

JOINT NOTICE TO INDUSTRY

May 2026





The Joint Inspection Group (JIG), International Air Transportation Association (IATA), Airlines for America (A4A), and IATA Fuel Quality Pool (IFQP) are issuing the following joint notice to the aviation fuel industry:






Recent increases in reports of microbiological (MBG) contamination in airport fuel handling systems have highlighted the need for attention to this important subject. Fuel and fuel system microbiology can be complicated, so operators should be aware of these MBG fundamentals regardless of which operating standard you are using:

1. Low levels of MBG are present in all water on earth and consequently impossible to eliminate completely from aviation fuel handling systems; therefore, it is critical to prevent these microorganisms from multiplying
2. MBG cannot be easily seen with the naked eye and rapid detection methods are limited; therefore, our best operational defense is to minimize water in the system while watching for the physical evidence of contamination
3. Observable evidence of MBG presence should not be considered as a normal operating condition
4. When evidence of MBG activity is observed, prompt action must be taken to identify its source, control its proliferation, and remediate the fuel system to prevent further impact
5. Full remediation, once MBG activity has progressed, may be very difficult; therefore, prevention of MBG is key to ensuring fit-for-purpose fuel

MBG detection typically relies on laboratories with specialized equipment which is impractical for day-to-day aviation fuel storage system operations. A simpler approach is to observe routine samples for gross evidence of MBG. Operators should take note of these common signs:

Table 1: Common symptoms of MBG

<p>Dark spotting on filter elements, especially coalescer elements, regardless of severity (leopard spotting)</p>		<p>Presence of a third layer between fuel and water typically appearing as lacy or fluffy sometimes containing "bubbles" which do not float or sink</p>	
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<p>A slime or sludge-like material</p>		<p>Premature filter plugging</p>	
<p>A lacy, fluffy or membranous film especially on tank walls or on filter elements</p>	 	<p>Cloudy or hazy fuel and or water layers</p>	
<p>Foul smelling water from tank or filter sumps</p>		<p>Low pH of water in sumps/tank bottoms</p>	

It is important to note that MBG typically occurs in the interface between water and fuel, making visual observation of samples at the fuel/water interface an important tool for monitoring fuel quality. MBG evidence may be missed if only clean fuel samples are analysed.

Every routine fuel quality activity is an opportunity for MBG observation, for example, a foul odor in a line displacement prior to sampling. Where any symptoms from the table above are observed, operators should immediately conduct further investigation and notification, according to your operating standard and/or internal company procedures. Continuing to operate with these signs should not be considered “normal.”

Aviation fuel filters are not designed to prevent the spread of MBG. Microbiological contamination of aircraft tanks can lead to problems ranging from fuel quantity probe failures to tank corrosion, and in extreme cases fuel system blockages which can affect flight safety.

Given that small traces of MBG are always present in a fuel system, it is not possible to set an acceptable maximum amount. When clear signs of MBG are detected, you should inform affected parties according to the requirements of your operating standards, and it is strongly encouraged to notify key affected stakeholders.

This document does not intend to cover all aspects of monitoring, detecting, mitigating and remediation, but instead serves to remind the industry that microbial contamination is a serious event and action must be taken. There are industry guidance documents in existence and experts available to support any suspected microbial contamination events. Prompt action is critical to protecting your fuel system infrastructure and flight safety.

Suggested microbial references:

JIG TID 1 Microbial Growth in Fuel and Monitoring Strategies

<https://www.jig.org/standards-publications/tid-1-microbial-growth-in-fuel-and-monitoring-strategies-edition-2/>

ASTM D6469 Standard Guide for Microbial Contamination in Fuels and Fuel Systems

<https://www.astm.org/d6469-20.html>

IATA Guidance Material on Microbiological Contamination in Aircraft Fuel Tanks (GM-MCAFT)

https://www.iata.org/en/store/publications/manuals-standards-and-regulations/guidance-material-on-microbiological-contamination-in-aircraft-fuel-tanks--gm-mcaft__gm-mcaft/?code=9680-06