Targeted Constituents

<table>
<thead>
<tr>
<th>Significant Benefit</th>
<th>Partial Benefit</th>
<th>Low or Unknown Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sediment</td>
<td>Heavy Metals</td>
<td>Floatable Materials</td>
</tr>
<tr>
<td>Oxygen Demanding Substances</td>
<td></td>
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<tr>
<td>Nutrients</td>
<td>Toxic Materials</td>
<td>Oil &amp; Grease</td>
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<tr>
<td>Bacteria &amp; Viruses</td>
<td>Construction Wastes</td>
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**Description**
The purpose of this BMP is to reduce pollution impacts from cleaning and maintenance of air conditioning and refrigeration units. It is allowable to discharge condensed water, which is essentially pure water from the atmosphere. It is illegal to discharge any water that contains chemicals, detergents, algae-killing agents and other manmade substances onto the ground or onto any surface which drains to the city stormwater drainage system, ditches, swales, curbs, natural creeks and streams or wetlands. Even if the contaminated water does not directly reach the storm drainage system, the chemicals will wash into the stormwater runoff during the next rainfall.

**Approach**
It is illegal to discharge any substance (liquid or solid) to the environment in any manner that could allow the substance to wash into the municipal stormwater drainage system, ditches, swales, natural streams and creeks, wetlands or sinkholes. This prohibition is mandated by federal and state regulations, and also included in the Stormwater and Street Ordinance (Chapter 22.5 of the City Code). The City of Knoxville is required to prohibit non-stormwater discharge as part of the National Pollutant Discharge Elimination System (NPDES) permit issued to the City of Knoxville by the state of Tennessee. The City Engineering Department website contains the current ordinance and NPDES permits.

See IC-01 (Non-Stormwater Discharges to Storm Drains) for a list of exempted discharges. Both air conditioning condensate and refrigeration condensate are on the list of allowable discharges, provided that such water is distilled pure water taken from the atmosphere. However, any cleaning water or washwater cannot be discharged to the ground, but must be captured for disposal in the sanitary sewer system.

When cleaning air conditioner coils, capture washwater and dispose properly. Minimize the use of chemicals and cleaning agents by scrubbing to remove dirt and deposits. If power or pressure washing, then contain all generated washwater for recycling and proper disposal.

In addition to possible fines and civil penalties mentioned on the next page, the Tennessee Department of Environment and Conservation (TDEC) also investigates water quality complaints received from the general public. The local TDEC office regularly investigates known water quality issues on Knoxville creeks and streams.
The following notification letter, sent to area businesses in response to a few instances of pollution, explains the types of water quality violations that have been observed.

June 2002

To: Knoxville local air conditioning & refrigeration businesses, incorporated.

Re: Proper disposal of wastewater from refrigeration maintenance and repair. Please post this letter in a conspicuous location for all employees to read.

Dear Owner/Operator:

This notice is being sent to all air conditioner and refrigeration maintenance and repair companies operating in the City of Knoxville as a courtesy, and does not necessarily reflect on your particular company or your disposal practices.

The City has received information that some companies discharge wastes into the storm drainage system during cleaning and maintenance of air conditioners and refrigeration units. Wastes must be prohibited from entering roof drains, parking lot catch basins, ditches, and other areas that drain to natural creeks and streams. Only uncontaminated condensation may be allowed to enter the storm drainage system.

It has been brought to our attention that some companies also use tablets to inhibit algae and bacteria growth in drain pans. This product contaminates the condensation and is prohibited from being discharged outdoors, either to the ground or anywhere where it could be washed into the storm drainage system (and eventually natural creeks and streams). Such illegal discharges pollute the environment and may be enforced with civil penalties up to $5000 per day per discharge.

All of the stormwater drainage systems drain directly into the major creeks and streams without any treatment or filtration. Help protect our stream water quality and comply with the law. Please discharge all wastewater from your cleaning operations to the sanitary sewer system (indoor drains) so that it will be treated at one of the municipal wastewater plants.

On July 1, 1996, the State of Tennessee Department of Environment and Recreation (TDEC) issued a NPDES permit to the City of Knoxville. The NPDES permit requires the City to prohibit any non-stormwater discharges, as listed in the Code of Federal Regulations 40 CFR (d)(2)iv(B)(I). To meet this requirement, the Knoxville Stormwater and Street Ordinance was adopted by the Knoxville City Council in 1997. The list of allowable discharges is in Section 22.5-52 of the ordinance and repeated in IC-01 (Non-Stormwater Discharges to Storm Drains). You may view the ordinance or the entire BMP Manual at the Engineering Department webpage http://www.cityofknoxville.org/engineering/

If you have any questions or comments regarding this letter or any other water quality issues, please contact me at (865) 215-2148. Thank you for your assistance in keeping our waterways (Tennessee River, natural creeks and streams, ditches, storm drains) clean and healthy.

Sincerely,

Robert E. Jones
Stormwater Management  (Knoxville Engineering Department)