for both headwater areas that drain to other waters of the United States and isolated wetlands which are not part of a surface tributary system to other waters of the United States or navigable waters regulated by your agency. Specifically, we are requesting that the isolated wetland areas be reconsidered as non jurisdictional waters and the issued permit be modified and amended accordingly. Our rationale for soliciting this request is the result of the Tabb Lakes and Hoffman Homes, Inc. Circuit Court rulings that are specific to the scope of Federal 404 authority on isolated intrastate wetlands. In addition, should these areas be considered isolated and not subject to Corps' jurisdiction, we believe the mitigation requirements should be amended to decrease the required mitigation acreage.

The Federal regulations require that for an isolated wetland to be considered "waters of the United States", pursuant to 40 CFR 230.3(s)(3), it must satisfy the commerce clause as defined in (i) through (iii) of that section which states:

(3) All other waters such as intra-state lakes, rivers, streams mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:

14458 Old Mill Road #201
Upper Marlboro, MD 20772

(301) 627-7505

Mrs. Linda Morrison
Page -2-
March 4, 1994

(i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or

(ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or

(iii) Which are used or could be used for industrial purposes by industries in interstate commerce...

The Tabb Lakes and Hoffman Homes Circuit Court decisions have specifically addressed these requirements. In the case of Hoffman Homes v. United States (Hoffman Homes), the United States Court of Appeals for the Seventh Circuit ruled that Hoffman Homes did not have to pay an administrative penalty for filling an isolated wetland. More importantly, the Court found that filling an isolated wetland had no effect on interstate commerce. As they stated, "[the area in question] is an intrastate, isolated wetland. Such wetlands are not part of aquatic ecosystems and protection of them would not further the stated policy of the [Clean Water] Act 'to restore and maintain the chemical, physical, and biological integrity of the Nation's waters'". Thus, the 7th Circuit Court found that the wetland in question was non Jurisdictional for purposes of Section 404 of the Clean Water Act.

In another landmark case, Tabb Lakes, LTD v. United States of America (Tabb Lakes LTD), the United States District Court for the Eastern District of Virginia ruled in favor of the plaintiff. Following guidance from the Kelly Memorandum, dated November 8, 1985, the Corps asserted jurisdiction over an isolated wetland on the basis that the areas may have use or possible use by migratory birds that cross state lines as sufficient interstate commerce connection. However, the Court ruled that the Kelly Memorandum was not exempt from the informal rulemaking requirements of the Administrative Procedure Act (APA). Therefore, in the absence of formal rulemaking requirements as stipulated in the APA, the Corps could not assert jurisdiction over the wetland in question. This case clearly states that the Corps cannot use the presence of migratory birds in an isolated wetland to exercise jurisdiction under the Clean Water Act. Furthermore, in Hoffman Homes, the Court ruled that "Although the Act mentions wildlife as an important result of controlling pollution, the purpose of the Act is to restore and maintain clean water, not to conserve wildlife".

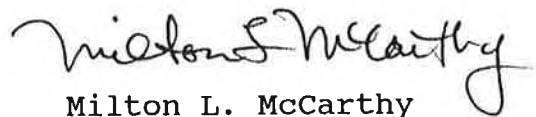
Mrs. Linda Morrison
Page -3-
March 4, 1994

We believe that the isolated wetland areas at Chesapeake Terrace should not be regulated by your agency on the following basis:

- The wetlands are hydrologically isolated and do not have a surface tributary connection to other waters of the United States. These wetlands are perched as a result of an underlying impermeable layer and are maintained by precipitation.
- The wetlands are manmade as a result of past sand and gravel mining operations. The National Wetland Inventory maps depict two of the areas in question as being excavated ponds, and not natural wetlands. These wetlands are completely surrounded by uplands.
- Precedents established in Hoffman Homes and Tabb Lakes LTD clearly state that isolated intrastate wetlands are not jurisdictional waters of the United States. In addition, the use or possible use of the isolated wetlands by migratory birds do not constitute a sufficient commerce connection to be regulated by the Federal Government.
- Precedents set by the Baltimore District Corps of Engineers, whereby the Corps did not exert jurisdiction over isolated intrastate waters. The Corps has in the recent past elected not to regulate isolated wetlands, both natural and man-made, since there was no commerce nexus.
- The isolated wetlands located at Chesapeake Terrace do not satisfy the regulatory requirements of 40 CFR 230.3(5)(3)(i-iii) for interstate or foreign commerce.

In light of this information, I respectfully request that the jurisdictional determination made for Chesapeake Terrace be modified to eliminate the isolated wetlands from Section 404 Jurisdiction, with a corresponding modification of the mitigation requirements. In addition, I also respectfully request a written response to my letter. I appreciate your attention to this matter. Please call me if you have any questions or comments.

Sincerely,



Milton L. McCarthy

cc: Mr. Warren E. Halle, Halle Enterprises
Mr. Andy Chisholm, Halle Enterprises

McCARTHY & ASSOCIATES, INC.

REGULATORY and ENVIRONMENTAL CONSULTANTS

April 2, 1997

Certified Mail

Return Receipt Requested # Z 011 753 902

Mr. Steve Harman
U.S. Army Corps of Engineers
Baltimore District
City Crescent Building, 8th Floor
10 South Howard Street
Baltimore, Maryland 21201

Re: Chesapeake Terrace
CENAB-OP-RW 91-1204-3

Dear Mr. Harman:

I am writing as a follow up to our previous site visits to the Chesapeake Terrace Rubble landfill located in Anne Arundel County, Maryland. The purpose of the site visits were to examine the isolated wetland areas to determine whether or not they were waters of the United States, as defined in 40 CFR 230.3(5)(3). Based on the re-evaluation of those areas, it was determined by you and Mrs. Linda Morrison that the following wetland areas were not subject to Federal jurisdiction pursuant to Section 404 of the Clean Water Act.

| Area | Forested | Non Forested | Total |
|------|----------|-----------------|------------|
| 3D | ----- | .08 | .08 |
| 4D | .21 | .14 | .35 |
| 6N | .22 | ----- | .22 |
| 7D | ----- | .29 | .29 |
| 9D | ----- | .07 | .07 |
| 10D | ----- | .01 | .01 |
| 11D | ----- | .69 | <u>.69</u> |
| | | | 1.71 |

Of these referenced areas, isolated areas 6N, 4D, and 9D, were determined not to be jurisdictional "waters of the United States". These areas total .64 acres and are referenced in your September 29, 1995 letter to me regarding this subject.

