

**Check List for EC/IC Long Term Assessment
For
University of Maryland, College Park, MD
RCRA ID #: MDD 980 829 873**

March 26, 2014 Facility Visit

I. Background:

EPA determined the Final Remedy for University of Maryland (UM) in 2007 as part of the EPA Corrective Action part of the MDE RCRA Permit (CA part signed 1/12/2007). The remedy is two part: One part addresses the four former landfills, unlined, uncontrolled and last used in the 1960's; the other part addresses groundwater contamination at a fire training facility located on one of the former landfills.

The LFs have land and groundwater (gw) use restrictions in an easement recorded in Prince George's County Land Records in 2007. The easement document (institutional control) includes surveyed LF boundaries and coordinates. EPA's digital map shown on LCD's UM website uses the surveyor's coordinates, along with a pop-up containing the land and gw use restrictions. The second part of the remedy addresses gw contamination found at the Maryland Fire and Rescue Institute (MFRI), located on a portion of one of the former LFs. The remedy is long term monitoring for gasoline components and naphthalene. Monitoring is once every four years, except for 2013-2014, where groundwater was monitored twice to confirm higher than expected contaminant levels. The wells were redeveloped and then resampled. The resampled levels confirm a continued downward trend in contaminant levels. GW will be sampled again in 2018. UM reports LF conditions annually and gw every four years.

The 2007 Permit requires UM to notify EPA of proposed land use changes on the LFs. Changes that may disturb the cap (asphalt and concrete) or other land use changes need written permission from EPA. Three of the LFs (Paint Branch LFs) are paved and flush with the existing topography and two LF had commercial or UM sheds and garage type buildings on them in 2007. The Paint Branch LFs were used for disposal of fly ash from UM's former coal burning steam plant, refuse, garbage and other debris generated by UM. The LFs were closed prior to regulations.

Paint Branch Land Fill 1A (PBLF-1A) is included in UM's East Campus development plans. UM began moving buildings and operations off of PBLF 1A to prepare the area for development. Most of the buildings were gone by the March 26, 2014 site visit, with the asphalt/concrete cap remaining. The Permit allows for routine maintenance/utility work on the LFs, provided worker protection is maintained. For any LF development/construction, UM must notify EPA early in the planning process. EPA will review draft construction plans and will consent to construction provided that UM demonstrates that potential worker and public contaminant exposure is identified and controlled. In previous LF development planning efforts, UM has included EPA in the planning stages. The planned construction didn't occur at that time.

II. Current Issues:

In January 2014, UM wrote EPA about a hotel and conference center proposal for the East Campus, planned for an area adjacent to the PBLF-1A boundaries. In a March 26, 2014 letter, EPA responded to UM expressing EPA's concerns about the potential for encountering LF waste during excavation/construction even though the development is next to the mapped LF boundary and not on it. The mapped PBLF boundaries are approximate, and a 2004 LF Report map shows that wastes may underlie a portion of the area considered for development. This area is not part of the easement. EPA's letter told UM to inform the developer(s) about the potential for

encountering LF waste and plan for: (1) worker and public protection and safety; and (2) contaminated soil and/or gw removal. EPA's UM contact (Mr. Scott Lupin) will follow-up with EPA as the plans develop.

III. EC/IC Assessment Checklist:

This Checklist includes the results of EPA's in-office review of EPA's UM records and website in preparation for the UM Site visit on March 26, 2014.

A. In-office Review:

1. EC/IC documents and location/boundary maps: Documents reviewed included: (1) IC prohibitions and reporting requirements in the 2007 Permit, (2) UM 2007 Easement recorded in Prince George's County Land Records, which includes LF surveyed boundaries and LF use restrictions on land and gw, (3) Required Reports (in Permit) submitted to EPA annually on LF cap conditions (asphalt/concrete), land use and any proposed changes, and gw MNA reports documenting progress towards meeting EPA's clean-up goals, due every 4 years.

EPA's website for UM had broken links to the digitized LF boundary maps and ICs. The links were repaired. UM is meeting their reporting requirements.

