THE WORLD LEADER IN CLEAN AIR SOLUTIONS

Gulf Oil Odor Control

SAAF TECHNOTE

Oil Chemicals Cause Gas Station Like Odors

The oil event in the Gulf of Mexico has resulted in millions of gallons of crude oil being injected into the ocean waters of the gulf. This oil can cause gas station like odors that are the result of volatile organic compounds (VOCs) found in crude oil, such as benzene, tuolene, xylene, and naphthalene. Through the oil evaporation process, these gases become airborne, impacting the gulf coastal areas where people live and work. In addition, oil dispersants have been injected into the water and air to assist with oil mobilization. The dispersant is a chemical base that becomes airborne and contributes to the malodorous environment around the gulf area. This odor laden air can enter buildings via doorways, windows, and heating, ventilating, and air conditioning (HVAC) systems. A nice ocean breeze has the potential to quickly become a noxious nuisance to those in the Gulf Region.

Potential Negative Impact of Odor

According the U.S. Environmental Protection Agency (EPA), low levels of odor-causing pollutants associated with oil on the shore in the Gulf Region has been observed. While the EPA has conducted monitoring of the air around the gulf coastal areas, using monitoring instrumentation targeted to specific air toxics, the exact chemical makeup of the air has not been identified. Levels of ozone and particulates ranging from “good” to “unhealthy for sensitive groups” has been documented on the EPA’s Air Quality Index for the Gulf Region. These unknown chemicals can cause headaches: eye, nose and throat irritation; or nausea. Some people may be able to smell several of these unknown chemicals, well below those that could cause short-term health problems.

AmAir®/C Filters Successfully Reduce Odors
AAF’s AmAir/C filter is a combination filter with a particulate removal efficiency of MERV 7 (MERV 6 available with AmAir/CE).

Oil dispersant being deployed to the oil on the water’s surface of the Gulf of Mexico. Gulf coastal areas could potentially lose income from the noxious odors involved in the cleanup.

AAF Gas-Phase Solutions

In combination with our expertise in airborne particulate filtration, AAF’s Gas-Phase products are developed for unique and effective total filtration solutions to protect people, processes, and equipment. A complete line of filtration solutions for the removal of chemicals from the air is available, including AmAir/C disposable carbon filters. Made with activated carbon, AmAir/C filters are more effective than standard odor control filters, because they contain more chemical media, using AAF’s SAAFWeb™ technology.

Disposable carbon filters are designed to provide odor and particulate control where light to moderate odor conditions exist. AmAir/C filters are an economical, quick fix solution to many odor problems. While several chemical compounds have been identified as being present in crude oil and in the oil dispersants, there are likely other unidentified VOCs present. AmAir/C filters remove VOCs and reduce their levels to help control oil-related odors. AmAir/C filters are available in 1″, 2″, and 4″ depths, and are interchangeable with conventional particulate filters of the same size. Simply replace your prefilters with AmAir/C filters and enjoy gaseous contaminant control.

AAF® INTERNATIONAL

BETTER AIR IS OUR BUSINESS®

Gulf Oil Odor Control

AAF's Gas-Phase Technology

AAF's SAAFWeb technology results in a filter that has the same dimensions as a dust removal filter but with the added benefit of odor control, making it an easy replacement for existing dust removal filters. The activated carbon is dispersed within the AmAir/C filter to remove airborne VOCs.

Table 1 below contains a listing of common coastal area building types, where oil odors may be present along with the recommended AmAir/C filter. In addition to buildings, ships traveling through the Gulf area are also likely to experience oil odors. The AmAir/C filter can also be used in the HVAC systems of ships and cruise liners.

Table 1:
Type of Filter Recommended for Oil Odor Control

Application	HVAC Equipment Type	AmAir®/C (Typically 2″ or 4″ filters)	AmAir®/CE (Typically 1″ filters)
Hotel Guest Rooms	Unitary equipment including fan coil units (FCU), package terminal air conditioning (PTAC) units, etc.		•
Hotel Common Areas & Conference Areas	Air handling units (AHU), roof top package units (RTU)	•	
Commercial Buildings	Air handling units (AHU), rooftop package units (RTU)	•	
Condominiums	Unitary equipment including fan coil units, residential furnaces, and air conditioning units		•
Restaurants & Retail Stores	Rooftop package units	•	

For more information on the AmAir/C filters, including specifications, visit our website at www.aafintl.com

9920 Corporate Campus Drive, Suite 2200, Louisville, KY 40223-5690
888.223.2003 Fax 888.223.6500 | www.aafintl.com

GPF-8-104A 08/15