14458 Old Mill Road #201
Upper Marlboro, MD 20772

(301) 627-7505

Mr. Steve Harman

Page 2

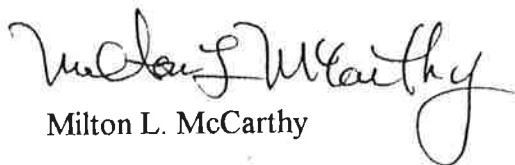
April 2, 1997

During the site visit with you and Mrs. Morrison on June 3, 1996, Mrs. Morrison further indicated that areas 10D, 11D, 7D, 3D were not considered waters of the United States subject to Section 404 jurisdiction. These areas total 1.07 acres; for a combined total of 1.71 acres of non jurisdictional areas. In addition, there are two areas that were examined, but no decision has been to determine whether or not these areas are considered waters of the United States, or wetlands, by satisfying the technical wetland criteria as stipulated in the 1987 Corps of Engineers Wetland Delineation Manual. These include areas 13D and 14N. A determination by your agency in the near future, or guidance to me regarding these two areas, would be sincerely appreciated.

By copy of this letter, we request that the referenced permit be revised to reflect the reduction of impact based of the re-evaluation of those areas discussed above (i.e., 6N, 4D, 9D, 10D, 11D, 7D, and 3D). The revised impact would be 5.37 acres -1.71 acres, or a revised total of 3.66 acres. Based on the revised impact, there is a corresponding reduction in the required compensatory wetland mitigation. The permit requires a total of 6.78 acres of wetland mitigation, at a 2:1 replacement ratio for forested areas, and a 1:1 replacement ratio for emergent and open water impacts. The impact reduction of 1.71 acres, by type, is .43 acres of forested wetland, and 1.28 acres of emergent and open water wetland. At the appropriate ratio, this would reduce the forested wetland mitigation requirement from 3.56 acres to 2.7 acres, and decrease the 3.22 acres of emergent and open water wetlands to 1.94 acres for a revised total of 4.64 acres, instead of the original 6.78 acre requirement.

Your attention to this matter is sincerely appreciated.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Milton L. McCarthy". The signature is fluid and cursive, with the first name "Milton" and last name "McCarthy" clearly distinguishable.

Milton L. McCarthy

cc: Mr. Warren Halle (Halle Enterprises, Inc.)

FEET
0 200 400



| WETLAND | TOTAL | FORESTED | NON-FORESTED |
|------------------|---|-----------------|-------------------|
| 1N | 0.02 | 0.02 | 0.08 |
| 2D | 0.08 | ---- | 0.08 |
| ✓3D | 0.08 | ---- | 0.08 |
| ✓4D | 0.35 | 0.21 | 0.14 |
| 5d | 2.53 | 0.98 | 1.55 |
| ✓6N | 0.22 | ---- | 0.22 |
| ✓7D | 0.29 | ---- | 0.29 |
| 8D | 0.02 | ---- | 0.02 |
| ✓9D | 0.07 | ---- | 0.07 |
| ✓10D | 0.01 | ---- | 0.01 |
| ✓11D | 0.69 | ---- | 0.69 |
| 12N | 0.03 | 0.03 | ---- |
| 13D | 0.07 | ---- | 0.07 |
| 14N | 0.46 | 0.46 | ---- |
| 15N | 0.01 | 0.01 | ---- |
| 16N | 0.07 | 0.07 | ---- |
| 17N | 0.26 | 0.26 | Eliminated Impact |
| 18D | 0.37 | | |
| | 3.53 | 3.11 | 0.42 |
| | Reduced to Road impact | | |
| 19N | 1.04 | 1.02 | 0.02 |
| | Eliminated Impact | | |
| TOTAL | 9.83 Ac. | 6.17 Ac. | 3.66 Ac. |
| NEW TOTAL | 5.37 Acres - May 1991 Redesigned Proposed | | |