2. Local and State contact: UM is a public research university and is largely self-governing, making up most of the College Park, MD community. I will e-mail the Prince George's County Land Records office to check that the easement remains as recorded in 2007.

3. Facility Contact: The UM visit was scheduled for March 26, 2014 with EPA's Corrective Action contact at UM, Mr. Scott Lupin, Assoc. Dir., Dept. of Environmental Safety (DES). I sent Mr. Lupin the checklist ahead, which allowed him to plan relevant personnel and records for the meeting. The UM Director of Development was at the meeting so we could discuss the proposed East Campus development.

B. Facility visit:

1. UM in-office review: (a) compare EC/IC maps for accuracy/consistency; (b) discuss any EC/IC and/or remediation units regarding updates or info. not conveyed in reports to EPA and any plans for land use, construction or sale of restricted use land; (b) discuss how restricted areas and restrictions are communicated to staff, contractors, upper management, local planners/gov't. as applicable; (c) discuss any issues identified under A., above; (d) discuss any recommendations with UM, if they arise.

EPA's maps were identical to UM's maps. EPA's website for UM is at:

www.epa.gov/reg3wcmd/ca/mdwebpages/mdd980829873. UM just hired a GIS specialist to digitize map layers for the Facility Master Plan. UM will create an easement layer showing LF boundaries and restrictions.

Communication between the UM Depts. occurs regularly, and the same people comprise upper management for over seven years. All campus projects go through a formal multi-dept. review process. Big projects go through a more extensive planning and review process, and then UM applies for State Permits. The Fire Marshall is part of the DES and keeps DES involved in campus safety. UM set up a website for the public, local planners and developers for the East Campus area. The website includes due diligence environmental reports regarding the East Campus LFs (Paint Branch LFs) and includes maps that show the LF boundaries. The website is: www.eastcampus.umd.edu.

UM was approached by a developer to build a conference center/hotel with some retail units on a 3.5-acre area next to the PBLF-1A. UM greenhouses have occupied the space since the 1950's. The greenhouses were moved off site recently. For conference center/hotel construction, the plans are to build the nine story building on a

concrete pad, not requiring much subsurface excavation. UM hopes to break ground this year. UM informed EPA of these developments in January 2014 and EPA expressed its concerns in a March 26, 2014 letter as discussed on Page 2.

UM and EPA will continue to interact as more details emerge.

2. View EC/IC and on-going remediation areas including photo documentation. Note activities on and around EC/IC/remedy areas. Note any remedy difficulties, like equipment malfunctions, timely responses and notifications to EPA.

EPA and UM personnel visited the three PBLFs, including the MFRI (on PBLF-3A) and the Metzert Road LF. The LFs appear the same as in 2007, except PBLF-1A has no building structures. All USTs on Campus were removed, including the ones on PBLF-1A. UM is a large generator TSD with a MDE Permit. UM constructed a new \$1M TSD Facility on-Campus.

The Metzert Road LF (MRLF) overlooks the UM golf course in a wooded area away from main campus. This LF consists mostly of Campus soil/fill that was dumped over time, creating a giant mound and leveled off at the top. No significant contamination was found in the LF. The LF is used as a storage/staging area for roll-offs, construction and road maintenance materials staged on bare soil. The LF is secured by a chain link fence with a card activated gate. MRLF is also part of the use restriction easement.

C. Document the Review in Memo/Report to Files: Document what was reviewed, including photos, findings and recommendations. Once approved by management, send Report to Facility and upload to EPA Facility website and update RCRA Info with applicable code(s).

D. Conclusion of Assessment: EPA's conclusion is that UM is successfully implementing the Remedy, abiding by the Permit and easement requirements for IC and EC for the LFs.

Attachments:

Pages 4- 7: UM Campus and Landfill boundaries.

Page 8: Fig 2 shows PBLF-1A, and the approximate landfill waste locations. The area with Bldgs.001-005 is the proposed 3.5-acre Conference Center and Hotel location.

Page 9-10: Four photographs taken during the March 26, 2014 site visit.

Page 11-12: Easement (text, w/o signatures, coord., and maps).

