



State of Ohio Environmental Protection Agency

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MAR 03 2005

STREET ADDRESS:

Lazarus Government Center  
122 S. Front Street  
Columbus, Ohio 43215

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Columbus, OH 43216-1049

OHIO EPA/CDO  
CERTIFIED MAIL

March 1, 2005

Mr. Timothy Hall  
M/I Homes of Central Ohio, LLC  
3 Easton Oval  
Columbus, Ohio 43219

**RE: Issuance of Covenant Not To Sue for the Proposed Greenspace Property at Woods of Powell (04NFA195)**

Dear Mr. Hall:

I am happy to inform you that on March 1, 2005, the Director of the Ohio Environmental Protection Agency ("Director") issued a Covenant Not To Sue ("Covenant") to M/I Homes of Central Ohio, LLC for the Proposed Greenspace Property at Woods of Powell located north of Rutherford Road, Powell, Delaware County, Ohio. The Covenant was issued as Final Findings and Orders pursuant to Ohio Revised Code ("ORC") Chapter 3746 and Ohio Administrative Code ("OAC") Chapter 3745-300.

Upon the issuance of these Findings and Orders, and subject to the conditions set forth herein, Ohio EPA hereby covenants not to sue and releases M/I Homes of Central Ohio, LLC and their agents, employees, shareholders, officers, directors, successors and assigns, and successors and assigns of the Property, from all civil liability to the State of Ohio (the "State") to perform additional investigational and remedial activities at the Property for the releases of hazardous substances or petroleum identified and addressed in the Phase I Property Assessment or Phase II Property Assessment conducted in compliance with ORC Chapter 3746 and OAC 3745-300.

You will find the certified copy of the Covenant enclosed. When filing the Covenant and its exhibits at the Delaware County Recorder's Office, please use the enclosed Affidavit from Ohio EPA to guide the recording of the documents in the County's

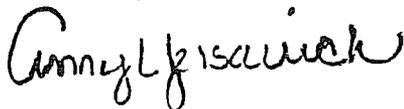
Bob Taft, Governor  
Jennette Bradley, Lieutenant Governor  
Christopher Jones, Director

deed records.

The issuance of the Covenant is a final action of the Director and will be public noticed in accordance with OAC 3745-47-07. The action may be appealed to the Environmental Review Appeals Commission ("Commission"). The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice or issuance of the action. (See ORC 3745.04 and 3745.07.) A copy of the appeal must be served on the Director within three (3) days after the appeal is filed with the Commission. The appeal may be filed with the Commission at 309 South Fourth Street, Room 222, Columbus, Ohio 43215.

Many persons within the agency, M/I Homes of Central Ohio, LLC, and Geotechnical Consultants, Inc., among others, worked hard to remove the environmental barriers associated with redeveloping this property. Congratulations on the issuance of this Covenant. If you have any questions or concerns, please feel free to contact me at (614) 644-2285 or [amy.yersavich@epa.state.oh.us](mailto:amy.yersavich@epa.state.oh.us).

Sincerely,



Amy Yersavich, Manager  
Division of Emergency and Remedial Response  
Voluntary Action Program

Enclosure

cc: Bruce Savage, Certified Professional, Geotechnical Consultants, Inc.  
Michael Ebner, DERR-CDO  
Sue Kroeger, Legal Office  
CO DERR-VAP Files

TO BE RECORDED IN DEED RECORDS,  
PURSUANT TO R.C. 317.08(A)

AFFIDAVIT

STATE OF OHIO )  
 )  
COUNTY OF FRANKLIN ) ss:

Before me, the subscriber, a Notary Public in and for the State of Ohio, personally appeared Tonya R. Jackson, who, being duly sworn according to law, deposes and says that: (i) she is employed as a records management officer in the Legal Office of the Ohio Environmental Protection Agency ("Ohio EPA") and, as such, is authorized to sign this Affidavit on behalf of Ohio EPA; and (ii) the attached document is a true and correct copy of the Covenant Not to Sue/Director's Final Findings and Orders issued by the Director and entered in the Ohio EPA Director's Journal on March 1, 2005 regarding the property known as Proposed Greenspace Property at Woods of Powell, located north of Rutherford Road, in Powell, Delaware County, Ohio, and further described in Exhibit 1 of the attached Covenant Not to Sue.

Tonya R. Jackson  
Tonya R. Jackson  
Records Management Officer  
Ohio EPA Legal Office

Sworn to and subscribed before me, a Notary Public in and for the State of Ohio,  
this 1<sup>st</sup> day of March, 2005.

Donald L. Vantepool  
Notary Public  
State of Ohio

Permanent Commission  
No expiration, R.C. 147.03

This instrument prepared by:  
Sue Kroeger, Attorney  
Ohio EPA Legal Office  
P.O. Box 1049  
Columbus, Ohio 43216-1049

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OHIO E.P.A.

OHIO EPA/CDO

MAR -1 2005

REVISED DIRECTOR'S JOURNAL

BEFORE THE  
OHIO ENVIRONMENTAL PROTECTION AGENCY

In the matter of:

M/I Homes of Central Ohio, LLC  
3 Easton Oval  
Columbus, OH 43219

Covenant Not to Sue

Director's Final Findings  
and Orders

Regarding property known as:

Proposed Greenspace Property at  
Woods of Powell  
North of Rutherford Road  
Powell, Ohio 43065

Pursuant to Ohio Revised Code ("ORC") Chapter 3746 and Ohio Administrative Code ("OAC") Chapter 3745-300, the Director of the Ohio Environmental Protection Agency (the "Director") hereby makes the following Findings and issues the following Orders ("Findings and Orders").

FINDINGS

1. A No Further Action Letter, No. 04NFA195 (the "NFA Letter"), was submitted on December 17, 2004 to the Director under the Voluntary Action Program on behalf of M/I Homes of Central Ohio, LLC (the "Volunteer"), by Bruce A. Savage, CPG, a certified professional, No. CP265, as defined in ORC 3746.01(E) and OAC 3745-300-01(A)(8) (the "Certified Professional").
2. The NFA Letter describes the investigational activities undertaken at the approximately 38.38 acre property, currently known as the Proposed Greenspace Property at Woods of Powell (previously known as the Wallingford Property / Former CSX Railroad Wye Property), located north of Rutherford Road, Powell, Delaware County, Ohio (the "Property"). An exact legal description of the Property is attached hereto as Exhibit 1. A Property location map is attached hereto as Exhibit 2. Based on the information in the NFA Letter, the current owner of the

Joseph Jackson 3-1-05

Property is M/I Homes of Central Ohio, LLC.

3. The Certified Professional prepared pursuant to OAC 3745-300-13(I) an Executive Summary of the NFA Letter, which is attached hereto as Exhibit 3.
4. Based upon the information contained in the NFA Letter, the Volunteer undertook or completed the following investigational activities regarding the Property:
  - a. a Phase I Property Assessment, in accordance with OAC 3745-300-06, to determine whether there is any reason to believe that a release of hazardous substances or petroleum has or may have occurred on, underlying or is emanating from the Property;
  - b. a Phase II Property Assessment, in accordance with OAC 3745-300-07, including but not limited to investigations of identified areas and affected media, to assess environmental conditions related to releases of hazardous substances and petroleum;
  - c. identification, in the Phase I Property Assessment or Phase II Property Assessment, of one or more releases of hazardous substances or petroleum with chemicals of concern that include but are not limited to polycyclic nucleic acids (PNAs), total petroleum hydrocarbons (TPH), and metals for which the Volunteer determined the applicable standards; and
  - d. a demonstration that the Property complies with applicable standards for the identified chemicals of concern in the identified areas and affected media at the Property through a comparison to background levels, in accordance with OAC 3745-300-07, the use of generic numerical standards, in accordance with OAC 3745-300-08, and the use of a Property-specific risk assessment, in accordance with OAC 3745-300-09.
5. The Certified Professional has verified by affidavit that the investigational activities undertaken at the Property comply with the applicable standards established in ORC Chapter 3746 and OAC Chapter 3745-300, that the Property is eligible to receive a covenant not to sue under the Voluntary Action Program, and that the voluntary action was conducted in compliance with all applicable federal, state and local laws and regulations.
6. At the time that analyses were performed, Test America Laboratories and Kemron Environmental Services were certified laboratories, No.(s) CL0018 and CL0012, respectively, as defined in ORC 3746.01(D) and OAC 3745-300-01(A)(7), whose services were used in support of the NFA Letter (the "Certified Laboratories").

7. The Certified Laboratories have declared in affidavits contained in the NFA Letter that they performed analyses for which they were certified and qualified, pursuant to ORC Chapter 3746 and OAC 3745-300-04, that formed the basis for the issuance of the NFA Letter by the Certified Professional.