4.73 - regulated
0.64 - not-regulated



LEGEND

PROPERTY LINE

AMERICAN JEWISH
ORGANIZATION & AMERICAN BLUE KNIGHTS

100 YR FLOOD - (BASED ON CURRENTLY
DRAIN PLAT MAPS, 1970)

NOTE: WETLAND LABELS REFLECT WETLAND NUMBER (1 THRU 19) AND WETLAND CONDITION
0 = LOCATED DISTURBED, 4 = LOCATED NORMAL

CONTENTS BASED ON AERIAL PHOTOGRAPHY
FROM OR PROVIDED BY MAT
WASTE MATERIALS

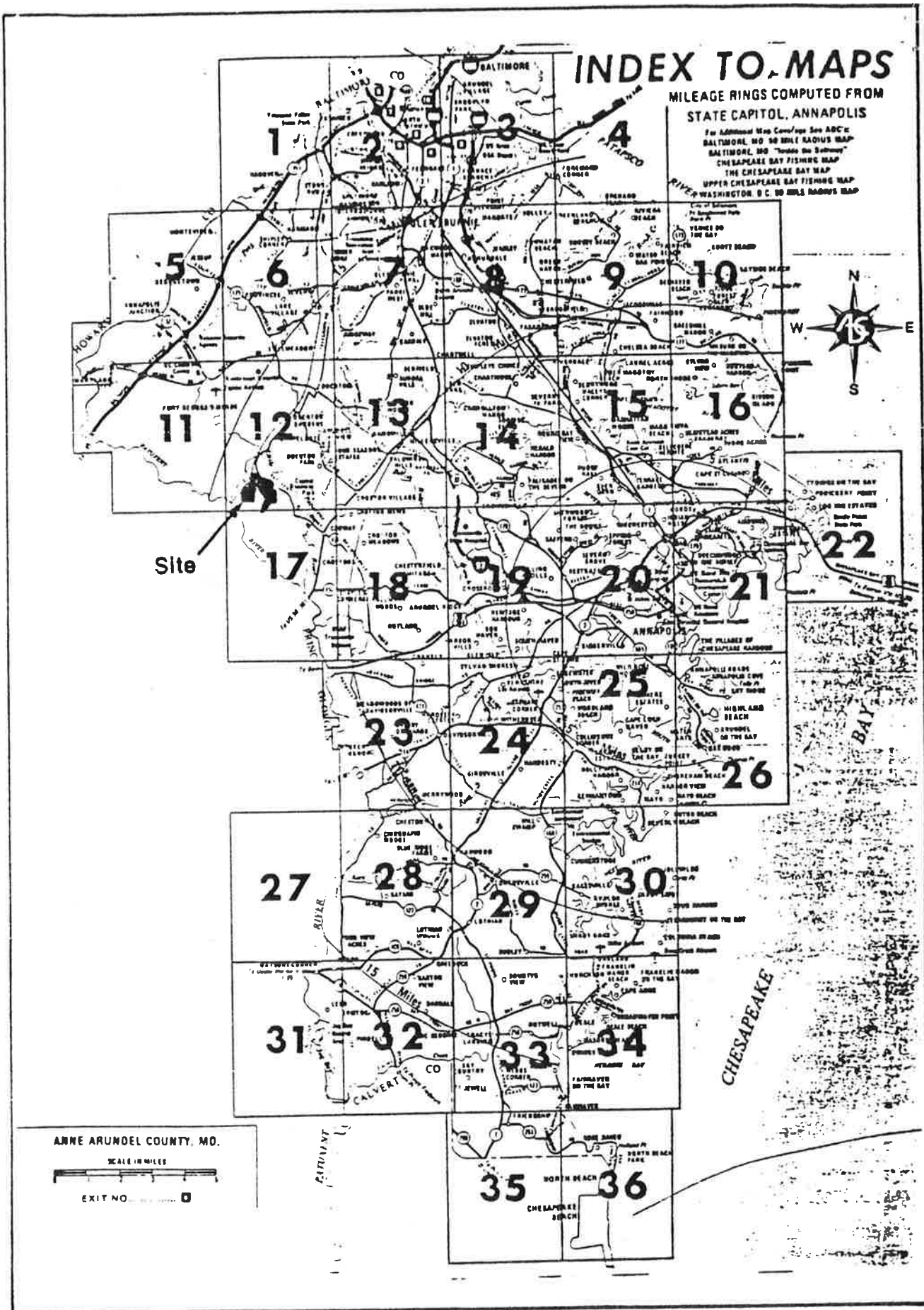
Estimated Forested Floodplain Wetland

Wetlands to be Impacted:

Chlorophanes **Therese**

0 (continued) every position from 0 to 100

EA ENGINEERING,
SCIENCE, AND
TECHNOLOGY, INC.



Vicinity map. (Source: ADC map of Anne Arundel County)



**US Army Corps
of Engineers**
Baltimore District

Public Notice

In Reply Refer to Application Number
CE-NABOP . RW (Chesapeake Terrace)

Date November 22, 1991

91-1204-3 Revised

Comment Period: Nov. 22, 1991 to Dec. 22, 1991

THE PURPOSE OF THIS NOTICE IS TO SOLICIT A RESPONSE FROM THE PUBLIC ABOUT THE WORK DESCRIBED BELOW. AT THIS TIME, NO DECISION HAS BEEN MADE AS TO WHETHER OR NOT A PERMIT WILL BE ISSUED.

This District has received an application for a Department of the Army permit pursuant to Section 404 of the Clean Water Act (33 U.S.C. 1344) as described below:

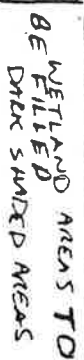
APPLICANT: Mr. Warren E. Halle
National Waste Managers, Inc.
2900 Linden Lane, Suite 300
Silver Spring, Maryland 20910

WATERWAY: In isolated and adjacent wetlands near the floodplain of the Little Patuxent River, Patuxent Road, Anne Arundel County, Maryland.

WORK: To fill and grade 5.37 acres of non-tidal wetlands to convert 215 acres of a 460 sand and gravel surface mine to a rubble fill operation. The work is to be done in accordance with the enclosed plans. If any additional information is needed on the proposed rubble fill project, please contact Mr. Joseph Berg, the applicant's consultant at (410)771-4950. If there are questions concerning the wetland areas or the permit process, call Mr. Steven Harman of this office at (410)962-4253.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, and, in general, the needs and welfare of the people.

"The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity."



EVA

410-
 222-7436
 Newm Dooley

- NTW - Flood plan

- 1) Wetland acreage (466) Ac based on FEMA
 Based on FEMA
- 2) Flood plan Acreage - Best Guess
- 3) Forest Acreage -

- Chas. Terrace -

- Krum Dooley -

Wetland Maps OK
 But info actual
 wetland calculations
 based on a survey
 line.

Specific

Article 21

Floodplain - engineered flood plan
 Based on engineering calculation

Forest - Take from aerial photo.

