

**Memorandum**  
**Date:** May 5, 2011  
**To:** Bill Springer, RK&K  
**From:** Bob Denton, GeoConcepts Engineering, Inc.  
**Subject:** Regulatory Summary Memo - Maintenance Facility Fuel Island Improvements (Our 11003)

GeoConcepts Engineering, Inc. (GeoConcepts) has prepared this memorandum to summarize our understanding of the regulatory issues related to the planned improvements to the Town of Leesburg Vehicle Maintenance Facility Fuel Island and Site Stormwater Management System.

As the subject site is regulated by the VPDES 2009 General Permit (Permit VAR051427), the only regulatory nexus applicable is with the Virginia Department of Environmental Quality (VDEQ), which administers the VPDES program for industrial and commercial facilities. Referencing our telephone conversation of March 18, 2011 with Susan Mackert, Senior Permit Writer - VDEQ, the sole regulatory requirement for the site is submission of an annual stormwater monitoring test to verify that the discharge does not exceed the limits as set forth in the permit document.

Ms. Mackert also sent guidance regarding the submission of a "Notice of Planned Change" and requirements for updating the existing Stormwater Pollution Prevention Plan (SWPPP). A copy of this communication is included as Attachment A to this memo. In summary, the VDEQ requirements are as follows:

1. A Notice of Planned Change (NOPC) must be submitted detailing any changes to the existing system that are intended. The NOPC shall include an existing site plan, a plan showing the intended changes, and a narrative describing the changes and BMP improvements (if applicable).
2. VDEQ recommends that the facility complete an outfall evaluation for unauthorized discharges once all site work has been completed. Although the permit requires this evaluation to be done annually, completing such an evaluation after the conclusion of the site work (even if one has already been done for the year) is to the advantage of the facility.
3. The SWPPP needs to be updated; however, only those sections of the SWPPP that have been rendered inaccurate by the physical changes on-site will need to be addressed. A modification sheet will be included with the SWPPP that shows what sections have been updated and when they were updated. It is recommended that the SWPPP again be signed and certified in accordance with Part 11K of the permit once all site work has been completed. The updated SWPPP shall be kept on-site; however, it does not need to be submitted to VDEQ for approval.

We also spoke to Ms. Mackert specifically regarding the possible addition of the canopy, O/W separator, and filtration BMPs. She explained that VDEQ has no regulatory authority to require any BMPs to be installed, as their only oversight pertains to the discharge monitoring, exclusively. However, she was clearly in favor of any improvements to the site BMPs, and felt that the specified changes were clearly in the best interest of the Town.

Ms. Susan Mackert  
May 4, 2011

**Subject: Notice of Planned Change - Leesburg Central Maintenance Facility Fuel Island**

**Dear Ms. Mackert:**

On behalf of the Town of Leesburg, Rummel, Klepper and Kahl, LLP and our partner GeoConcepts Engineering, Inc. we are pleased to submit this Notice of Planned Change for the Central Maintenance Facility in accordance with Part 11J of the Town's permit. The following narrative outlines the proposed changes to the Fuel Island located at the Central Maintenance Facility. This facility and the adjacent Water Pollution Control Facility are regulated under the 2009 General Permit Number VPDES VAR051427.

**Introduction**

Based on the need to upgrade aging infrastructure, provide additional fueling capabilities and enhance safety, the Town of Leesburg proposes to upgrade their Central Maintenance Facility's fuel station. This project proposes the removal of two underground fuel storage tanks and replace them with two (2) 6,000 gallon above ground storage tanks. New fuel dispensers will also be installed. Demolition of existing fuel island infrastructure and accessory structures will be required in addition to a removal of the concrete pad, concrete island, tanks, and dispensers. A diagram showing the existing site conditions is included as Attachment A. The existing site is currently drained by overland flow directed towards grate drop inlets which connect to the on-site storm sewer system. The first grate inlet near the existing fuel island contains a valve that can be closed to prevent runoff from entering the storm sewer at this location. The project site drains through the existing storm sewer system into an open ditch, and then into the floodplain of Tuscarora Creek, approximately 220 feet from the existing fuel island.