#### Applicable Standards

8. Based on the information contained in the NFA Letter and all conditions set forth in these Findings and Orders, the Property meets the applicable standards contained in ORC Chapter 3746 and OAC Chapter 3745-300 for unrestricted (residential) land use and unrestricted potable ground water use. The applicable standards, the methods of achieving compliance with the standards, and the associated points of compliance for the standards for each complete exposure pathway, are identified in the NFA Letter Form, Section D, Tables 10-1 through 10-3. The applicable standards include but are not limited to:
  - a. residential land use standards for direct contact to chemicals of concern related to hazardous substances in soil. The standards consist of generic numerical standards from Table II of OAC 3745-300-08 and standards based on background concentrations in soil determined in accordance with OAC 3745-300-07(H), and apply at a point of compliance from the ground surface to a depth of 10 feet;
  - b. residential land use standards for direct contact to chemicals of concern related to petroleum in soil. The standards consist of generic numerical standards in accordance with OAC 3745-300-08(B)(3)(a)(i) at a point of compliance from the ground surface to a depth of 10 feet;
  - c. unrestricted potable use ground water standards for the chemicals of concern in ground water. The standards consist of generic numerical standards from Tables VI and VII of OAC 3745-300-08, in the sand and gravel ground water zone ranging from approximately 10 to 22 feet deep, at all points underlying the Property;
  - d. unrestricted potable use standards for chemicals of concern in ground water in the sand and gravel ground water zone, including an evaluation in accordance with OAC 3745-300-07(D)(4)(a) to satisfy the requirements in OAC 3745-300-10(E) for ensuring the protection of the ground water zone. The standards consist of generic numerical standards from Tables VI and VII of OAC 3745-300-08 at all points underlying the Property. The sand and gravel ground water zone will maintain continued compliance with unrestricted potable use standards based on a weight of evidence demonstration in accordance with OAC 3745-300-07(D)(4)(a)(ii).

- e. soil standards based on vapor intrusion to indoor air exposure to the chemicals of concern in soil, derived using property-specific risk assessment procedures in accordance with OAC 3745-300-09 for residential human receptor exposures not related to direct contact with soils, at a point of compliance from the ground surface to a depth of 10 feet;
  - f. surface water standards, determined in accordance with OAC 3745-300-08(E), for protection of aquatic life in the wetlands on the Property;
  - h. sediment standards for human receptor exposures to the chemicals of concern in sediment, derived using Property-specific risk assessment procedures in accordance with OAC 3745-300-09(D) and (F)(2)(a), for the wetlands on the Property; and
  - i. sediment standards for important ecological resources that are exposed to the chemicals of concern in sediment, determined in accordance with OAC 3745-300-09(F)(2)(b), (F)(2)(c) or (F)(3), for the wetlands on the Property.
9. Based on the NFA Letter and subject to all conditions set forth in these Findings and Orders, a covenant not to sue may be issued for the Property in accordance with ORC 3746.12(A), and the voluntary action for the Property is protective of public health and safety and the environment.

## ORDERS

### Covenant

1. Upon the issuance of these Findings and Orders, and subject to the conditions set forth herein, Ohio EPA hereby covenants not to sue and releases M/I Homes of Central Ohio, LLC and their agents, employees, shareholders, officers, directors, successors and assigns, and successors and assigns of the Property, from all civil liability to the State of Ohio (the "State") to perform additional investigational and remedial activities at the Property for the releases of hazardous substances or petroleum identified and addressed in the Phase I Property Assessment or Phase II Property Assessment conducted in compliance with ORC Chapter 3746 and OAC 3745-300.

## Conditions and Limitations

### Requirement to Record and Submit Verification of the Recording

2. Within sixty (60) days after the issuance of these Findings and Orders, the Volunteer shall:
  - a. record a true copy of these Findings and Orders, including Exhibits 1 (Legal Description), 2 (Property Location Map) and 3 (Executive Summary), in the Delaware County Recorder's Office, in the same manner as a deed to the Property pursuant to ORC 3746.14(A); and
  - b. submit to Ohio EPA a true copy of the Findings and Orders that bears the recorder's office filing date-stamp or other reliable information that verifies the recording of the documents in accordance with this condition. The submission shall identify "Recorded - Covenant Not to Sue for the Proposed Greenspace Property at Woods of Powell, NFA Letter # 04NFA195," and directed to Ohio EPA, 122 S. Front Street, P.O. Box 1049, Columbus, OH 43216-1049, Attention: DERR Records Management Officer and Ohio EPA Central District Office, P.O. Box 1049, Columbus, OH 43216-1049, Attention DERR Site Coordinator for the Proposed Greenspace Property at Woods of Powell.

### Scope of Covenant

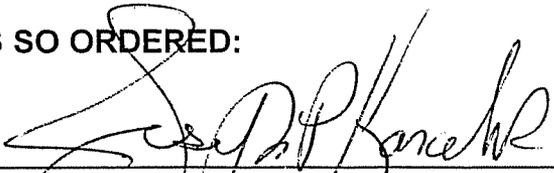
3. The Covenant provided in Order No. 1 shall only apply to the approximately 38.38-acre Property described in the NFA Letter, these Findings and Orders, and the Exhibits attached hereto, upon which the investigational activities specified in the NFA Letter were conducted.
4. Pursuant to ORC 3746.12(B), the Covenant shall remain in effect for as long as the Property continues to comply with the applicable standards upon which the Covenant is based, as referenced in these Findings and Orders.
5. Pursuant to ORC 3746.21, authorized representatives of the Director shall be granted access to the Property for inspection or investigation purposes.
6. The Covenant shall not apply to releases of hazardous substances or petroleum:
  - a. that occur after the issuance of the NFA Letter to the Volunteer;
  - b. on or emanating from the Property, that are not identified and addressed in the Phase I Property Assessment or in the Phase II Property Assessment of

- the NFA Letter; or
- c. for which investigational activities were conducted that were not in compliance with ORC Chapter 3746 or OAC Chapter 3745-300.
7. The Covenant shall not apply:
- a. to claims for natural resource damages the State may have pursuant to Sections 107 or 113 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), 42 U.S.C. 9607 and 9613, as amended;
- b. to claims the State may have pursuant to Section 107 of CERCLA, 42 U.S.C. 9607, as amended, for costs other than those for damages to natural resources, provided that the State incurs those other costs as a result of an action by the United States Environmental Protection Agency; or
- c. as otherwise specifically provided in ORC Chapter 3746.
8. Nothing in ORC Chapter 3746 limits the authority of the Director to act under ORC 3734.13 and 3734.20 to 3734.23, or to request that a civil action be brought pursuant to the ORC or common law of the State to recover the costs incurred by Ohio EPA for investigating or remediating a release or threatened release of hazardous substances or petroleum at or from the Property, when the Director determines that the release or threatened release poses an imminent and substantial threat to public health or safety or the environment.
9. Nothing in the Covenant shall be construed to limit or waive the Director's authority to revoke the Covenant in response to any of the circumstances for revocation of a covenant, as provided in ORC Chapter 3746 and OAC Chapter 3745-300.

#### Transfer

10. Pursuant to ORC 3746.14 and OAC 3745-300-13(K), the NFA Letter and the Covenant Not to Sue/Findings and Orders may be transferred to any person by assignment or in conjunction with the acquisition of title to the Property.

**IT IS SO ORDERED:**

  
\_\_\_\_\_  
Joseph P. Koncelik, Director  
Ohio Environmental Protection Agency

2/28/05  
Date

**Exhibit 1**  
**Legal Description**

**BOUNDARY DESCRIPTION**  
**38.38 ACRES**

Situated in the State of Ohio, County of Delaware, Township of Liberty, Farm Lots 18, 19 and 20, Section 1 and Farm Lot 1, Section 2, Township 3, Range 19, United States Military Lands and described as follows:

Beginning at the southeasterly corner of said Farm Lot 1, in the centerline of Rutherford Road;

thence North  $86^{\circ} 11' 44''$  West, with said centerline, a distance of 154.68 feet to the easterly railroad right-of-way line for CSX Transportation, Inc.;

thence with said easterly railroad right-of-way line, the following courses:

North  $10^{\circ} 53' 41''$  West, a distance of 748.16 feet;

North  $08^{\circ} 35' 08''$  West, a distance of 1541.07 feet;

North  $04^{\circ} 13' 20''$  West, a distance of 782.01 feet;

North  $35^{\circ} 19' 13''$  East, a distance of 36.89 feet;

North  $23^{\circ} 58' 01''$  East, a distance of 95.92 feet;