Can use existing data but run the
 rest of some one claiming the
 information

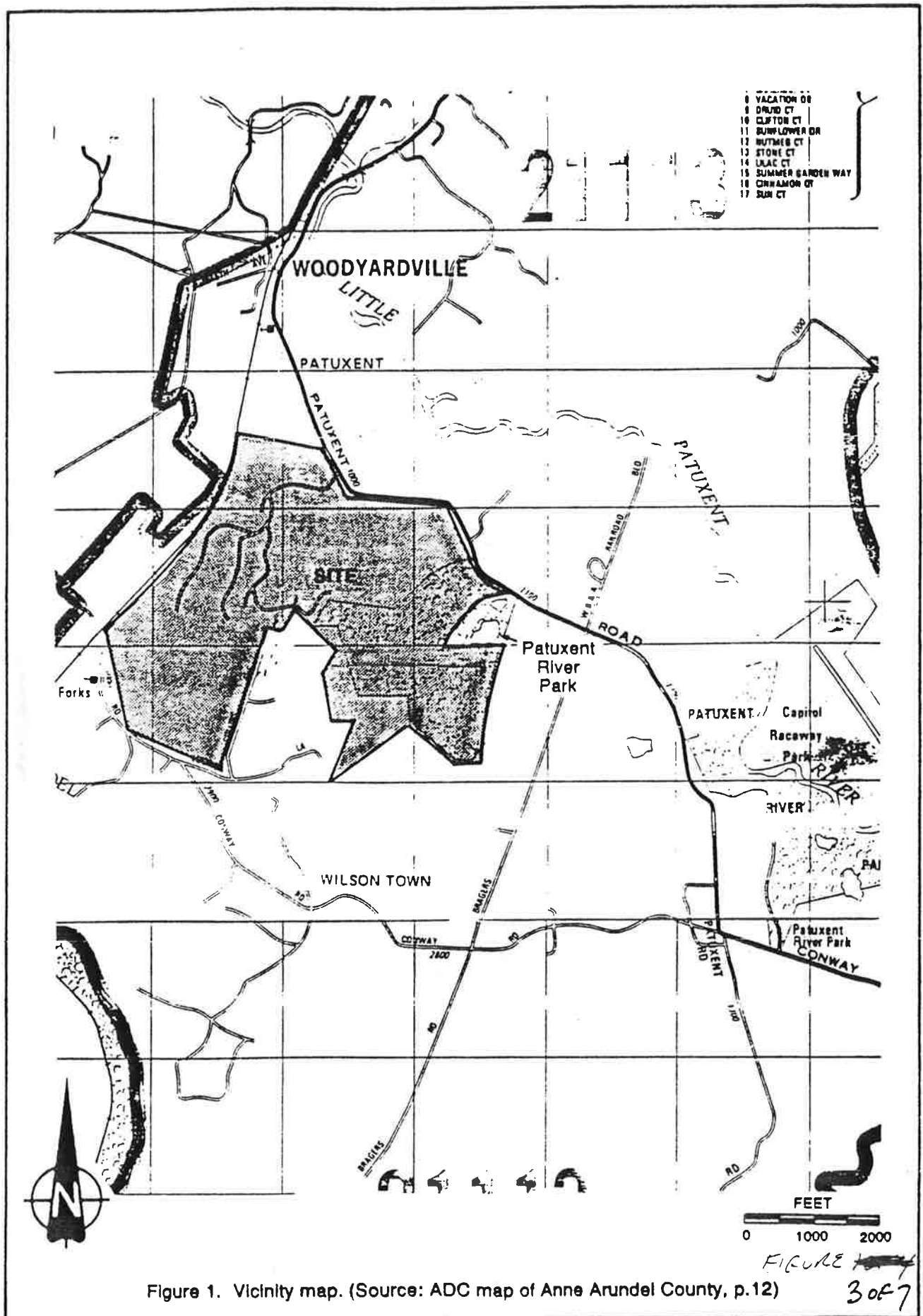
Dave Hirsch

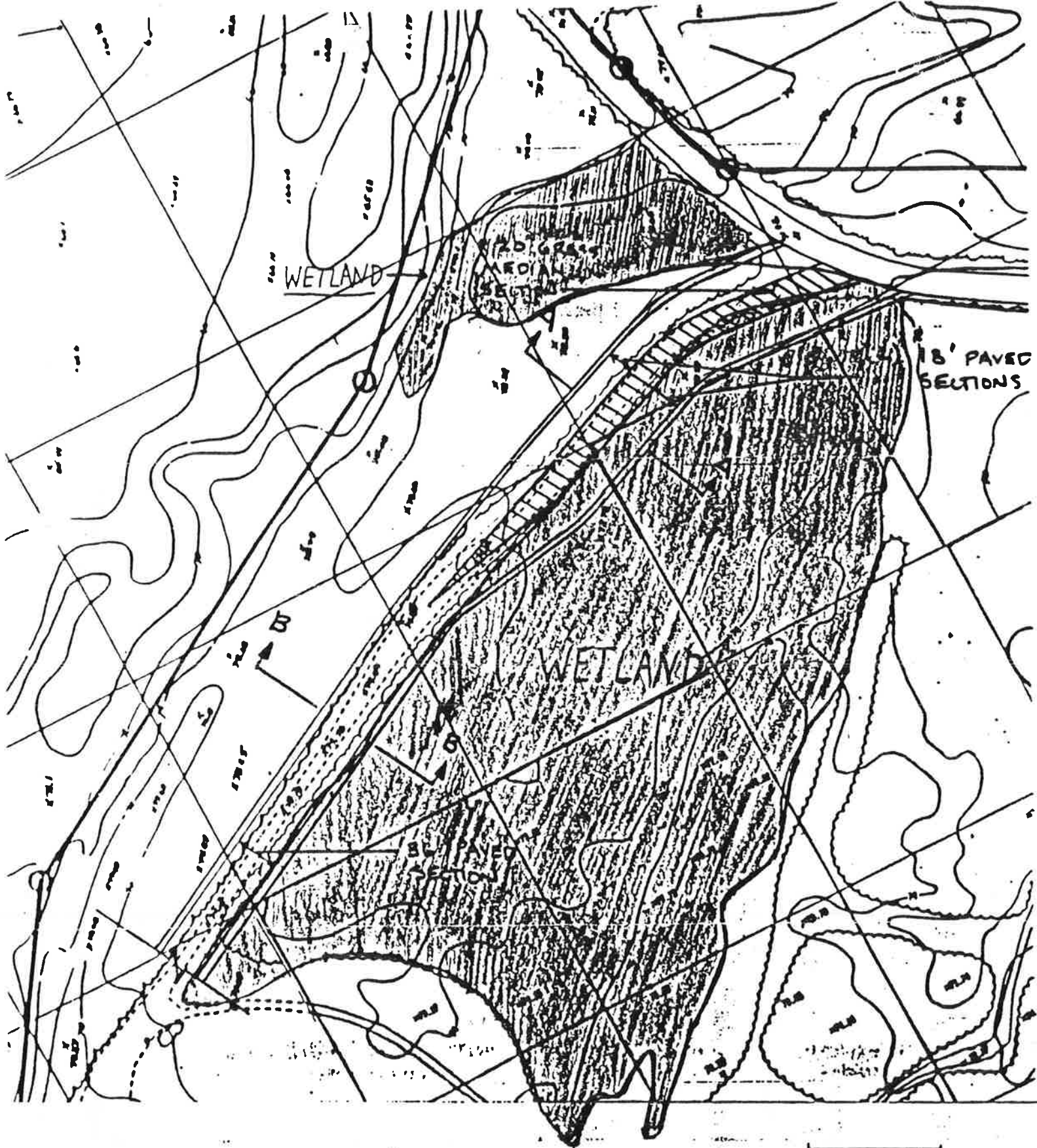
A-6 FEMA EC. 70 (100yr)

Wetland Port comment

80.03
 .66
 .22
 6.70

Exhibit #5 Total wetlands in comment
 = 107.989 Acres





Chesapeake Terrace Entrance Road:

100 ft

6 of 7



LEGEND

- PROPERTY LINE
- STUDY SITE BOUNDARY & PROPOSED PROJECT BOUNDARY
- 100 YR FLOOD - (BASED ON CENSUS DATA & DATA PLAT MARCH, 1990)

NOTE: WETLAND LABELS REFLECT WETLAND MAPS (1 thru 19) AND WETLAND CONDITION. D-INDICATES DISTURBED, N-INDICATES NORMAL. COLOURS BASED ON AERIAL PHOTOGRAMMETRY FROM 1980 OR PROVIDED BY NATI WASTE MANAGEMENT