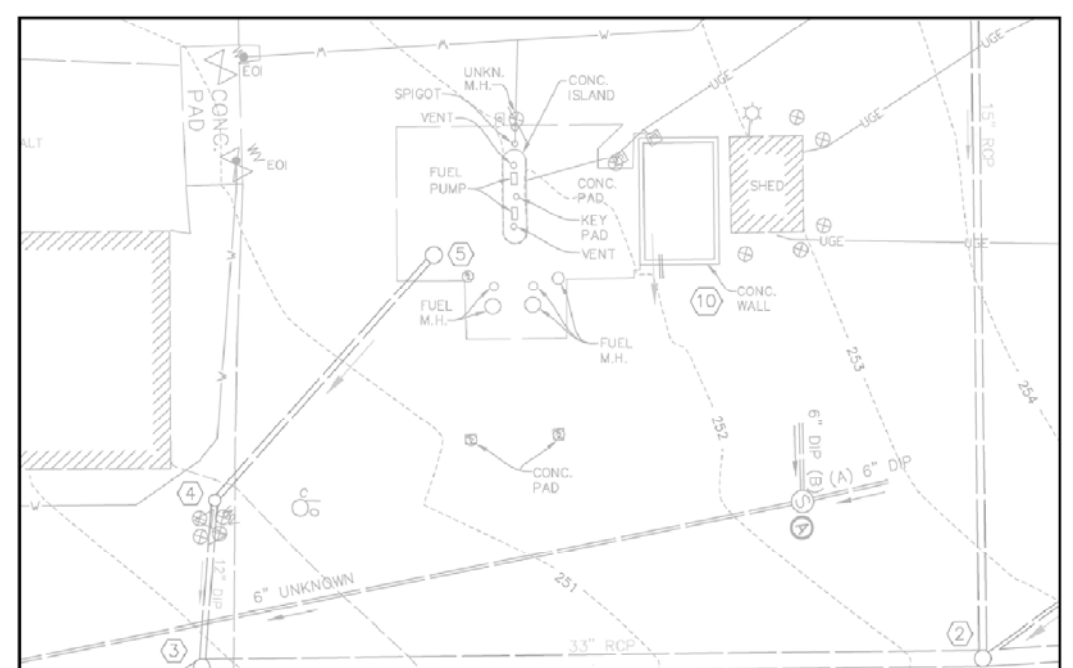
**Proposed Improvements**

Due to the sensitive nature of the site and its proximity to Tuscarora Creek, the Town of Leesburg is providing several enhancements for this proposed project that will improve water quality, increase safety and decrease the chance of illicit discharges into Tuscarora Creek. These enhancements are described below and are shown on Attachment B.

**Above Ground Storage Tanks, ASTs:** The two 6,000 gallon ASTs are double-walled steel construction and provide secondary containment totaling 110% of the tank capacity. A small reservoir is also provided on the underside of each tank. One tank will contain automotive grade diesel fuel while the other tank will contain gasoline. The tanks will be placed in the center of the fuel island on a concrete island and will be protected by anti-crash bollards and steel vehicle guards. In addition, new fuel dispensers will be provided to replace the older systems.

Ms. Susan Mackert  
May 4, 2011

**ATTACHMENT A**  
**EXISTING CONDITIONS**



**COMMONWEALTH of VIRGINIA**  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
NORTHERN REGIONAL OFFICE  
13901 Crown Court, Woodbridge, Virginia 22193  
(703) 583-3800 Fax (703) 583-3821  
www.deq.virginia.gov

David K. Paylor  
Director

Thomas A. Fisk  
Regional Director

May 17, 2011

Mr. William S. Springer, PE  
Project Manager  
Rummel, Klepper, and Kahl, LLP  
10306 Eaton Place, Suite 240  
Fairfax, VA 22030

Re: Notice of Planned Change, VPDES Permit No. VAR051427

Dear Mr. Springer:

Thank you for your correspondence dated May 4, 2011, with respect to the planned improvements at the Town of Leesburg Central Maintenance Facility. DEQ has reviewed the information and has no comments or objections to the project.

Should you have any questions, please do not hesitate to contact me at (703) 583-3853 or susan.mackert@deq.virginia.gov.