North  $02^{\circ} 03' 16''$  East, a distance of 195.96 feet to the northerly line of said Farm Lot 1;

thence South  $86^{\circ} 24' 15''$  East, with said northerly Farm Lot line, a distance of 708.91 feet to the northeasterly corner thereof;

thence with the easterly line of said Farm Lot 1, the following courses:

South  $04^{\circ} 15' 04''$  West, a distance of 973.92 feet;

South  $02^{\circ} 31' 40''$  West, a distance of 668.33 feet;

thence across said Farm Lot 18, the following courses:

South  $85^{\circ} 48' 22''$  East, a distance of 459.76 feet;

South  $02^{\circ} 45' 26''$  West, a distance of 189.89 feet to the southerly line of said Farm Lot 18;

thence North  $86^{\circ} 33' 55''$  West, with said southerly Farm Lot line, a distance of 306.78 feet;

thence across said Farm Lots 1, 18, 19 and 20, the following courses:

38.38 ACRES

-2-

South 03° 26' 05" West, a distance of 140.00 feet;

with a curve to the left, having a central angle of 51° 37' 56" and a radius of 155.00 feet, a chord bearing and chord distance of South 67° 37' 07" West, 135.00 feet;

North 48° 11' 51" West, a distance of 145.00 feet;

South 41° 48' 09" West, a distance of 91.88 feet;

South 07° 44' 51" West, a distance of 378.71 feet;

South 01° 00' 07" East, a distance of 489.32 feet;

North 69° 50' 18" East, a distance of 162.59 feet;

with a curve to the left, having a central angle of 24° 12' 25" East, and a radius of 155.00 feet, a chord bearing and chord distance of South 32° 15' 55" East, 65.00 feet;

South 03° 18' 39" West, a distance of 215.39 feet;

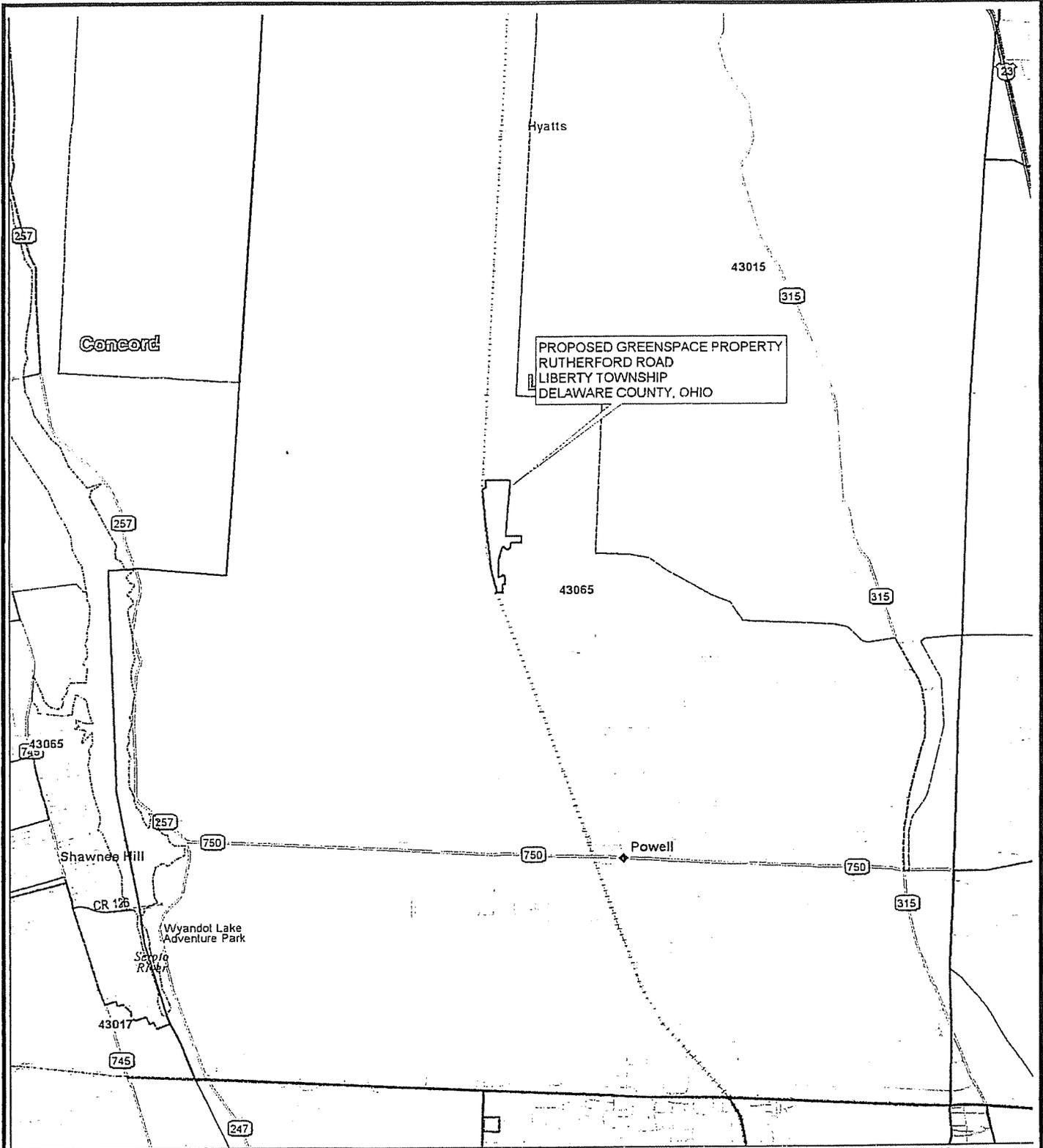
North 86° 41' 21" West, a distance of 50.00 feet to the easterly line of said Farm Lot 1;

thence South 03° 57' 53" West, with said easterly Farm Lot line, a distance of 235.71 feet to the Point of Beginning and containing 38.38 acres, more or less.

This description was prepared from existing record and is not to be used for transfer.

EVANS, MECHWART, HAMBLETON & TILTON, INC.

**Exhibit 2**  
**Property Location Map**



© 2003 DeLorme. Street Atlas USA® 2004.  
 www.delorme.com

Scale 1 : 50,000  
 1" = 4,166.7 ft Data Zoom 12-0



North

**PROPOSED GREENSPACE PROPERTY  
 NORTH OF RUTHERFORD ROAD  
 LIBERTY TOWNSHIP, DELAWARE COUNTY, OHIO**



**Exhibit 3**  
**Executive Summary**

## **EXECUTIVE SUMMARY**

### **Executive Summary of Ohio Voluntary Action Program No Further Action Letter**

#### **Property:**

**Proposed Greenspace Property at Woods of Powell  
38.38-Acres North of Rutherford Road  
Powell, OH 43065**

#### **Volunteer:**

**M/I Homes of Central Ohio, LLC  
3 Easton Oval  
Columbus, OH 43219**

#### **Certified Professional:**

**Bruce A. Savage, CPG  
VAP Certified Professional No. 265  
Geotechnical Consultants, Inc.  
720 Greencrest Dr.  
Westerville, OH 43081  
Telephone No. 614-895-1400**

## EXECUTIVE SUMMARY

### 1.0 Introduction

Geotechnical Consultants, Inc. (GCI) was commissioned by M/I Homes of Central Ohio, LLC (the "Volunteer") to perform Phase I and Phase II Property Assessments (PAs) consistent with Ohio's Voluntary Action Program (VAP) rules established under Ohio Administrative Code (OAC) 3745-300-01 through 15. The purpose of the executive summary is to summarize the findings of the voluntary action conducted at the Property, to meet the requirements of OAC 3745-300-13(H) to use the format provided by the Ohio Environmental Protection Agency (EPA) for submitting the NFA letter, and OAC 3745-300-13(J), which is for recording a summary of the NFA letter in the county recorder's office.

M/I Homes of Central Ohio, LLC engaged Bruce A. Savage, CPG, VAP Certified Professional No. 265 to prepare and submit the NFA letter.

The Property of the voluntary action and for which the NFA letter applies is that 38.38-acre Property known as Proposed Greenspace Property at Woods of Powell, described in the attached Legal Description of the Property. The Property is vacant, mostly wooded land containing no buildings. Several wetlands have been delineated on the Property, and have been verified by the U.S. Army Corps of Engineers in their letter dated April 24, 2003 included in Appendix K of the Phase I PA report. An approximately 75-foot long section of a small stream crosses the northeastern corner of the Property. The Property is currently zoned for residential use.