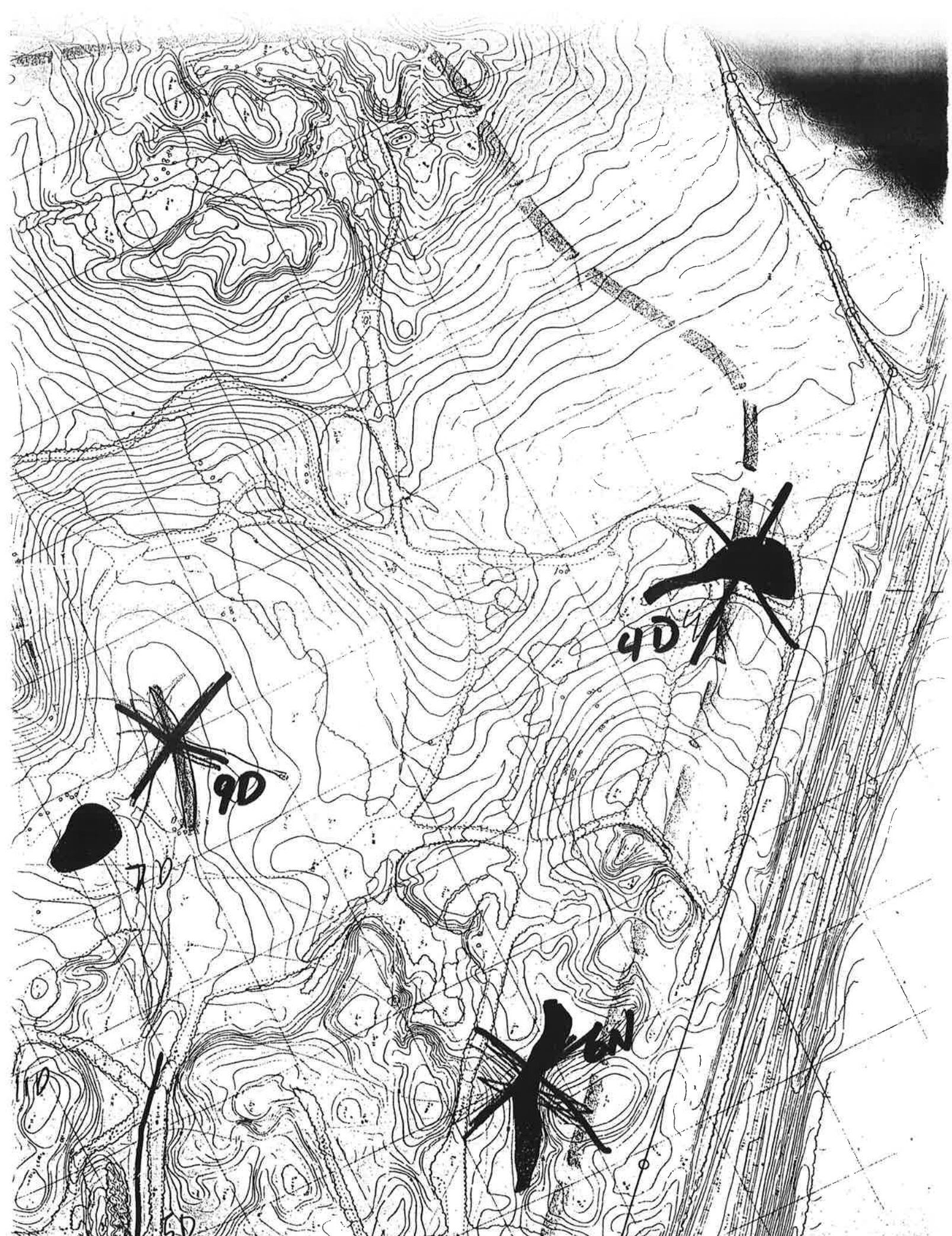


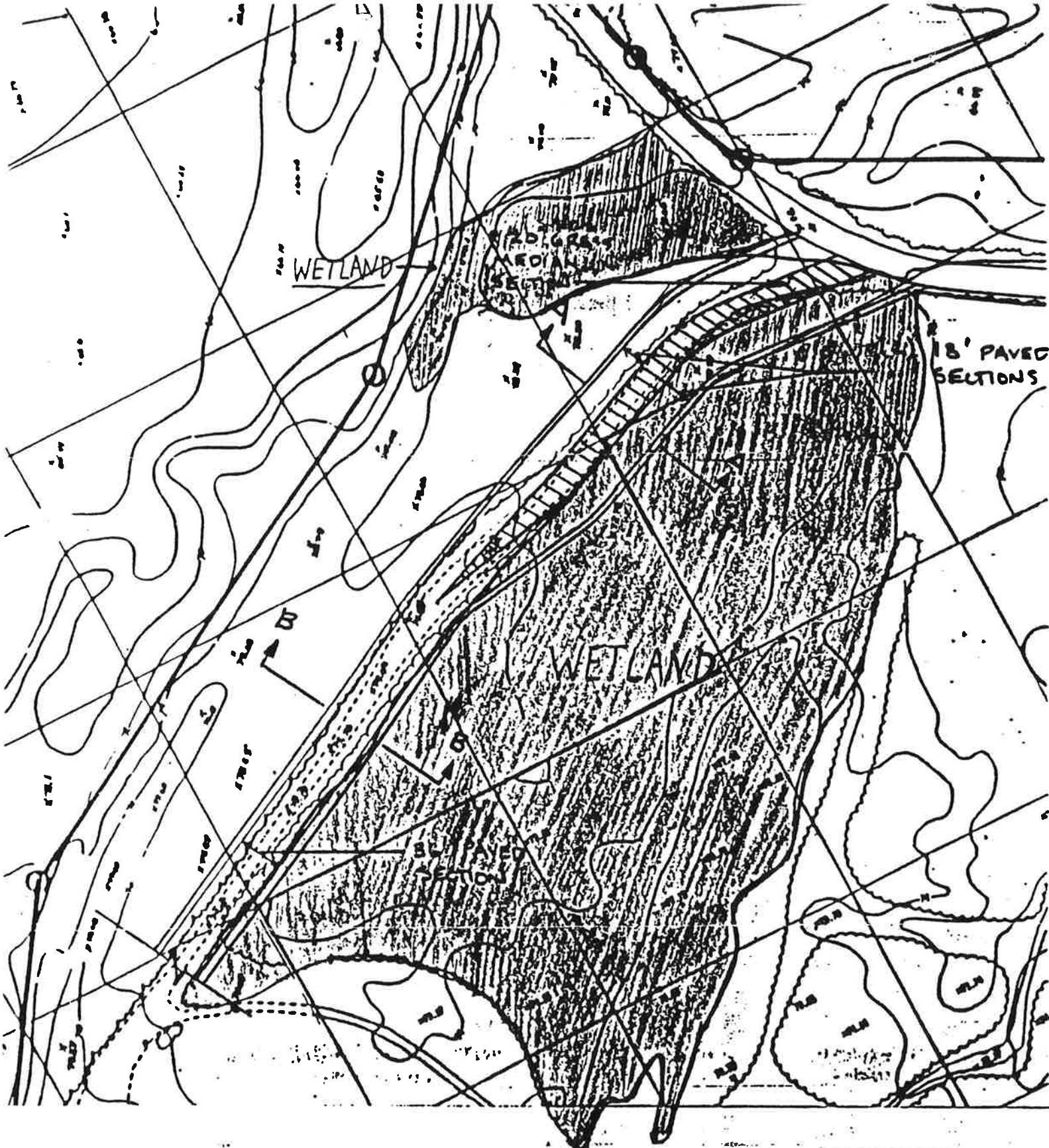
Estimated Forested Floodplain Wetland



Wetlands to be Impacted

| | |
|--|----------------|
| Chesapeake Bay Area | |
| Study Site and Wetland Approx. Station | |
| EA ENGINEERING, SCIENCE & TECHNOLOGY, INC. | EA |
| DATE: 10/10/90 | BY: JAB |
| SCALE: 1" = 100' | DATE: 10/10/90 |





Chesapeake Terrace Entrance Road

100ft

6 of 7



BAY ENVIRONMENTAL, INC.