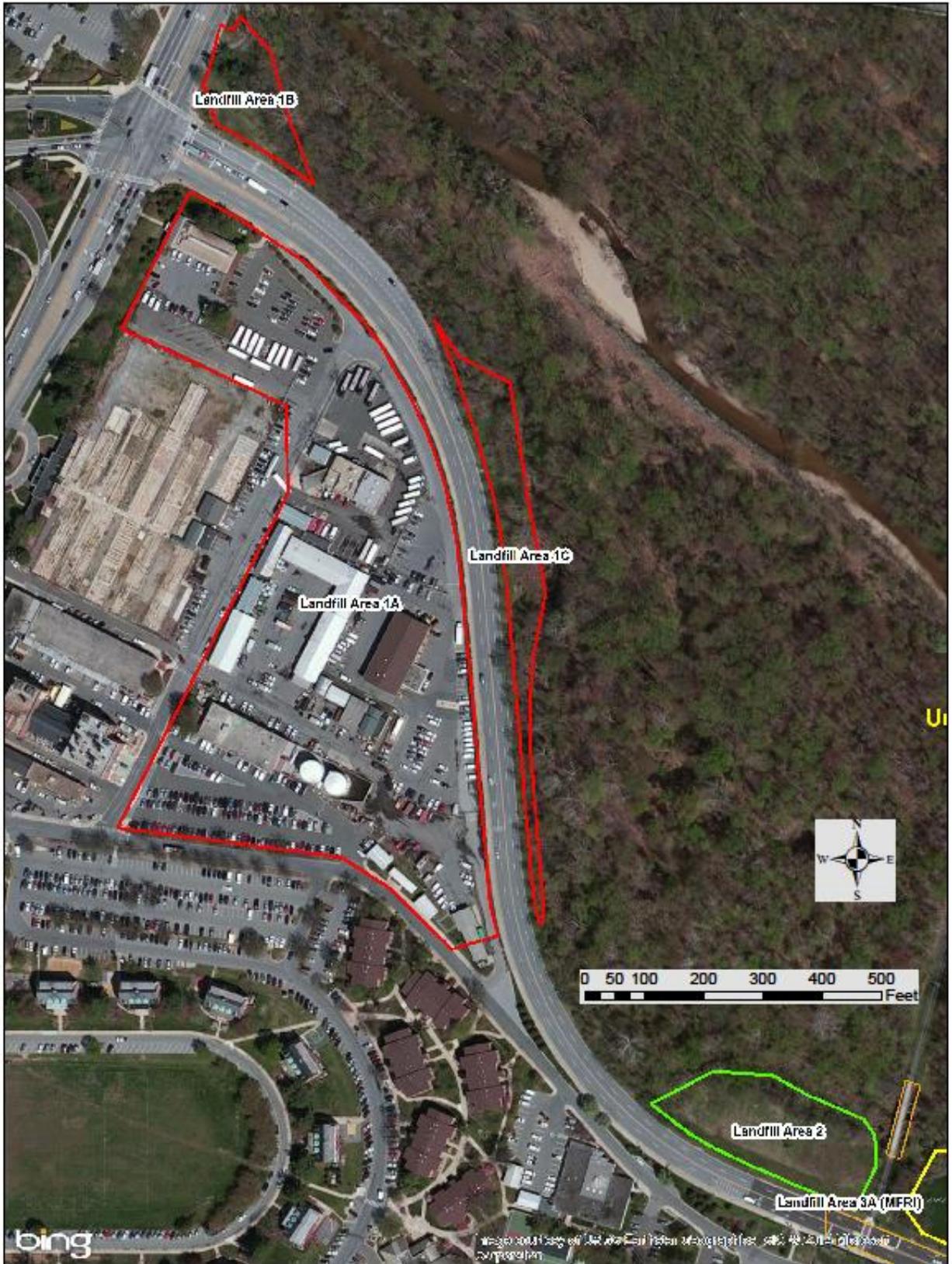
Page 13-16: 2007 Memo from UM to Staff: Implementation of LF prohibitions from CA Permit.