The Property was acquired as vacant land from private individuals by Hocking Valley Railway Company between the years 1926 and 1941. The Property parcels were subsequently titled to Chesapeake and Ohio Railway (C&O) then by merger to CSX Transportation. Historical track maps and aerial photograph evidence included as Appendix G of the Phase I PA report indicated a wye track was developed on the central part of the Property between 1927 and 1940. CSX personnel indicated the former railroad Property was used primarily to reverse the direction of locomotives on the wye track. The railroad Property had two identified groundwater supply wells (drilled in 1948) and a small water treatment plant in the northwestern portion, where well water was treated to make it more suitable for use in the boilers of the steam locomotives. The historical track map indicates the dates of water treatment plant operations were from approximately the mid to late 1940s to the late 1950s. The plant, wells and tracks were abandoned between the late 1950s and the early to mid 1960s. The former treatment plant building and the wells and their well houses were closed and removed from the Property in 1991. At that time the wells were grouted for proper sealing.

The former railroad portion of the Property was transferred from CSX to the immediate past owner, Liberty 8112 Land Co. / George Wallingford, in 1994. From the mid-1960s until the present, the Property has not been used, the only exception being CSX's placement of railway track and crossing repair residual materials (railroad ties, asphalt and aggregate) along the access road that runs parallel to the western boundary of the Property. These materials are west of the subject Property boundary.

The Property was defined as 38.38-acres as shown in Figure 2 of the Phase II PA report and described in the legal description in Appendix A provided in the Phase I PA report.

The activities conducted in support of the NFA letter included Phase I and II Property Assessments and a Property Specific Risk Assessment (PSRA). These activities included collecting and chemically analyzing soil and groundwater below the Property, collecting and chemically analyzing surface water and sediment in wetlands and the former lime sludge impoundment on the Property, and preparing reports consistent with VAP rules in OAC 3745-300-06, 07 and 09. Chemicals of concern (COC) investigated on the Property were: polynuclear aromatic hydrocarbons (PNA), polychlorinated biphenyls (PCB), total petroleum hydrocarbons (TPH) and metals (VAP 16.)

The date of issuance of the NFA letter is November 3, 2004.

A complete copy of the NFA letter can be obtained from the Volunteer, M/I Homes of Central Ohio, LLC (3 Easton Oval, Columbus, OH 43219, telephone 614-418-8000); and through the Certified Professional Bruce A. Savage, CPG, CP265, (c/o Geotechnical Consultants, Inc., 720 Greencrest Dr., Westerville, OH 43081, telephone 614-895-1400).

The legal description of the Property is provided as an attachment to this NFA letter executive summary.

## **2.0 Summary of the No Further Action Letter**

The concise summary of the basis for issuance of the NFA letter, including intended land use follows.

Documents used to support the NFA letter and NFA Addendum are:

Phase I Property Assessment report dated September 30, 2004; Phase II Property Assessment report dated November 3, 2004; and a Property Specific Risk Assessment report dated November 2, 2004, 2004 attached as Appendix M to the Phase II PA report.

### **2.1 Phase I Property Assessment**

The purpose of the Phase I PA was to identify the history of the Property use, the chemicals of concern (COC) associated with the Property use, and the Identified Areas on the Property where impacts to the Property by the COC were likely to be present.

The Phase I PA activities were performed between April 13, 2003 and August 30, 2004. The methods of the Phase I PA inquiry included those methods required by OAC 3745-300-06.

The subject Property was formerly a portion of a property owned by the Hocking Valley Railway Company. The central portion contained a "wye" (a railroad turnaround), and the northern portion contained a boiler maintenance area. The southeastern portion of the Property includes land formerly used for agricultural purposes.

The subject Property comprises portions of two parcels identified as Delaware County Auditor's parcel no. 31924001068001 (comprising 40.636-acres) and parcel no. 31913302006000 (comprising 42.231-acres). These parcels were transferred to the current owner, M/I Homes of Central Ohio, LLC, September 17, 2003. The Property previously comprised all of three parcels and parts of two other parcels, as follows:

- All of the 2.034-acre parcel No. 31913302004000 previously owned by Liberty 8112 Land Company;
- All of the 1.21-acre parcel No. 31924001068000 previously owned (acquired 12/10/1993) by Liberty 8112 Land Company;
- Part of the 37.398-acre parcel No. 31924001068001 previously owned by Liberty 8112 Land Company;
- Part of the 20.86-acre parcel No. 31913302006000 previously owned by George W. Wallingford; and
- Part of the 21.25-acre parcel No. 31913302008000 previously owned by George W. Wallingford.

Delaware County deed records indicate the first three parcels listed above were transferred from private owners to Hocking Valley Railway Company between the years 1926 and 1941. These three parcels were subsequently titled to Chesapeake and Ohio Railway (C&O) then by merger to CSX Transportation. The latter two parcels previously owned by George Wallingford were privately owned from at least 1920 and were undeveloped property during this time period.

According to CSX personnel (cited in the previous Phase I Environmental Site Assessment (ESA) report dated June 7, 1993 by Environmental Consulting & Engineering Company, Inc. (ECEC)), the former railroad use of the Property was primarily to reverse the direction of locomotives on the wye tracks. Trains leaving the Columbus area and traveling north had to overcome the grade of the Powell Moraine geologic feature. For the trains to reach cruising speed, an additional locomotive was used to power the train over the grade. After cruising speed was reached, the additional helper locomotive was no longer needed. The helper locomotive was then disconnected from the train, turned around at the Powell Wye, and returned to Columbus.

The railroad use of the Property also included a small water treatment building in the northwestern portion of the Property, where well water was treated to make it more suitable for use in the boilers of the steam locomotives. The building and well houses were removed from the Property in 1991 (Kemron report, 1991). Although not their intended purpose, the boilers were effective water distillers. Because of this, hard water precipitate (lime) was deposited in the piping of the boiler systems or settled to the bottom of the boiler. Chemical additives were often used to soften hard water from the wells or to keep minerals in solution. This also resulted in precipitation of hard water solids. The exact start date of the treatment plant operations is not known; however, it is assumed that operations began soon after C&O acquired the parcels of land north and south of the wye in 1941. CSX personnel also said that well water extracted at

the Property was treated for pH adjustment and hardness, and no other water treatment was performed. Locomotive maintenance was not known to be performed on the Property. When boilers contained too much sediment precipitated from water, the engineer would remove the sediment by allowing the boiler to “blow down.” The blow down refers to the procedure used to remove the sediment using pressure in the boiler to force the sediment out the bottom of the boiler.

The *Right of Way and Track Map, The Hocking Valley RY. Co.* (1927) shows the railroad Property and the adjoining property owners. Copies of the map are included in Appendix G of this report. Notations on this map indicated the following historical activities on the Property after 1927:

- Erect Well House No. 1 5-27-1948;
- Erect Coal House 5-27-1948;
- Erect Toilet 6-15-1949;
- Power & Control Line – Water Station 7-17-1950;
- Blow Off Pit 7-17-1950;
- Retire Tool & Supply House 8-18-1952;
- Retire Water Station Facilities 3-38-1958;
- Coal House moved to Parsons 6-13-1960;
- Retire Well House #1 in place 8-27-1963;
- Retire Water Treating Plant in place 8-27-1963;
- Retire Well House #2 in place 8-27-1963;
- Retired Track #2928 – 780’ 6-27-1966; and
- Retired Track #2775, #2775 & #3298 10-8-1984.

The track map shows locations of the coal house, toilet and possibly one of the well houses. The subject Property has generally been unused since about 1963 or earlier. In 1991, wells on the Property were properly closed by grouting and the well houses were removed. A copy of the April 19, 1991 well closure and well house removal report prepared by Kemron Environmental is included in Appendix I of the Phase I PA report. The only other activities occurring on or adjacent to the Property appeared to be the placement of railway track and crossing repair residual materials (ties, asphalt and aggregate) along the access road that runs parallel to the western boundary of the Property. These materials are west of the subject Property boundary.

Three Identified Areas (IAs) was identified at the Property:

- IA-1: Former Railroad Wye Track area including adjacent wetlands;
- IA-2: Former Water Treatment / Boiler Blow Down Area; and
- IA-3: Off-Property waste piles along the western Property boundary.

Based on the findings of the Phase I PA, a Phase II PA was required before a No Further Action letter for this Property could be issued by a Certified Professional to the VAP.

Based on information provided in the VAP Phase I Property Assessment, the subject Property was determined to be eligible for the VAP consistent with OAC 3745-300-02. The VAP Phase I Property Assessment includes the results of database searches for state, federal and local regulatory agencies. All properties are eligible for the VAP except as provided for in OAC 3745-300-02(C); if the exceptions do not apply to the Property, the Property is eligible for the VAP. Section 10.0 of the Phase I PA report contains the eligibility determination. Based upon the information presented in the Phase I Property Assessment, the subject Property is eligible for the VAP.

## **2.2 Phase II Property Assessment**

The purpose of the Phase II PA was to determine the concentrations and extent of COCs in soil and groundwater beneath the Property, and in sediments and surface water on the Property. The Phase II PA was conducted between April 13, 2003 and October 27, 2004.