December 13, 2018

Via Electronic Mail

Mr. Richard Kibby
Baltimore District Office
U.S. Army Corps of Engineers
2 Hopkins Plaza
Baltimore, Maryland 21201

Re: Chesapeake Terrace Rubble Landfill
RW91-1204

Dear Mr. Kibby,

In accordance with your request, please find the Permit drawings and spreadsheet for the Chesapeake Terrace Rubble Landfill. You will note on the spreadsheet (Sheet 1) that the impacts are given by area. Furthermore, they are designated by 'D' ("disturbed") and 'N' ("natural"). You will also note the acreages in an adjoining column.

I have placed checkmarks by Impact Areas 3D, 4D, 6N, 7D, 9D, 10D, and 11D. Based on my request of April 2, 1997 and our onsite evaluation with the Corps on June 3, 1996, the Corps determined that these areas were isolated and, therefore, not subject to federal jurisdiction under Section 404 of the Clean Water Act. By Corps letter dated October 17, 1997, the Corps revised the permit to reflect this reduction of impact. A copy of the Corps letter is attached. If you have any questions, please do not hesitate to call.

Very truly yours,



Milton L. McCarthy

cc Steve Fleishman
Andy Chisolm



BAY ENVIRONMENTAL, INC.

November 2, 2018

VIA ELECTRONIC MAIL

Mr. Richard Kibby
Maryland Section Northern, Regulatory Functions Branch
Baltimore District Army Corps of Engineers
2 Hopkins Plaza
Baltimore, MD 21201

Re: CENAB-OP-RMN (Chesapeake Terrace) 1991-01204-M18
Chesapeake Terrace Rubble Landfill
Odenton, Anne Arundel County, Maryland

Dear Mr. Kibby,

In accordance with Paragraph 3 of your May 20, 2013 letter, please consider this correspondence as a request for a 5-year extension of time for the above referenced project. The current permit expires on December 31, 2018. If you have any questions, please do not hesitate to contact me. Your attention to this request is sincerely appreciated.

Very truly yours,

Milton L. McCarthy

CC: *Amanda Sigillito (Maryland Department of the Environment)*
Stephen N. Fleischman (The Halle Companies)
Andy Chisholm (J.A. Chisholm, P.E. LLC)



Maryland

Department of the Environment

Larry Hogan, Governor
Boyd K. Rutherford, Lt. Governor

Ben Grumbles, Secretary
Horacio Tablada, Deputy Secretary

April 26, 2019

Mr. Stephen N. Fleischman
The Halle Companies
2900 Linden Lane
Suite 300
Silver Spring, Maryland 20190

Re: Chesapeake Terrace Rubble Landfill
Water Quality Certification No. 91-WQ-0516
AI No. 63592

Dear Mr. Fleischman:

The purpose of this letter is to confirm that the Water Quality Certification No. 91-WQ-0516, originally issued for the U.S. Army Corps of Engineers' Chesapeake Terrace Rubble Landfill Permit (No. CENAB-OP-RMN 1991-01204-M18), remains in effect until the December 31, 2023 expiration date of the federal permit. Should you have any questions, please feel free to contact me at 410-537-3766 or at amanda.sigillito@maryland.gov.

Sincerely,

Amanda Sigillito, Chief
Nontidal Wetlands Division

C: Richard Kibby (Maryland Section Northern, Regulatory Functions Branch, Baltimore District Army Corps of Engineers, 2 Hopkins Plaza, Baltimore, MD 21201)

✓ Milton L. McCarthy (Bay Environmental, Inc., 2661 Riva Road, Bldg. 800, Suite A, Annapolis, MD 21401)



MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101 • www.mde.state.md.us

Martin O'Malley
Governor

Robert M. Summers, Ph.D.
Secretary

Anthony G. Brown
Lieutenant Governor

May 28, 2013

Mr. Warren E. Halle
National Waste Manager, Inc.
2900 Linden Lane, Suite 300
Silver Spring, Maryland 20910

Project: WQC 91-WQ-0516/199101204
Chesapeake Terrace Rubble Fill, Anne Arundel County

Dear Mr. Halle:

The Wetlands and Waterways Program (Program) has reviewed your request to extend the expiration date of the Water Quality Certification (WQC) for the Chesapeake Terrace Rubble Fill located in Odenton, Anne Arundel County. The request asks the Program to renew the expiration date of the WQC to coincide with the expiration of the US Army Corps of Engineers (Corps) letter, dated May 20, 2013. That letter extends the Corps authorization until December 31, 2018.

Accordingly, by way of this letter, the Program extends the expiration date for WQC 91-WQ-0516/199101204 until December 31, 2018.

If you have any questions please contact me by phone at 410-537-3766 or by email at asigillito@mde.state.md.us.

Sincerely,

Amanda Sigillito, Chief
Nontidal Wetlands Division

cc: WMA Compliance Program (Central)
US Army Corps of Engineers (Northern)
McCarthy & Associates, Inc. (Milton McCarthy)





MARYLAND DEPARTMENT OF THE ENVIRONMENT

1800 Washington Boulevard • Baltimore MD 21230

410-537-3000 • 1-800-633-6101

Martin O'Malley
Governor

Anthony G. Brown
Lieutenant Governor

Shari T. Wilson
Secretary

Robert M. Summers, Ph.D.
Deputy Secretary

October 1, 2010

Mr. Milton McCarthy
McCarthy & Associates, Inc.
14458 Old Mill Road, Suite 201
Upper Marlboro, MD 20772

Project: WQC 91-NT-0516/199101204
Chesapeake Terrace Rubble Fill, Anne Arundel County

Dear Mr. McCarthy:

The Nontidal Wetlands and Waterways Division has reviewed your request to extend the expiration date of the Water Quality Certification for the Chesapeake Terrace Rubble Fill to coincide with the Corps' expiration date while the proposed project moves forward through the local and State permitting process.

By way of this letter, the Nontidal Wetlands and Waterways Division is extending the expiration date of WQC 91-NT-0516 through December 31, 2013.

Please contact me at 410-537-3769 or by email at jbroersma@mde.state.md.us if you have any questions.

Sincerely,

Judy Broersma

Judy Broersma
Wetlands Specialist

cc: Elder Ghigiarelli



MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway • Baltimore, Maryland 21224
(410) 631-3000

Parris N. Glendening
Governor

Nontidal Wetlands and Waterways Division
Southern Maryland Regional Field Office
Goldstein State Office Building
200 Duke Street, Suite 2700
Prince Frederick, Maryland 20678
Phone: (410)414-3400 Fax: (410)414-3410

Jane T. Nishida
Secretary

February 25, 1998

Mr. Milt McCarthy
McCarthy & Associates, Inc.
14458 Old Mill Road, Suite 201
Upper Marlboro, MD 20772

Application Tracking No: 199101204
WOC No. 91-WO-0516
Project: Chesapeake Terrace, Anne
Arundel County

Dear Mr. Milt:

The Division has received and reviewed the resubmittal of information dated January 29, 1998 for Chesapeake Terrace Rubble Fill. We have determined that the project is in compliance with the Water Quality Certification conditions in the original WOC issued in 1991.

