



## Loudoun County, Virginia

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### Department of Building and Development

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## Technical and Procedural Newsletter

February 22, 2012

**To:** Members of the Land Development and Home Building Community

**From:** Terrance Wharton, Director

*The purpose of this correspondence is to inform the Land Development and Home Building Community of technical and procedural updates that have recently transpired. Please distribute this information to applicable personnel within your organization.*

### IN THIS EDITION:

Guidance on the County's Stormwater "Hotspot" requirements as they relate to the fuel storage and dispensing for emergency (backup) generators. This guidance only applies to emergency generator applications.

### APPLICABLE STANDARDS:

Loudoun County Facilities Standards Manual (FSM), **Section 5.320.E.4**

### DISCUSSION:

Emergency generator installations typically involve the placement of above-ground fuel tanks and fuel dispensing (filling of the tanks with petroleum-based fuels) at somewhat regular intervals. Under the "Hotspot" section in the facilities manual (FSM 5.320.E), **FSM 5.320.E.4** requires oil/water separators for all facilities that engage in activities such as fuel storage and dispensing. Additionally, this section addresses the need for secondary containment for fuel tanks, detection of material loss, and an emergency response plan.

We are finding that with many installations of emergency generators which serve facilities such as data centers, hospitals, public safety sites, etc., the frequency of tank refueling is low, typically driven by generator testing. In addition, most fuel tanks today satisfy the secondary containment criteria as they are "double-walled" and contain sensors that detect fuel loss. Finally, industry templates for the aforementioned Emergency Response Plan are readily available to applicants.

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Based upon the limited number of times per year that fuel dispensing will occur, the chance for oil-laden runoff from the operation to be conveyed (through storm sewer systems, ditches, etc.) to receiving waters is low – as long as incidental spills are cleaned up quickly (before they reach a storm drain inlet) and the area adjacent to the fuel tank is vigorously inspected and maintained.

Hence, the third (3<sup>rd</sup>) item in the following table provides an option to the installation of a typical oil/water separator or to the modification of existing storm sewer appurtenances with oil separator mechanisms for emergency generator locations. *(Note: for clarity, the other two design requirements are included in the chart.)*

FSM Section / Description	Acceptable Design Element
<b>FSM 5.320.E.4.b</b> – Provide secondary containment for fuel tank serving generator and material loss detection.	Double-walled fuel tank with fuel loss sensor; <u>or</u> other methods such as berms, walls, dikes, etc. that provide storage for the tank volume plus precipitation and a means for detecting fuel loss.
<b>FSM 5.320.E.4.c</b> – Provide an approved Emergency Response Plan.	Submit the plan to the Loudoun County Dept. of Fire & Rescue prior to initial operation of the emergency generator.
<b>FSM 5.320.E.4.a</b> – Provide an oil/water separator to serve the fuel tank and dispensing area.	<ul style="list-style-type: none"> <li>• Provide a hydrocarbon-type “spill kit” adjacent to the fuel tank and generator installation (a “mobile” spill kit is acceptable) to quickly mitigate incidental or larger spills, should they occur.</li> <li>• Provide an inspection and maintenance narrative as part of the water quality (BMP) narrative or “site notes” which portrays a regular schedule of inspections and clean-up of oil slicks and/or oily sludge that could build up over time.</li> </ul>

**EFFECTIVE DATE:** These options for meeting the Hotspot requirements for emergency generator installations are available immediately.

For questions or additional information please contact Jimmy Edmonds of my staff at 703-737-8052.