The activities conducted during the Phase II PA included collecting:

- 15 soil samples in Identified Area IA-1 between January 15 and May 25, 2004;
- 6 soil samples in Identified Area IA-2 on July 15, 2003;
- 9 soil samples in Identified Area IA-3 between April 30, 2003 and May 25, 2004;
- 4 groundwater samples on May 25, 2004;
- 10 surface water samples from wetlands in Identified Area IA-1 between June 26, 2003 and August 30, 2004;
- 11 sediment samples from wetlands in Identified Area IA-1 between June 26, 2003 and July 26, 2004;
- 4 sediment (sludge) samples from the former lime sludge impoundment in Identified Area IA-2 on May 25, 2004;
- 4 surface water samples from the former lime sludge impoundment in Identified Area IA-2 on May 25, 2004;
- 16 background soil samples beyond Identified Areas on the Property on May 25, 2004; and
- 8 background sediment samples from wetland area "E" located beyond Identified Areas in the northeastern part of the Property on July 26, 2004.

Laboratory chemical analysis was performed by Test America, Inc. of Dayton, Ohio and Kemron Environmental Services of Marietta, Ohio, both of which are VAP Certified Laboratories.

A Property Specific Risk Assessment (PSRA) was performed in response to:

- 1) According to OAC 3745-300-09(E)(1), "An ecological, property-specific risk assessment must be conducted to demonstrate that the remedy selected or COC(s) remaining on the property is protective of important ecological resources. If

complete exposure pathways. . .to important ecological resources exist, an ecological PSRA must be conducted to demonstrate compliance with the risk goals contained in paragraph (C)(4) of this rule.”; and

- 2) OAC 3745-300-09(F)(2)(a) states that: “For each complete exposure pathway to human receptors identified in accordance with paragraph (D)(2) of rule 3745-300-07, the volunteer must: (i) Sample the sediments in the identified areas. . . and (ii) Conduct a human health PSRA for the exposure pathways following the methodology outline in paragraph (D) of this rule.”

Therefore, the PSRA addressed important ecological resources and sediments in wetlands associated with Identified Area IA-1.

### **2.2.1 Soil Investigation and Findings**

Chemicals of concern for the Property were polynuclear aromatic hydrocarbons (PNA), total petroleum hydrocarbons (TPH), polychlorinated biphenyls (PCB) and metals.

Background metals concentrations in soil were investigated by direct push soil borings and hand sampling surface soils at the Property. Direct push soil borings for background soils were B-1 and P-10 installed to depths of 10 ft. bgs on May 25, 2004. Background soil samples B-2, B-3, B-4, B-5, B-6 and B-7 were collected at 0-1 ft. bgs on May 25, 2004. Background concentrations of metals in soils for the Property were derived in accordance with OAC 3745-300-07(H)(1)(d).

Soils on the Property were investigated by drilled soil borings, direct push soil borings and hand sampling at the surface at the Property. Drilled borings were MW-1, MW-2 and MW-3, which were installed and completed as groundwater monitoring wells on January 15, 2004. Direct push borings were P-4, P-7, P-8 and P-9 installed July 15, 2003; and P-1, P-2, P-3 and P-5 installed on May 25, 2004. Hand sampling locations S-1, S-2, S-3, S-4, S-5 and S-6 were collected from depths of 0-2 ft. bgs on April 30, 2003. Hand sample locations S-1, S-2 and S-3 were collected of the slag materials on the surface of the former railroad wye track. However, the slag was determined to not be subject to an applicable standard in the VAP, because the slag is not considered part of the soil media for VAP purposes (personal communication with the CP and VAP personnel, July 28, 2004.) No bedrock was encountered in the soil borings installed at the Property, which extended to maximum depths of 40 ft. bgs in borings P-7 and P-9.

No PCBs were detected in soils from the Property. Arsenic concentrations in soil on the Property were below the Property background arsenic concentration, which was determined to be 25.7 mg/kg using the procedure outline at OAC 3745-300-07(H)(1)(d). The remaining metals concentrations in soils from the Property met the VAP Generic Direct Contact Soil Standards (GDCSS) at and below the 0-10 ft. residential point of compliance (POC.)

The concentrations of remaining COCs in soil were below the VAP GDCSS for residential land use, as shown below:

COC	GDCSS	Max. Concentration on Property
Benzo(a)anthracene	11 mg/kg	0.599 mg/kg at surface soil S-5
Benzo(a)pyrene	1.1 mg/kg	0.473 mg/kg at surface soil S-5
Benzo(b)fluoranthene	11 mg/kg	0.683 mg/kg at surface soil S-5
Benzo(g,h,i)Perylene	1,700 mg/kg	0.173 mg/kg at P-1 boring at 4-6 ft.
Benzo(k)fluoranthene	110 mg/kg	0.342 mg/kg at surface soil S-5
Chrysene	1,100 mg/kg	0.597 mg/kg at P-1 boring at 4-6 ft.
Fluoranthene	2,300 mg/kg	1.11 mg/kg at P-1 boring at 4-6 ft.
Indeno(1,2,3-cd)pyrene	11 mg/kg	0.221 mg/kg at surface soil S-5
Phenanthrene	23,000mg/kg	0.503 mg/kg at surface soil S-5
Pyrene	1,700 mg/kg	0.914 mg/kg at surface soil S-5
GRO (C <sub>6</sub> - C <sub>10</sub> )	1,000-8,000 mg/kg	68.5 mg/kg at MW-2 at 8-10 ft.
DRO (C <sub>10</sub> - C <sub>20</sub> )	2,000-20,000 mg/kg	452 mg/kg at MW-2 at 8-10 ft.
DRO (C <sub>20</sub> - C <sub>34</sub> )	5,000-40,000 mg/kg	141 mg/kg at surface soil S-5

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These COCs in soil on the Property were below their respective residential land use GDCSS. As a result, all COCs in soil on the Property met the VAP construction/excavation GDCSS.

### 2.2.2 Groundwater Investigation and Findings

Based on soil investigation findings, groundwater in the uppermost saturated zone on the Property was investigated by installing three groundwater monitoring wells at the Property, MW-1, MW-2 and MW-3. Based on the soil investigation findings, no PCBs were identified; therefore, chemicals of concern in groundwater were PNAs and total metals. Groundwater samples were collected May 25, 2004 after developing the monitoring wells on May 24, 2004.

Hollow stem augers were used to install monitoring wells MW-1, MW-2 and MW-3 to total depths of 17.5, 17.5 and 22.5 feet bgs respectively. The uppermost saturated zone was indicated at depths between 10 and 14 ft. bgs. The zone of saturation in MW-1, MW-2 and MW-3 was encountered in thin granular layers or lenses present within the brown and gray glacial till (Clay-Silt) soil horizons.

No PNAs were detected in groundwater, and metals concentrations met the generic unrestricted potable use standards (UPUS) at OAC 3745-300-08(b) and (c). Based on the analytical results, groundwater classification was not required in accordance with OAC 3745-300-10.

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### 2.2.3 Surface Water and Sediment Investigation and Findings

The Property contained sediments and seasonal surface water in the wetlands in Identified Area IA-1, which are shown on Figure 2 of the Phase II PA report; therefore, these media were investigated in accordance with VAP requirements. COCs in sediments were PNAs, PCBs, TPH and total metals. COCs in surface water were PNAs, PCBs and total metals.

Samples with prefixes WCW, WDW, WHW and WMW assess surface water in wetlands in IA-1. A total of 11 surface water samples (three samples from Wetland C, four from Wetland D, three from Wetland H and one from wetland M), were collected from the wetlands in IA-1. In these samples, no PCBs or PNAs were detected. Metals in these samples did not exceed the applicable surface water quality standards (Outside Mixing Zone Average (OMZA) criteria per OAC 3745-1), with the following exceptions:

- Silver was detected at concentrations exceeding the OMZA criterion of 0.0016(hardness = 100)-0.0053(hardness = 200) mg/L in samples WCW-2, WDW-2, WDW-3, WHW-2 and WMW-1, which were collected on May 25, 2004. However, no silver was detected exceeding the laboratory detection limits in sediments in these wetlands, nor was silver detected in samples WCW-1, WDW-1 or WHW-1 collected on June 26, 2003; or in samples WDW-4 and WHW-3 collected on August 5, 2004. Certified laboratory chemical analysis results from lime sludge and surface water samples collected on May 25, 2004 in the former lime sludge impoundment in Identified Area IA-2 on the Property did indicate the presence of silver. The lack of detection of silver in wetland sediment samples in surface water samples from the wetlands at times other than May 25, 2004, and the presence of silver in the lime sludge and surface water samples from IA-2, indicates the OMZA exceedences for silver in the wetland surface water samples collected on May 25, 2004 are spurious.
- Barium was detected at a concentration of 0.236 mg/L in sample WCW-2 collected on May 25, 2004, which exceeded the OMZA standard of 0.22 mg/L by a factor of only 1.07. Sample WCW-1 collected June 26, 2003, and sample WCW-3A collected August 30, 2004 from this wetland did not exceed the OMZA standard for barium. The representative concentration, which is the 95% upper confidence limit (UCL) for barium in surface water in the wetlands in IA-1 was 0.141 mg/L and this value did not exceed the OMZA criterion. Surface water samples from wetlands D, H and W had no exceedences of the OMZA criteria.