Therefore, 91-WO-0516 now expires on December 31, 2000 in conjunction with the U.S. Army Corps of Engineers authorization.

Please call me if you have any further questions.

Sincerely,

Judy B. Cole

Judy Broersma-Cole
Project Manager
Nontidal Wetlands and Waterways Division

cc: COE - Steve Harman
Andrew Der

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
WATER MANAGEMENT ADMINISTRATION

WATER QUALITY CERTIFICATION

CERTIFICATION NUMBER: 91-WQ-0516 (Re-Issuance)

CORPS OF ENGINEERS NUMBER: 199101204

ISSUED TO: National Waste Managers
C/o Mr. Warren Halle
2900 Linden Lane, Suite 6
Silver Spring, Maryland 20910



Description of Certified Project: Construction of a rubble landfill known as Chesapeake Terrace. The project will result in permanent loss of approximately 3.66 acres of nontidal wetlands. The project is located on the south side of Patuxent Road, approximately 2.5 miles west of Md. 3, near Woodwardville, Anne Arundel County. The wetlands to be impacted are associated with drainage to Patuxent River.

This water quality certification is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments and the Environment Article, Sections 9-313 through 9-323, inclusive, Annotated Code of Maryland. A copy of this required certification has been sent to the U.S. Army Corps of Engineers. This certification does not relieve the applicant of responsibility for obtaining any other approvals, licenses or permits in accordance with federal, State, or local requirements and does not authorize commencement of the proposed project. The Maryland Department of the Environment has determined from a review of the plans that the project described above will not violate Maryland's water quality standards, provided that the following conditions are satisfied.

The certification holder shall comply with the conditions listed below.

GENERAL CONDITIONS

1. The proposed project shall be constructed in a manner which will not violate Maryland's Water Quality Standards as set forth in COMAR 26.08.02. The applicant is to notify the Water Management Administration (WMA) Compliance Program ten (10) days prior to commencing work. Verbal notification is to be followed by written notice within ten (10) days.
2. The proposed project shall be constructed in accordance with the plan and its revisions.
3. All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into waters of this State.
4. This certification is valid only for use by the certification holder. Certification may be transferred only with prior written approval of WMA. The new owner/operator shall request, in writing, transfer of this water quality certification to his/her name. In the event of transfer, transferee agrees to comply with all terms and conditions of this certification.
5. The certification holder shall allow the Maryland Department of the Environment or its representative to inspect the project area at reasonable times and to inspect records regarding this project.

SPECIAL CONDITIONS

6. The disturbance of the bottom of the water and sediment transport into adjacent State waters shall be minimized. The applicant shall obtain and certify compliance with a grading and sediment control plan which has been approved by the:

- ☒ (a) Anne Arundel Soil Conservation District or;
- ☐ (b) Erosion and Sediment Control Representative, Division of Environmental Services, Bureau of Highways, Department of Public Works of the City of Baltimore or;
- ☐ (c) The Department of the Environment, Water Management Administration or;
- ☐ (d) Montgomery County Department of Environmental Protection.

The approved plan shall be available at the project site during all phases of construction.

7. ☒ Work in waters shall be done only in the period June 16 through February 28 inclusive, of any year.
8. ☒ Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway. The natural vegetation shall be maintained and restored when disturbed or eroded. Stormwater drainage facilities shall be designed, implemented, operated, and maintained in accordance with the applicable approving authority.
9. ☐ Stormwater Management Plan: The certification holder shall provide to the Administration for review and approval a stormwater management plan including cross sections, and other applicable drawings which incorporates effective pollutant removal strategies in uplands to treat the required volume of runoff from impervious surfaces prior to the release of stormwater into state waters, tidal wetlands, or nontidal wetlands. There shall be no discharge of untreated stormwater to State waters and tidal and nontidal wetlands. The plan shall be provided by ☐ and shall be implemented by ☐.
10. ☒ Nontidal Wetland/Waters Mitigation Requirement: The certification holder shall mitigate for nontidal wetlands losses as required by the U.S. Army Corps of Engineers Permit.
11. ☐ The certification holder shall provide a stream restoration plan for review and approval by ☐. The approved plan shall be implemented by ☐.
12. ☐ At least one culvert in every stream crossing shall be depressed at least one foot below existing stream bottom under the low flow condition. A low flow channel shall be provided through any riprap structures. The culvert shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species.
13. ☒ Stormwater Discharges: Stormwater discharges from ponds, stormwater management outfalls, and stormwater facilities shall have a velocity of no greater than four feet per second for the two year storm in order to prevent erosion in the receiving water or wetland.
14. ☐ Future Stormwater Discharges: Future stormwater discharges to authorized pond(s) are prohibited unless the required volume of stormwater runoff from impervious surfaces is managed in uplands for effective pollutant removal.
15. ☐ Stormwater Detention Ponds: Authorized stormwater detention or extended detention ponds shall have a maximum detention time of ☐ for temporarily impounded stormwater volumes in excess of any permanent pool elevations or pond bottom.
16. ☐ Integrated Pest Management: An Integrated Pest Management Plan for any proposed golf course shall be developed in accordance with the University of Maryland, Department of Entomology.
17. ☒ Stormwater Drainage Facilities: Stormwater management and drainage facilities shall be maintained in accordance with the requirements of the applicable approving authority.



MARYLAND DEPARTMENT OF THE ENVIRONMENT
2500 Broening Highway • Baltimore, Maryland 21224
(410) 631-3000

Parris N. Glendening
Governor

Jane T. Nishida
Secretary

October 24, 1995

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|--|---------------------|----------------|
| Post-It™ brand fax transmittal memo 7671 | | # of pages ▶ 1 |
| To <i>JIM IRRE</i> | From <i>Valerie</i> | |
| Co. | Co. | |
| Dept. | Phone # | |
| Fax # <i>1-301-627-7505</i> | Fax # | |

Mr. Andy Chisolm
The Halle Companies
c/o McCarthy & Associates, Inc.
Attn: James Irre
14458 Old Mill Road, Suite 201
Upper Marlboro, Maryland 20772

RE: Chesapeake Terrace
91-WQ-0516

Dear Mr. Irre:

We are in receipt of your request for extension of the expiration date for the above reference water quality certification. The Maryland Department of the Environment will extend the expiration date to September 28, 1997.

If you have any questions, please call me at (410) 631-3609.

Sincerely,

Daniel J. O'Leary, P.E., Chief
Water Quality Certification Division


DJO:vs

18. Use of Stormwater Management Facility: Stormwater management facility may not be used until all stabilization is completed and all temporary sediment control devices have been removed.

19. Maintenance of Stormwater Management Facility: If maintenance of a stormwater management facility is the responsibility of a homeowner's association, maintenance shall be conducted according to County specifications.