2012 UMD Property Boundaries
Main Campus



S:\Facilities Planning\MappingManagement\Imagery\2012\UMDProperty.pdf

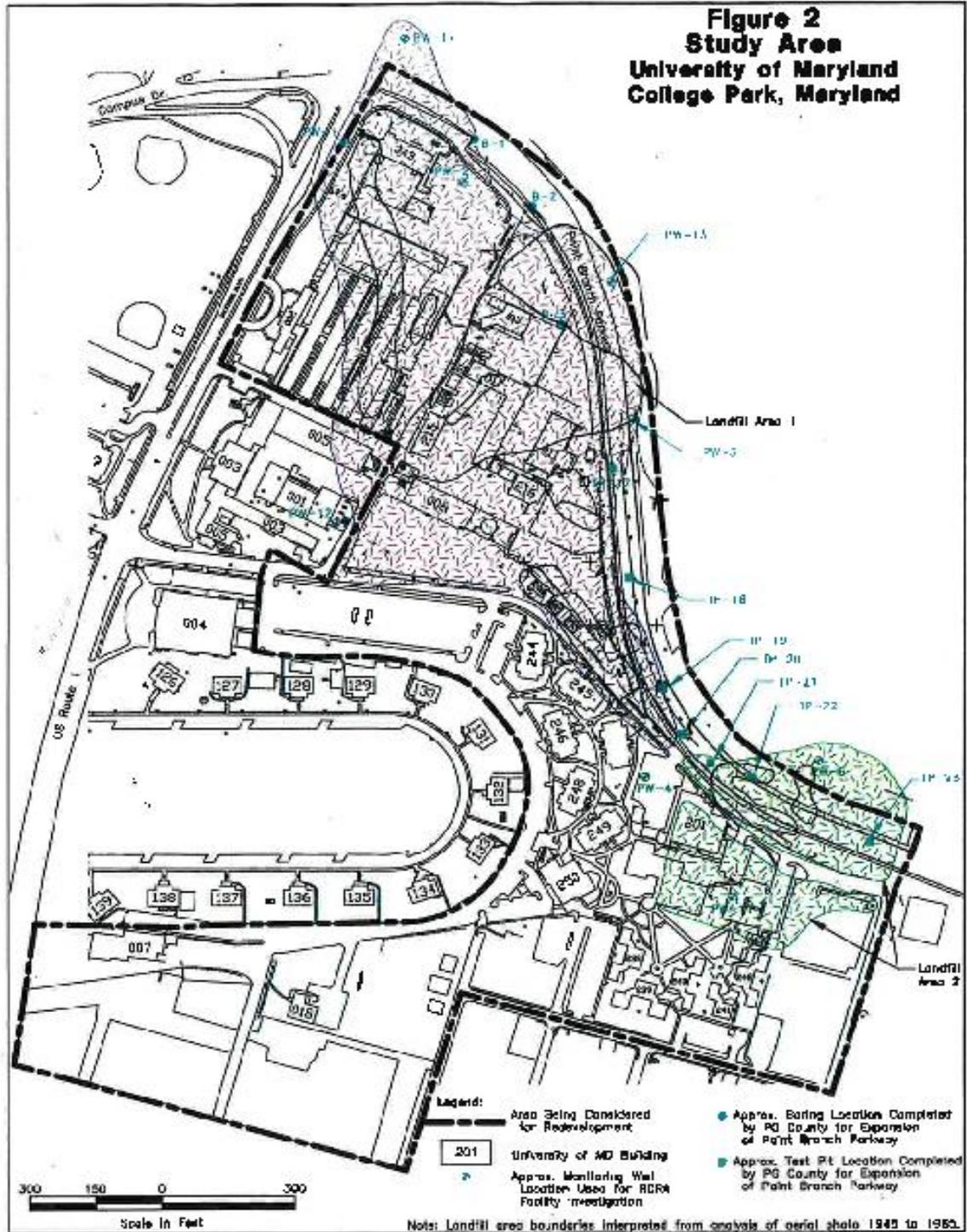
Image source: 2011 National Agricultural Inventory Program (NAIP), U.S. Department of Agriculture