Background metals concentrations in sediments were investigated by collecting sediment samples WE-1 through WE-8 at depths of 0-1 ft. bgs. in wetland E in the northeastern part of the Property. Background sediment samples were collected on July 26, 2004. Background concentrations of metals in sediments for the Property were derived in accordance with OAC 3745-300-07(H)(1)(d).

Sediment samples were collected from wetlands C, D, H and M. Sediment samples WC-1, WD-1, WH-1 and WM-1 were collected June 26, 2003. Sediment samples WC-2, WD-2, WD-3, WH-2 and WM-2 were collected May 25, 2004 for metals and PNA analysis only, because no PCBs were detected, and no TPH concentrations exceeded analytical method detection limits in samples WC-1, WD-1, WH-1 or WM-1, with the exception of 15.4 mg/kg (method reporting limit of 14 mg/kg) of GRO in sample WC-1. Sediment samples WD-4 and WD-5 were collected July 26, 2004 for metals analysis only.

No PCBs were detected in sediments from the Property. Representative metals concentrations as the maximum detected or the 95% UCL in sediments did not exceed sediment benchmarks (e.g., consensus-based threshold effect concentrations (TECs) (MacDonald, D.D., Ingersoll, C.G., and Berger, T.A., 2000)) or ecological data quality levels (EDQLs) (USEPA, 1998)) where benchmarks were available (e.g.: arsenic, cadmium, chromium, cobalt, mercury,

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nickel, silver, and zinc), with the exception of lead. The 95% UCL lead concentration in sediment exceeded the TEC, but was below the background sediment lead concentration derived for the Property. The maximum concentrations or 95% UCLs for the remaining metals not having sediment benchmarks (e.g., aluminum, barium, beryllium, selenium, thallium and vanadium) were compared to background concentrations derived for the Property. The maximum or 95% UCL concentrations of these metals in sediments from IA-1 did not exceed the Property background sediment concentrations.

To remove the lime sludge impoundment in Identified Area IA-2 as attractive nuisance and potential drowning hazard, the Volunteer filled the lime sludge impoundment with clean brown clayey silt (glacial till) soil, in accordance with the Ohio EPA Division of Surface Water Letter dated August 5, 2004, between October 14 and October 22, 2004. Prior to filling the impoundment, surface water and sediment (sludge) was present in the impoundment; therefore, surface water and sediment were investigated. Surface water sample SW-1 was collected on June 26, 2003. Analytical results for PCBs and PNAs in surface water sample SW-1 were below method detection limits (MDLs.) Metals concentrations in SW-1 are below detection limits with the exception of barium, which did not exceed the OMZA criterion of 0.22 mg/L.

Due to the lack of PCBs and PNAs in both surface water sample SW-1 and soils from IA-2, surface water samples SW-2, SW-3 and SW-4 and lime sludge samples SL-1, SL-2, SL-3 and SL-4 collected on May 25, 2004 were analyzed only for metals.

Metals concentrations in surface water samples SW-2, SW-3 and SW-4 are below MDLs, with the exception of barium, mercury, silver and vanadium. With the exception of silver, metals concentrations in surface water samples are below their respective OMZA criteria. Silver concentrations in SW-2, SW-3 and SW-4 ranged from 0.00253-0.00308 mg/L, which exceed the OMZA criterion of 0.0013 mg/L, and are similar to the silver concentrations detected in surface water samples from IA-1 (0.00312-0.00551 mg/L) analyzed by the same certified laboratory. It is noted that no silver was detected in either the first surface water sample SW-1 collected from

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this Identified Area, or in the surface water samples collected from IA-1, analyzed by a different VAP CL, or in any of the sediments from IA-1.

Metals concentrations in sludge samples SL-1, SL-2, SL-3 and SL-4 were below the sediment TCE/EDQL benchmarks, except for silver. Silver concentrations in the sludge samples ranged from 3.32-4.69 mg/kg, which exceeded the TEC benchmark of 0.5 mg/kg. Filling the impoundment eliminated the sediment and surface water and associated pathways in IA-2. The sludge is present at depths of 2-8 ft. bgs. after filling the impoundment and thus is considered soil. The sludge soil meets the residential GDCSS for the assessed COCs.

#### 2.2.4 Exposure Pathway Assessment

Pathways evaluated by the Phase II PA were:

##### Soils

No migration to off-Property soil from on-Property soil is occurring. Soil pathways, with the exception of leaching to groundwater, apply only to on-Property receptors. The following soil pathways are assumed to be potentially complete for all Identified Areas.

- *Direct contact* with soil containing COCs within the 0 to 10 ft. point of compliance (POC) to on-Property potential residential receptors and visitors. Direct contact exposures include ingestion, dermal contact and inhalation of particulates.
- *Direct contact* with soil containing COCs within and below the 0 to 10 ft. POC to on-Property potential construction/excavation workers.
- *Leaching of COCs* emanating from soil into groundwater resulting in on-Property and off-Property human exposures to COCs in groundwater.

##### Groundwater

Groundwater exists below the Property below a depth of approximately 10-14 ft. bgs. This saturated zone is assumed to underlie adjacent Properties. On this basis, the following groundwater pathways are assumed to be potentially complete for all Identified Areas.

- *Potable use* of groundwater containing COCs by on-Property and off-Property human receptors.
- *Non-potable exposures* (e.g., industrial process and irrigation waters) to groundwater containing COCs impacting on-Property and off-Property human receptors.
- *Migration of groundwater containing COCs to surface water* to on and off-Property human receptors.

### Surface Water Pathways

Surface waters on the Property are present in the wetlands associated with Identified Area IA-1 and the stream in the northeastern corner of the Property; therefore, on and off-Property surface water pathways exist. [Filling the impoundment in IA-2 eliminated the surface water and thus the surface water pathway.] Groundwater has the potential to discharge into the stream located on and off the Property. There are no public water supply surface water intakes within 500 yards of the potential point of discharge for groundwater into this stream.

The following surface water pathways are assumed to be potentially complete at the Property.

- *Potable use* of surface water containing COCs by on-Property and off-Property human receptors.
- *Non-potable exposures* (e.g., industrial process and irrigation waters) to surface water containing COCs from surface water and groundwater discharge impacting on-Property and off-Property human receptors.
- *Ecological exposures* to surface water containing COCs in wetlands, and groundwater discharge to the stream.

### Sediment Pathways

Sediments are present in the wetlands in IA-1 on the Property. [Filling the impoundment in IA-2 eliminated the sediment and thus the sediment pathway.] Sediment pathways in the wetlands in IA-1 therefore exist with respect to this investigation. The following sediment pathways are assumed to be potentially complete in Identified Area IA-1 at the Property.

- *Direct contact* with wetland sediments containing COCs to on-Property potential residential receptors and visitors.
- *Ecological exposures* to sediments containing COCs in wetlands on-Property.

### Pathway Elimination

The following potentially complete pathways are eliminated as follows.

- *Soil pathways to off-Property receptors.* No migration to off-Property soil from on-Property soil is anticipated. Off-Property soil pathways (direct contact and soil leaching) are therefore eliminated.

- **Soil vapor intrusion to indoor.** VOCs are not a COC for the Property and there are no buildings on the Property; therefore, this pathway is eliminated for on- and off-Property receptors.
- **Groundwater vapor intrusion to indoor air.** VOCs are not a COC; therefore, this pathway is eliminated for on- and off-Property receptors.
- **Sediments direct contact off-Property.** There are no outlets from the wetlands on the Property; therefore, there is no migration to off-Property sediments from on-Property wetland sediments.
- **Sediments ecological pathway off-Property.** There are no outlets from the wetlands on the Property; therefore, there is no migration to off-Property sediments from on-Property wetland sediments.

### 2.3 Determination of Applicable Standards

**Soil** - The soil definition applies to both soil and the lime sludge below the former impoundment on the Property. The impoundment was filled with clean soil and thus is soil present from approximately 4-8 ft. bgs. The slag on the surface of the former railroad wye track is not considered an environmental media.