Failure to comply with these conditions shall constitute reason for suspension or revocation of the Water Quality Certification and legal proceedings may be instituted against the certification holder in accordance with the Annotated Code of Maryland. In granting this certification, the Department reserves the right to inspect the operations and records regarding this project at anytime.

CERTIFICATION APPROVED


for Amanda Sigillito, Chief
Nontidal Wetlands and Waterways Division

December 31, 2006
Expiration Date

Cc: U.S. Army Corps of Engineers (Janet Vine)
WMA Compliance Program w/file
McCarthy & Associates, Inc. (Milton McCarthy)

WATER QUALITY CERTIFICATION

December 13, 2007

NABOP

1991-1204-3

CERTIFICATION 91-WQ-0516

PUBLIC NOTICE DATE November 22, 1991

RE: Chesapeake Rubble Terrace land Fill

**TO: National Waste Managers, Inc.
2900 Linden Lane, Suite 300
Silver Spring, Maryland 20910
Attention: Mr. Warren E. Halle**

This water quality certification is issued under authority of Section 401 of the Federal Water Pollution Control Act and its Amendments and the Environment Article, Sections 9-313 - 9-323, inclusive, Annotated Code of Maryland. A copy of this required certification has been sent to the Corps of Engineers. This certification does not relieve the applicant of responsibility for obtaining any other approvals, licenses or permits in accordance with federal, State, or local requirements and does not authorize commencement of the proposed project. The Maryland Department of the Environment has determined from a review of the plans that the construction of this facility and its subsequent operation as noted herein will not violate Maryland's water quality standards, provided that the following conditions are satisfied.

The Permittee shall comply with the conditions marked (X) below:

(X) (1) The proposed project shall be constructed in a manner which will not violate Maryland's Water Quality Standards as set forth in COMAR 26.08.02. The applicant is to notify this department ten (10) days prior to commencing work. Verbal notification is to be followed by written notice within ten (10) days.

(X) (2) The proposed project shall be constructed in accordance with the plan and its revisions as approved by the:

(X) (a) Corps of Engineers

(X) (b) Water Management Administration

(X) (3) All fill and construction materials not used in the project shall be removed and disposed of in a manner which will prevent their entry into waters of this State.

(X) (4) The applicant shall notify this Department upon transferring this ownership or responsibility for compliance with these conditions to another person. The new owner/operator shall request transfer of this water quality certification to his/her name.

(X) (5) The certification holder shall allow the Maryland Department of the Environment or its representative to inspect the project area at reasonable times and to inspect records regarding this project.

Page Two Water Quality Certification
Water Quality Certification 91-NT-0516
December 13, 2007

() (6) Construction of any bulkhead shall be completed prior to filling behind the bulkhead. The bulkhead shall be constructed in such a manner so as to prevent the loss of fill material to waters of this State. Only clean fill, which is free of organic, metallic, toxic or deleterious materials shall be used.

(X) (7) The disturbance of the bottom of the water and sediment transport into the adjacent State waters shall be minimized. The applicant shall obtain and certify compliance with a grading and sediment control plan which has been approved by the:

(X) (a) Anne Arundel Soil Conservation District or

() (b) Erosion and Control Representative, Division of Environmental Services, Bureau of Highways, Department of Public Works of the City of Baltimore or

() (c) The Department of the Environment, Water Management Administration or

() (d) Montgomery County Department of Environmental Protection.

The approved plan shall be available at the project site during all phases of construction.

() (8) The spoil disposal area(s), including dikes where applicable, shall be constructed to limit the suspended solids content in the discharge to the waters of this State to four hundred (400) parts per million or less.

() (9) _____ shall be done only in the period _____.

(X) (10) Stormwater runoff from impervious surfaces shall be controlled to prevent the washing of debris into the waterway. The natural vegetation shall be maintained and restored when disturbed or eroded. Stormwater drainage facilities shall be designed, implemented, operated and maintained in accordance with the requirements of the applicable approving authority.

(X) (11) National Waste Managers, Inc. shall provide to the Water Management Administration a stormwater management plan including cross-sections which incorporates effective pollutant removal strategies in uplands to treat a minimum of the first one-half inch of runoff from impervious surfaces prior to release of stormwater into State waters or wetlands. There shall be no discharge of untreated stormwater to State waters or wetlands. The plan shall be provided by March 1, 2008 and shall be implemented prior to any stormwater discharge from the site.

(X) (12) National Waste Managers, Inc. Shall provide to the Water Management Administration a mitigation plan for the construction of 4.64 acres (PFO = 2.7 acres and PEM 1.94 acres) of wetland mitigation for review and approval by Water Management Administration. The plan shall be submitted by August 1, 2008. The plan shall show:

- the source of hydrology for the constructed wetland
- the source and amount of soil to be used in constructing the wetland
- the species, size and density of vegetation to be planted in the constructed wetland and a planting schedule.
- a monitoring/maintenance plan.

(X) (13) National Waste Management Inc. Shall monitor the mitigation site for a period of five years and shall determine whether the wetland construction has been successful. A successful mitigation project shall result in: 435 woody plants/acre and 85% survivability of plants in forested and scrub/shrub wetlands and plants covering 85% of the area for emergent wetlands. If these standards are not met, National Waste Management, Inc. shall determine the reason(s) for failure, the problem(s) shall be corrected, and the area(s) shall be replanted and monitored.

(X) (14) The mitigation site shall be constructed in accordance with the revised plans, dated August 2008.

(X) (15) National Waste Management, Inc., shall provide a copy of the sediment and erosion controls plans for the complete and entire project by June 1, 2008. This plan shall be implemented prior to the initiation of any other grading on site.

() (16) At least one culvert in every stream crossing shall be depressed at least one foot below existing stream bottom under the low flow condition. A low flow channel shall be provided through any riprap structures. The culvert shall be constructed and any riprap placed so as not to obstruct the movement of aquatic species.

(X) (17) Stormwater discharges from ponds, stormwater management outfalls, and stormwater facilities shall have a velocity no greater than four feet per second for the two year storm in order to prevent erosion in the receiving waterway or wetland.

(X) (18) Future stormwater discharges to certified pond(s) are prohibited unless the first one half inch of stormwater runoff from impervious surfaces is managed in uplands for effective pollutant removal.

() (19) Authorized stormwater detention ponds shall have a maximum detention time of _____ hours.

() (20) _____ shall restore and revegetate all temporarily disturbed waters and wetlands to original contours upon completion of construction.

Failure to comply with these conditions shall constitute reason for suspension or revocation of the Water Quality Certification and legal proceedings may be instituted against the applicant in accordance with the Annotated Code of Maryland. In granting this certification, the Department reserves the right to inspect the operations and records regarding this project at anytime.

CERTIFICATION APPROVED

Water Management Administration

December 31, 2010
Expiration Date

cc: MDE Waste Management Administration (Ed Dexter)
MDE Compliance Program (Central Region)
US Army Corps of Engineers (Rich Kibby)
McCarthy & Associates, Inc. (Milton McCarthy)