Respectfully,

*Susan Mackert*  
Susan D. Mackert  
Environmental Specialist II Senior

cc: FileNet - VAR051427  
Permit File - VAR051427  
Mr. Robert Denton - GeoConcepts Engineering, Inc.

Ms. Susan Mackert  
May 4, 2011

**Canopy:** A new, heavy duty canopy will cover the entire fuel island to minimize the amount of precipitation falling directly onto the new concrete fuel island pad. Lights will be provided to provide additional security.

**Storm Drainage System:** The proposed improvements will be drained by a modified storm drainage system that incorporates variety of new BMPs aimed to enhance water quality and to minimize and contain any potential release of petroleum hydrocarbons. The improvements are summarized as follows:

- **Slotted Trench Drains to new BMP Device:** The concrete island will be surrounded by slotted trench drains to capture surface runoff. On the upstream edge of the concrete fuel island pad, slotted trench drains will intercept surface water from the parking lot and direct the runoff through a small storm sewer to a new underground BMP stormwater management filter system (Context StormFilter) before runoff can flow over the concrete fuel island pad. The BMP device will provide up to 65% removal efficiency for phosphorous and nitrogen runoff. Runoff from the canopy will also be placed directly into the slotted trench drain and storm system and through the BMP device.
- **Slotted Trench Drains to Oil/Water Separator:** The downstream portion of the concrete fuel island pad will capture the limited expected runoff underneath the canopy through slotted trench drains. This runoff will be directed to a new 1,000 gallon capacity oil/water separator that is intended to remove petroleum products for the stormwater runoff stream resulting from routine spills and overfills at the fuel island. The oil/water separator will also function as a back-up containment in the event of a significant spill or release occurring at the fuel island. The oil/water separator will be connected to the existing storm sewer system, just downstream of the proposed BMP device.
- **Storm Sewer Shut-Off Valve:** The existing inlet immediately downstream of the BMP device and oil/water separator contains a valve that can be manually closed to prevent additional water from entering the storm sewer system. This is identified as inlet #4.

**Regulatory Compliance**

Besides providing this Notice of Planned Change to DEQ, it is the intent of this notification to request written consent from DEQ acknowledging the suitability of the described proposed conditions in maintaining conformance with the Town's VPDES permit as administered under the Commonwealth's VPDES program. The Town would also like to confirm that connecting the oil/water separator to the storm sewer is an acceptable practice and meets the intent of the VPDES permit.

If you have any questions or require additional information, please feel free to call either Bob Denton or Bill Springer at the phone numbers listed below. We look forward to your review and concurrence with the Town's approach to enhance water quality and reduce the potential for illicit discharge for this proposed improvement.

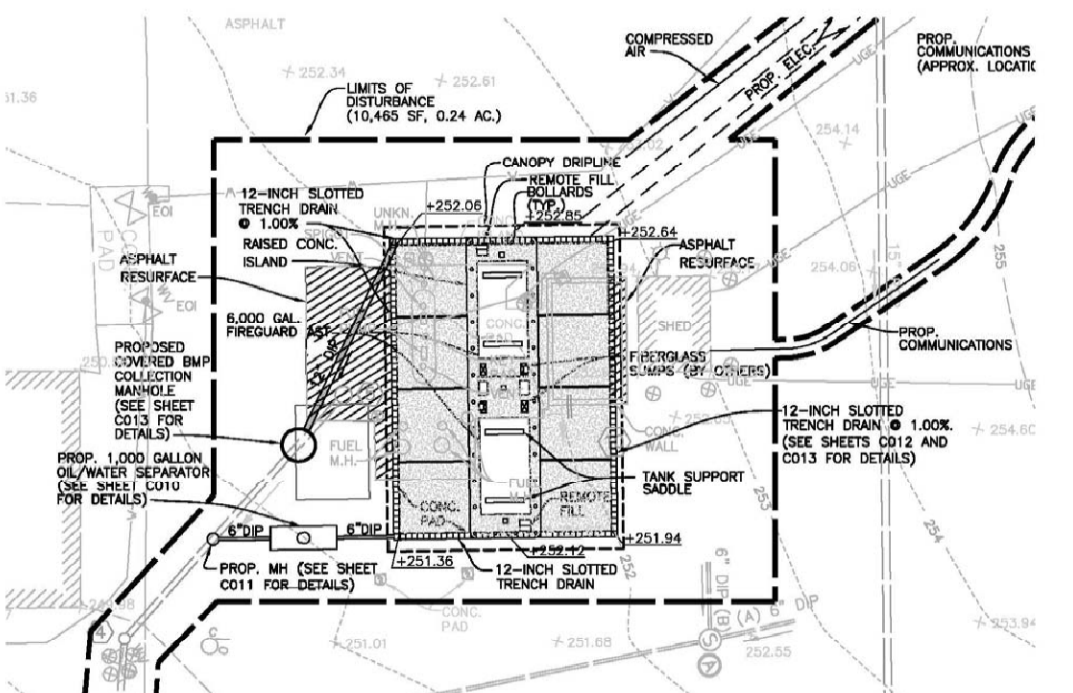
Very truly yours,  
RUMMEL, KLEPPER & KAHL, LLP  
William S. Springer, PE  
Project Manager, 703-246-0028