The applicable petroleum standards for soil are defined in Table I of OAC 3745-300-08(B)(3)(a)(ii)(e) - "Total Petroleum Hydrocarbon Soil Saturation Concentration."

The applicable standards for PNAs and PCBs in soil are defined in Table II of OAC 3745-300-08(B)(3)(b) - "Generic Direct-Contact Soil Standards for Carcinogenic and Non-carcinogenic Chemicals of Concern – Residential Land Use Category," and (for some additional PNAs) in the "Supplemental Generic Numerical Values – Direct Contact Soil: Residential Land Use Category" developed under the VAP Technical Assistance Program.

The applicable standards for metals other than arsenic and lead in soil are defined in Table II of OAC 3745-300-08(B)(3)(b) - "Generic Direct-Contact Soil Standards for Carcinogenic and Non-carcinogenic Chemicals of Concern – Residential Land Use Category."

The applicable standard for arsenic in soil is the background soil concentration of 25.7 mg/kg calculated for the Property (Section 8.4 of the Phase II PA report.)

The applicable standard for lead in soil is defined in Table V of OAC 3745-300-08(B)(3)(f) - "Generic Direct-Contact Soil Standards for Lead."

The generic leach-based soil values from "Ohio Leach-Based Soil Values Technical Guidance Document) (Ohio EPA, 2002) apply to the metals barium, cadmium, chromium, mercury, nickel and zinc in soil at the Property. The leaching value for soil is the background level derived per OAC 3745-300-07(H)(1)(d).

**Groundwater** - The applicable standards for groundwater are defined in Tables VI and VII of OAC 3745-300-08(C)(3)(b) and (c) –“Generic Unrestricted Potable Use Standards”, and “Risk-Derived Generic Unrestricted Potable Use Standards” and/or the “Supplemental Generic Numerical Values - Unrestricted Potable Use Standards (UPUS)” developed under the VAP Technical Assistance Program.

COCs in groundwater are determined not to exceed UPUS. A multiple chemical adjustment therefore is needed for that media.

**Surface Water** - The applicable standards for surface waters on the Property are the water quality standards established or developed in accordance with Chapter 3745-1 of the Ohio Administrative Code. The applicable standards for COCs in surface waters are therefore defined by OAC 3745-1-07 Table 7-1 “Statewide Water Quality Criteria For The Protection Of Aquatic Life”; and Table 7-9 “Statewide Water Quality Criteria For The Protection Of Aquatic Life For Water Hardness Dependent Criteria.”

**Sediment** – Except for background concentrations of aluminum, barium, beryllium, lead, selenium, vanadium and zinc derived for sediments on the Property, the applicable metals standards for sediments at the Property are the ecotoxicologically-based benchmarks from the following guidance documents with the following hierarchy:

- Consensus-based threshold effects concentration (TEC) values contained in the “Development and Evaluation of Consensus-based Sediment Quality Guidelines for Freshwater Ecosystems;”, D.D. MacDonald, C.G. Ingersol, and T.A. Berger, Arch. Environ. Contam. Toxicol. 39, 20-31 (2000); or
- Ecological data quality levels contained in U.S. EPA, Region 5, “Final Technical Approach for Developing Ecological Data Quality Levels for RCRA Appendix IX Constituents and Other Significant Contaminants of Ecological Concern,” April 1998.

#### 2.4 Determination of Compliance with Applicable Standards

**Soil** - No COCs in soils on the Property exceeded residential GDCSS or Property background levels within the POC of 0 to 10 ft. bgs. Soils on the Property are therefore determined to comply with applicable standards.

OAC 3745-300-08(B)(2)(b) requires a multiple cumulative adjustment (MCA) for COCs when more than one chemical is present on the Property. The MCA evaluation results in a cumulative non-cancer risk ratio of 0.73 and a cumulative cancer risk ratio of 0.48 for soil media.

Reductions of assumed exposures to COCs in soil are not required to meet the non-cancer and cancer risk ratios of 1.0 each as defined under OAC 3745-300-08(D)(1).

**Groundwater** – Groundwater below the Property meets generic unrestricted potable use standards, which is the applicable standard for that media. Therefore groundwater below the Property meets the applicable standards.

OAC 3745-300-08(C)(2)(c) requires a multiple cumulative adjustment (MCA) for COCs when multiple chemicals are present on the Property. The MCA evaluation results in a cumulative non-cancer risk ratio of 0.16 (attributed solely to the metals concentrations that exceeded MDLs in groundwater) for groundwater media. There were no carcinogens detected in groundwater; therefore, there is no associated cancer risk. Reductions of assumed exposures to COCs in groundwater are not required to meet the non-cancer and cancer risk ratios of 1.0 each as defined under OAC 3745-300-08(D)(2).

**Surface Water** – Surface water on the Property meets potable use and surface water quality standards with the following exceptions:

- Barium in one surface water sample, WCW-2 collected on May 25, 2004 from Wetland C in Identified Area IA-1, was detected at 0.235 mg/L, which meets the potable use standard of 2 mg/L but exceeds the OMZA criterion of 0.22 mg/L by a factor of only 1.07. However, the 95% UCL calculated for barium in the 11 surface water samples from IA-1 wetlands is 0.141 mg/L, which meets the OMZA criterion and the potable use standard.
- Silver in surface water samples WCW-2, WDW-2, WDW-3, WHW-2 and WMW-1 from Wetlands C, D, H and W in Identified Area IA-1 was detected at concentrations ranging from 0.00312-0.00551 mg/L, which exceeds the OMZA criterion of 0.0013 mg/L. However, these results are spurious based on the fact that silver does not exceed the 0.0005 mg/L MDL in the surface water samples WCW-1, WDW-1, WHW-1 and SW-1 (Table 10 in the Phase II PA report) collected on June 26, 2003; or in samples WDW-4 and WHW-3 (Table 10 in the Phase II PA report) collected on August 5, 2004 and analyzed by a different VAP Certified Laboratory (CL), nor did silver exceed the MDLs in any of the sediments collected from wetlands in IA-1. The lack of detection of silver in surface water samples collected and analyzed by a different VAP CL before and after the samples having silver levels exceeding the OMZA, indicates the OMZA exceedences for silver in the surface water samples collected on May 25, 2004 are spurious.

Based on these demonstrations, surface water in wetlands on the Property meets the applicable standards.

**Sediment** – Sediments in the wetlands at Identified Area IA-1 and sediments formerly in the lime sludge impoundment at Identified Area IA-2 meet the sediment benchmarks consisting of the Threshold Effect Concentration (TEC) levels and/or Ecological Data Quality Levels (EDQLs) with the following exceptions:

- Sediment sample WC-1 collected June 26, 2003 in Wetland C at IA-1 contained 0.26 mg/kg of Chrysene and 0.274 mg/kg of Pyrene, which exceed their respective TEC levels of 0.166 mg/kg and 0.195 mg/kg by respective factors of 1.6 and 1.4. However, the 95% UCLs calculated for Chrysene and Pyrene in the nine sediment samples from IA-1 wetlands are 0.14 mg/kg and 0.154 mg/kg, respectively, which meet the TEC benchmark levels.
- Aluminum has no sediment TEC or EDQL benchmark level. Aluminum concentrations in the nine sediment samples from IA-1 were compared to background aluminum concentrations from Wetland E located in the northeastern part of the Property. The 95% UCL for aluminum in wetland sediments was determined to be 13,700 mg/kg, which exceeds the background wetland sediment concentration of 13,410 mg/kg by a factor of only 1.02. No hazardous waste activity, or releases of a hazardous substance or waste comprising aluminum has been identified on the Property, indicating the aluminum concentrations in the wetland sediments at the Property reflect naturally occurring levels.
- Sludge samples SL-1 through SL-4 in the former impoundment at IA-2 contained 3.32-4.69 mg/kg silver, which exceeded the TEC benchmark of 0.5 mg/kg. However, the impoundment was filled in accordance with requirements of Ohio EPA in their August 5, 2004 letter. As a result, the sludge was present below ground surface at a depth of not less than 4 ft. The sludge therefore is considered soil and meets the residential GDCSS of 390 mg/kg for silver.

Based on these demonstrations, sediments on the Property meet the applicable standards.

#### **2.4.1 Data Analysis**

The comparisons of COCs to the applicable standards for media on the Property are presented in Sections 2.2.1, 2.2.2, 2.2.3 and 2.4 of this document.

#### **2.4.2 Compliance with Generic Numerical Standards (GNS)**

The GNS were used for the direct contact soils pathway and the groundwater pathways. Soils and groundwater below the Property meet the GNS. The cumulative adjustment calculations for soil and groundwater COCs were made and no adjustments were necessary based on the calculations. The Property Specific Risk Assessment, provided as Appendix M of the Phase II Property Assessment Report, includes multiple chemical cumulative adjustment calculations.



