

# HVAC COIL CLEANING & MAINTENANCE

## BMP FACTSHEET 15

Rev. 04/2023



### Targeted Pollutants

Sediment	X
Nutrients	
Trash	
Metals	X
Bacteria	
Oil & Grease	X
Chemicals	X
Salt	X

### Objectives

Cover	
Contain	X
Educate	X
Reduce/Minimize	X
Product Substitution	

### DESCRIPTION

In order to maintain an efficient and high functioning HVAC system, it is necessary to perform periodic coil cleaning on HVAC units. Several cleaning methods exist and it is the responsibility of the base operations and maintenance contractor to determine what method works best for the types of HVAC systems found on Fort Belvoir. Based on interviews with the current base operations and maintenance contractor, HVAC equipment at Fort Belvoir requires the use of cleaners to ensure the efficiency and longevity of the equipment is maintained. In order to comply with MS4 and ISW permit conditions, it is very important that excess chemicals in wash water from cleaning coils does not get discharged into storm drains and leach into groundwater. The pollutants found in wash water (such as dirt, grease, cleaning solutions, heavy metals and suspended solids) pose a threat to natural water ways and can be detrimental to fish and other aquatic organisms. The discharge of these harmful pollutants into storm drains and ground water can be reduced if proper BMPs and good housekeeping measures are implemented.

### GUIDELINES

- Keep good housekeeping practices. Have good housekeeping strategies. Reference BMP Factsheet Overview for more details.
- Refrain from washing any cleaning product into storm drains.
- Store, handle and apply chemicals in a manner consistent with chemical/product specific instructions provided by the manufacturer and without coming into contact with stormwater.



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## MAINTENANCE/GOOD HOUSEKEEPING

The following best management practices and good housekeeping should be followed to ensure compliance with all Fort Belvoir stormwater permits:

### *Cleaning Agent Selection:*

- Visit the EPA website to determine if your choice of cleaner used ingredients that are listed on the Safer Chemical Ingredients List (SCIL) is a list. This list is designed to help manufacturers find safer chemical alternatives for their cleaning products. It is important to know however, that although the ingredients are determined to be safer than traditional chemical ingredients, it does not mean they should ever be discharged into a storm drain.
- Some companies sell environmentally “friendly” products that are no rinse or foam products but, even these products although considered environmentally friendly, should never be washed down storm drains!
- There are many acid and alkaline-based cleaners available for coil cleaning today. These cleaners affect water pH which can be detrimental to aquatic organisms if released into a storm drain.



### *Material Storage:*

- Cleaning product should be stored preferably inside.
- Cleaning products should not be stored on the ground and should be stored in such a manner as to not come in contact with stormwater.

### *Cleaning Agent Application Considerations:*

- Always be aware of what is surrounding your HVAC unit when cleaning the coils. If a storm drain is located directly in the vicinity of your cleaning activities you may need to take extra precautions to ensure water does not enter any storm drains, swales, or drainage ditches;
- Rinse water containing cleaning product must be captured so it does not enter groundwater or is carried by stormwater runoff to nearby waterways including the storm sewer system. Many companies today sell products that allow for the recapture of cleaning products and rinse water so that it can be contained and safely disposed of in accordance with local, state and federal laws and regulations. These products include; Spill Blocker Dikes (PIG®), absorbent pads, and other types of containment products;

## SPILL RESPONSE PROCEDURES

In the event of a spill or leak, follow the appropriate Spill Response Procedures posted at your facility or refer to the BMP Factsheet Overview.

- **Survey the incident** from a safe distance. Identify the source of release and the material being released.
- Call the Ft. Belvoir Fire Department if spills are greater than 5 gallons OR greater than 5 square feet. If ANY amount of leaked material has entered a storm drain or waterway call the Ft. Belvoir Fire Department at 703-781-1800 and DPW Environmental Division (Env. Div.) at 703-806-3694.
- Provide the Safety Data Sheet of the spilled material to the spill response personnel.
- Fill out Spill Incident Report in your SWPPP.
- REPORT ALL SPILLS REGARDLESS OF SIZE TO DPW/ENV. DIV.

### REPORT SPILLS TO DPW/ENV. DIV. BY:

- E-mailing your Spill Incident Report to zachary.d.witman.civ@army.mil
- Calling 703-806-3694