**Figure 2
Study Area
University of Maryland
College Park, Maryland**



ERSI

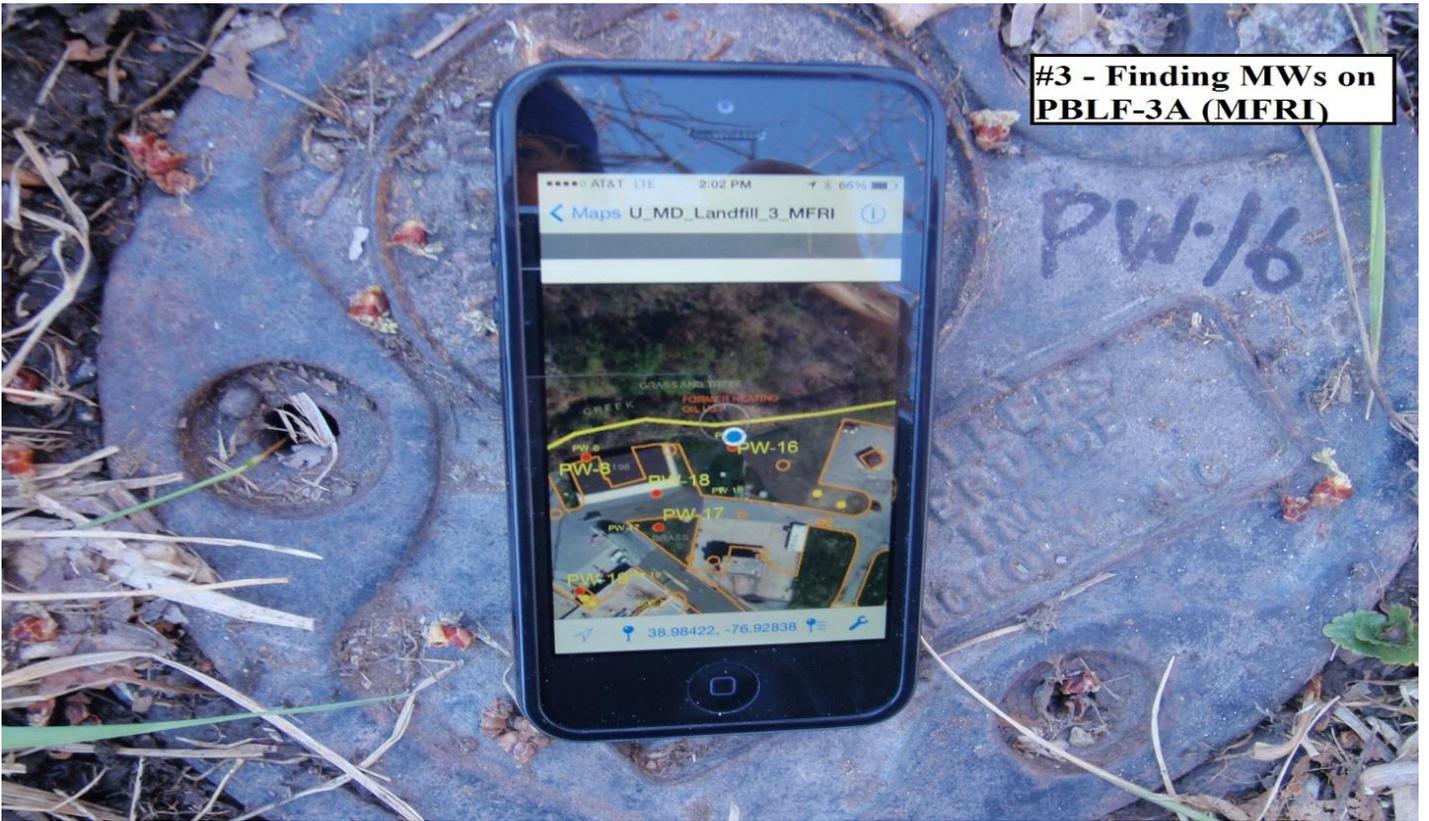
MDNR/DCM/01-11-00-CMP/04-14-00-CMP/1102 LE

**#1 - Future Hotel -
Conference Ctr. Area**



#2-Metzerott Landfill





#3 - Finding MWs on PBLF-3A (MFRI)



#4 - Fire Prop at MFRI (PBLF-3A)

Parcel IDs: 2411122, 2411213, 2411189,
2400265, 2400708

DECLARATION OF NOTICE OF USE RESTRICTION AND EASEMENT

THIS DECLARATION OF NOTICE OF USE RESTRICTION AND EASEMENT (hereinafter "Declaration") is made this 4th day of April, 2007 by the State of Maryland for the use of the University of Maryland System on behalf of its constituent institution, the University of Maryland College Park (hereinafter "Declarant").