GeoConcepts Engineering, Inc.  
Robert K. Denton, Jr., CPG, LRS  
Senior Geologist, 703-726-8030

Attachments  
Attachment A - Existing Fuel Island Conditions and Features  
Attachment B - Proposed Fuel Island Conditions and Features

Ms. Susan Mackert  
May 4, 2011

**ATTACHMENT B**  
**PROPOSED CONDITIONS**



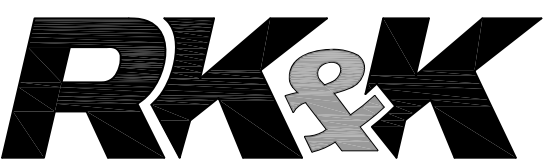
Attachments: A. Communication from Susan Mackert, VDEQ  
B. Secondary Containment Memorandum



Attachment A and B and not included in this summary reproduction.

TOWN OF LEESBURG, VIRGINIA  
25 WEST MARKET STREET, P.O. BOX 88, LEESBURG, VA 20178  
CENTRAL WAREHOUSE & MAINTENANCE FACILITY

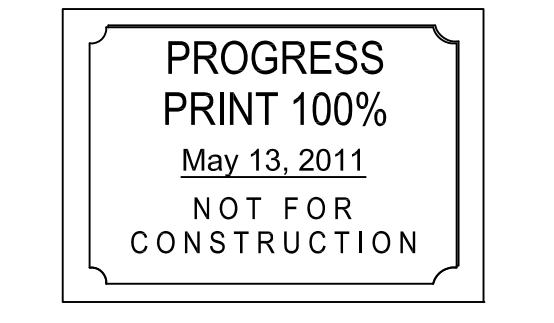
FUEL ISLAND UPGRADE



10306 EATON PLACE  
WILLOWWOOD II, SUITE 240  
FAIRFAX, VA 22030  
(P) 703 246-0028  
(F) 703 246-0123



1420 King Street Suite 510  
www.wendelcompanies.com  
p:703.299.8715 f:703.299.8719  
ARCHITECTURE • ENGINEERING • PLANNING  
ENVIRONMENTAL SERVICES • CONSTRUCTION MANAGEMENT



THIS DOCUMENT, AND THE IDEAS AND DESIGN INCORPORATED HEREIN, ARE AN INSTRUMENT OF PROFESSIONAL SERVICE, THE PROPERTY OF WENDEL, KLEPPER AND KAHL, LLP. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT THE WRITTEN AUTHORIZATION OF WENDEL, KLEPPER AND KAHL, LLP.

NO.	REVISIONS	DATE

DWG. TITLE

CORRESPONDENCE

DATE	04/29/11
SCALE	N/A
OWN: K&B	CHK: WSS
PROJ. No.	
DWG. No.	

C016



new sheet added

M:\Projects\2009\VPDES\_Leesburg\Task\_03\_Maintenance\_Facility\CADD\Current\_Sheets\16-CORRESPONDENCE.dwg, May 17, 2011 - 2:28pm