## **Ecological Risk Assessment**

Concentrations of chemicals of concern detected in sediments, ground water, and surface water at the Property were compared to applicable standards in these media for ecological receptors and to the Ohio Surface Water Quality Standards. No chemicals of concern detected in surface water or ground water, with the exception of silver in ground water exceeded the applicable Ohio Surface Water Quality Standard. Silver in groundwater exceeded the surface water OMZA silver criterion; however, the representative silver concentrations measured in surface water at the Property meet the OMZA concentration, and the major source of surface water on the Property is most likely to be from precipitation and runoff, not from groundwater discharge. In addition, based on the Phase I PA and the Phase II PA analyses, no hazardous waste activity or release of a hazardous substance or waste comprising silver has been identified on the Property. Thus, no unacceptable risks are present for ecological receptors in surface water on the Property.

Of the constituents of concern detected in sediments at the Property, only aluminum slightly exceeded the background sediment concentration or the ecotoxicologically-based TEC. However, aluminum has no ecotoxicologically-based standard and no hazardous waste activity, or releases of a hazardous substance or waste comprising aluminum has been identified on the Property, indicating the aluminum concentrations in the wetland sediments at the Property reflect naturally occurring levels.

### **2.4.4 Determination of Whether Remedial Activities are Required**

Based on the Phase II PA and the PSRA, no remedial activities were required to meet applicable standards.

### **2.5 Remedial Activities**

No remedial activities were required to meet applicable standards. Based on the PSRA discussed in Section 2.4.3 above, no remedial activities were required.

### **2.6 Planned Remedies**

No other remedies are necessary.

### **3.0 Conclusions**

Based on the soil COC concentrations, the Property meets all applicable soil standards. Based on the groundwater COC concentrations, the Property meets all applicable groundwater standards. In addition, the Property Specific Risk Assessment (PSRA) demonstrates that COC concentrations in soil, groundwater, surface water and sediment are protective considering potential direct contact exposures to groundwater by possible future construction and excavation workers on and off the Property. No other remedial activities were required.

The points of compliance for soil was 0-10 feet for Property occupants, and the reasonably anticipated depths of excavation within and below the 0-10 foot depths for construction and excavation worker short term exposures.

Groundwater below the Property complies with the UPUS.

Based on the results of the Phase I and II Property Assessments and the Property Specific Risk Assessment, a No Further Action (NFA) Letter under Ohio VAP may be prepared for the Property.

Attachment: Legal Description of the Property



**BOUNDARY DESCRIPTION**  
**38.38 ACRES**

Situated in the State of Ohio, County of Delaware, Township of Liberty, Farm Lots 18, 19 and 20, Section 1 and Farm Lot 1, Section 2, Township 3, Range 19, United States Military Lands and described as follows:

Beginning at the southeasterly corner of said Farm Lot 1, in the centerline of Rutherford Road;

thence North  $86^{\circ} 11' 44''$  West, with said centerline, a distance of 154.68 feet to the easterly railroad right-of-way line for CSX Transportation, Inc.;

thence with said easterly railroad right-of-way line, the following courses:

North  $10^{\circ} 53' 41''$  West, a distance of 748.16 feet;

North  $08^{\circ} 35' 08''$  West, a distance of 1541.07 feet;

North  $04^{\circ} 13' 20''$  West, a distance of 782.01 feet;

North  $35^{\circ} 19' 13''$  East, a distance of 36.89 feet;

North  $23^{\circ} 58' 01''$  East, a distance of 95.92 feet;

North  $02^{\circ} 03' 16''$  East, a distance of 195.96 feet to the northerly line of said Farm Lot 1;

thence South  $86^{\circ} 24' 15''$  East, with said northerly Farm Lot line, a distance of 708.91 feet to the northeasterly corner thereof;

thence with the easterly line of said Farm Lot 1, the following courses:

South  $04^{\circ} 15' 04''$  West, a distance of 973.92 feet;

South  $02^{\circ} 31' 40''$  West, a distance of 668.33 feet;

thence across said Farm Lot 18, the following courses:

South  $85^{\circ} 48' 22''$  East, a distance of 459.76 feet;

South  $02^{\circ} 45' 26''$  West, a distance of 189.89 feet to the southerly line of said Farm Lot 18;

thence North  $86^{\circ} 33' 55''$  West, with said southerly Farm Lot line, a distance of 306.78 feet;

thence across said Farm Lots 1, 18, 19 and 20, the following courses:

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38.38 ACRES

-2-

South 03° 26' 05" West, a distance of 140.00 feet;

with a curve to the left, having a central angle of 51° 37' 56" and a radius of 155.00 feet,  
a chord bearing and chord distance of South 67° 37' 07" West, 135.00 feet;

North 48° 11' 51" West, a distance of 145.00 feet;

South 41° 48' 09" West, a distance of 91.88 feet;

South 07° 44' 51" West, a distance of 378.71 feet;

South 01° 00' 07" East, a distance of 489.32 feet;

North 69° 50' 18" East, a distance of 162.59 feet;

with a curve to the left, having a central angle of 24° 12' 25" East, and a radius of 155.00  
feet, a chord bearing and chord distance of South 32° 15' 55" East, 65.00 feet;

South 03° 18' 39" West, a distance of 215.39 feet;

North 86° 41' 21" West, a distance of 50.00 feet to the easterly line of said Farm Lot 1;

thence South 03° 57' 53" West, with said easterly Farm Lot line, a distance of 235.71 feet  
to the Point of Beginning and containing 38.38 acres, more or less.

This description was prepared from existing record and is not to be used for transfer.

EVANS, MECHWART, HAMBLETON & TILTON, INC.

**Certified Professional Affidavit Pursuant to OAC 3745-300-13(P) and 3745-300-05(F)(4)**  
*[for submittals under OAC 3745-300-13(P): Certified Professional NFA letter submissions to the Director of Ohio EPA]*

**Volunteer:**

M/I Homes of Central Ohio, LLC  
3 Easton Oval  
Columbus, OH 43219

**Owner(s) of Property:**

Same as Volunteer

**Certified Professional who issued the NFA Letter:**

Bruce A. Savage (CP 265)  
Geotechnical Consultants, Inc.  
720 Greencrest Dr.  
Westerville, OH 43081

**Property subject to NFA Letter:**

Proposed Greenspace Property at  
Woods of Powell  
38.38 Acres North of Rutherford  
Road, Powell, OH 43065

**State of Ohio**

)

ss:

**County of Franklin**

)

I, Bruce A. Savage, being first duly sworn according to law, state that, to the best of my knowledge, information and belief:

1. I am an adult over the age of eighteen (18) years old and competent to testify herein.
2. I am a Certified Professional, No. 265, in good standing under Ohio Revised Code (ORC) Chapter 3746 and Ohio Administrative Code (OAC) Chapter 3745-300.
3. I have prepared a No Further Action (NFA) Letter for M/I Homes of Central Ohio, LLC, issued on November 3, 2004 for property located at 38.38 Acres North of Rutherford Road, Powell, OH 43065 (the "Property").
4. I have read the standards of conduct contained in OAC 3745-300-05(F), and maintained full compliance with these standards regarding the NFA Letter and while rendering professional services to the Volunteer regarding the Property.
5. The Property is eligible for the Voluntary Action Program pursuant to ORC 3746.02 and OAC 3745-300-02.
6. The voluntary action has been conducted and the NFA Letter has been issued in accordance with the ORC Chapter 3746 and OAC Chapter 3745-300.
7. The Property meets the applicable standards contained in ORC Chapter 3746 and OAC Chapter 3745-300.
8. The voluntary action at the Property was conducted in compliance with all applicable federal, state and local laws and regulations.
9. The NFA Letter, the completed NFA Form for the Property and any other information, data, documents and reports submitted with the NFA Letter and the NFA Form are true, accurate and complete.

10. The NFA Letter, the completed NFA Form and all supporting information, data, documents and reports, are a true, accurate and complete characterization of conditions at the Property, including the presence or absence of hazardous substances and petroleum.

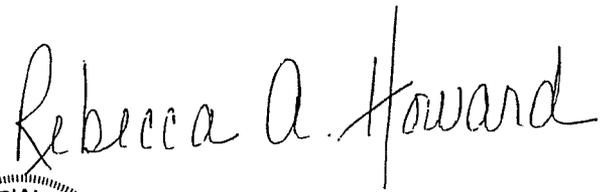
Further affiant sayeth naught.

Signature of Affiant



Sworn to before me this 4th day of November, 2004.

Notary Public



Revised 10/02

REBECCA A. HOWARD  
Notary Public, State of Ohio  
My Commission Expires June 23, 2008