RECITALS

A. Declarant is the fee simple owner of real property with certain areas that received waste generated by the University of Maryland, College Park. These areas are identified as Landfill Areas 1A, 1B, 1C, 2, 3A, 3B, and 4 situated in the County of Prince George's, State of Maryland, more particularly described in the Exhibit attached hereto and made a part thereof (hereinafter the "Property");

B. Declarant received United States Environmental Protection Agency ("USEPA") Corrective Action Permit Number MDD980 829 873 (the "Permit") for the Property. The facility at which the Property is located is the University of Maryland College Park Campus; and

C. Pursuant to the Permit, Declarant is required to record a Notice of Use Restriction and to reserve unto itself an easement for the exclusive right to the use of groundwater at or beneath the Landfill Areas.

NOW THEREFORE, Declarant hereby gives notice of use restriction as follows and reserves unto itself the below described easement.

1. Definitions.

- a. "Landfill Areas" means the Property comprised of the areas shown on the Exhibit attached hereto and incorporated herein and which received wastes generated by the University of Maryland, College Park, further identified Landfill Areas 1A, 1B, 1C, 2, 3A, 3B, and 4.
- b. "Permit" means USEPA Corrective Action Permit Number MDD980 829 873 issued pursuant to the Resource Conservation and Recovery Act effective January 12, 2007.
- c. "Property" means the Landfill Areas shown on the Exhibit attached hereto and incorporated herein.

Clerk of the
County Court

17 11 2006

2. **Notice of Use Restriction.** The Landfill Areas have been used in the past as solid waste disposal areas, and, therefore, the groundwater located at or beneath the Landfill Areas shall not be used as drinking water. In addition, certain activities, including but not limited to, excavation, grading, dewatering, sheeting or shoring, which could result in undesirable exposures to the waste/contaminants previously disposed of on the Property or interfere with or adversely affect the Landfill Areas ("Prohibited Activities") are expressly prohibited without the prior written approval of Declarant. Declarant, in its sole discretion, may forward any request to allow a Prohibited Activity to USEPA for approval or may require the requesting person to obtain USEPA approval of any such work. Any such requests for approval shall be sent in writing to: **Associate Director, Environmental Affairs**, Department of Environmental Safety, Division of Administrative Affairs, University of Maryland, 3115 Chesapeake Building, College Park, Maryland 20742-3133.

ANY INTEREST IN THE PROPERTY SHALL BE CONVEYED SUBJECT TO THE FOREGOING NOTICE OF USE RESTRICTION.

3. **Reservation of Easement.** Any interest conveyed in the Property is hereby subject to an irrevocable and permanent easement held by the Declarant for the exclusive right to restrict the use of groundwater at or beneath the Landfill Areas for drinking purposes. The Declarant will enforce the terms of this easement against all subsequent grantees, assignees and transferees of all or a portion of the Property or any real estate interest in such Property.

4. **Run with the Land.** The Notice of Use Restriction and Easement reserved by the Declarant run with the land and shall be included in any ~~future conveyances or interests~~ created in the Property.

IN WITNESS WHEREOF, this Declaration of Notice of Use Restriction and Easement is signed as of the above written date.

[SIGNATURE PAGE FOLLOWS]



UNIVERSITY OF MARYLAND

DEPARTMENT OF ENVIRONMENTAL SAFETY

3115 Chesapeake Building 338
College Park, Maryland 20742-3133
301.405.3960 TEL 301.314.9294 FAX

January 31, 2007

MEMORANDUM

TO: Distribution List

FROM: Maureen Kotlas
Director, Dept. of Environmental Safety

Diane R. Schwartz Jones
University Counsel, Office of the President

RE: University of Maryland - RCRA Corrective Action Permit

The University of Maryland historically operated landfills in connection with campus operations that predated the Resource Conservation and Recovery Act ("RCRA") regulations. The landfills are known as the Paint Branch Landfills located on the East Campus, and the Metzertott Landfill located off Metzertott Road and across from the University System of Maryland offices. Maps that delineate the boundaries of the Paint Branch and Metzertott Landfills are attached. You are being sent this memorandum because your department may be involved in current or future operations, contracts or development that are or may be subject to new environmental permit restrictions.

In 1991, the U.S. Environmental Protection Agency (USEPA) issued a RCRA Corrective Action Permit to the University that required the conduct of environmental impact studies within the Landfill Areas as well as other locations on campus. The University completed the studies under USEPA's direction, as required. The studies concluded that the two Landfill Areas do not pose a significant risk under current land uses.

On January 12, 2007, the USEPA issued a new RCRA Corrective Action Permit to the University that imposes several new restrictions within the two Landfill Areas. These restrictions are federally enforceable and significant penalties may result from knowingly or unknowingly failing to comply with the permit. As a result, it is imperative that you and current and future key personnel within your department fully understand the permit restrictions and notify the Department of Environmental Safety (DES) prior to conducting any regulated activity. Additionally, if you have any questions about whether a contemplated activity is regulated, you should contact DES in advance of the activity. The following are the key restrictions that apply within the two Landfill Areas:

- ▶ No building, structure or trailer may be constructed, erected or moved onto the Landfill Areas without prior USEPA written approval. Mobile trailers solely used for office purposes that are placed on the ground surface using support stands integral to the trailer and that does not involve the placement of footings or other subsurface support is acceptable without notifying USEPA.
- ▶ There shall be no disturbance of the surface or subsurface of the Landfill Areas by filling, drilling (other than drilling for soil or groundwater samples), burial, excavation, or removal of rock or minerals in any manner without prior USEPA written approval.
- ▶ No welding, torching, sparking or open flames shall be permitted in the Landfill Areas during excavation or entry into a confined space, unless the area is first monitored for a combustible atmosphere and the monitoring results indicate that the level is below 25 percent of the lower explosive limit.
- ▶ The ground water at or beneath the Landfill Areas may not be used for drinking water.
- ▶ UM may conduct temporary, routine or emergency measures related to maintenance and/or repair of facility appurtenances (e.g., paving, utility repair, etc.) within the Landfill Areas without notifying USEPA when performing these activities. However, UM must develop and implement appropriate health and safety measures for its own employees who perform allowable routine maintenance and utility work and must require third party contractors whose employees may perform allowable routine maintenance and utility work to demonstrate that they have an appropriate Health and Safety Plan (HASP) in place. A HASP will be considered appropriate if it meets applicable state and federal OSHA regulations. Third party HASP's must be submitted to or otherwise approved by DES prior to the start of work.

Distribution List

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- ▶ Prior to constructing improvements associated with redevelopment at the Landfill Areas, UM must submit to USEPA a Conceptual Development Plan that includes a description of the proposed development; the potential environmental and safety risks, the controls to be instituted to manage those risks, and a project schedule. USEPA's comments to the Conceptual Plan must be addressed in a 95% Site Design that must be submitted and approved by USEPA prior to construction.
- ▶ UM must notify USEPA of any newly discovered releases of hazardous materials/waste within the Landfill Areas and any newly identified solid waste disposal areas on the campus.
- ▶ DES must conduct an annual inspection of the Landfill Areas to verify that no land use activities restricted by the Permit, including but not limited to disturbances of the surface or subsurface of the Landfill Areas, have occurred. An annual inspection report must then be submitted to USEPA.

It is anticipated that the University's compliance with the restrictions may raise questions within the context of specific projects, contracts and activities. Please contact Scott Lupin (DES) at 405-3968 if you have any questions regarding the permit restrictions and to coordinate the submission of required notifications when planning restricted activities.

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Attachments