

Operations Bulletin



Bulletin 83

Microbial Monitoring Strategies

October 2015

Introduction

This publication, available to download from the JIG website (and soon to be available as a hard copy) is a new format JIG Information Document: *Microbial Monitoring Strategies*. Endorsed by IATA, it complements their publication: *Guidance Material on Microbiological Contamination in Aircraft Fuel Tanks*.

Although IATA recommends maximum allowable levels of microbial contamination in aircraft fuel tanks, there are no industry specified microbiological contamination limits for the manufacture or distribution of aviation fuels up to point of delivery to aircraft due to the wide variety of facilities involved and the extremely dynamic nature of the distribution system. Guidance provided in this JIG Information Document is intended to ensure microbe levels at the point of delivery to aircraft are significantly lower than the IATA recommended maximum levels for aircraft fuel tanks.

The following content areas are included in this three part document.

Part 1: Microbial Monitoring Strategies

- Introduction and background on the subject of microbial contamination
- Guidance on appropriate sampling and monitoring strategies for use throughout the aviation fuel supply chain up to the point of delivery to aircraft

Part 2: Microbial Growth Risk Management and Testing

- Guidance to operations staff wanting to employ risk based microbial testing as part of their management and control strategy for both fuel product quality assurance and facility maintenance
- Guidance, where microbial contamination has been confirmed by testing, on more detailed monitoring that can help identify potential upstream or local sources and provide remediation strategies
- Guidance on test kits and limit values that can be used for a monitoring program

Part 3: Informative annex on Microbial Growth and Monitoring Strategies

- Information on microbial proliferation and impact on systems - fouling & corrosion
- Specific issues related to microbial contamination of fuel, some limited suggestions on remediation, and advice on further reading

Note: The JIG Standards only mandate the use of semi-annual microbial monitoring for vehicles routinely used for the defueling of aviation fuel. However, microbial monitoring may also be used as an alternative to quarterly visual inspections to assess the microbiological cleanliness of product recovery tanks and as a means to evaluate possible extension to the main storage tank cleaning frequency.

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Actions to implement this Bulletin - with effect from 1 January 2016	Action Type (Table 1)
Local management shall obtain a copy of the JIG Information Document and take appropriate action	I

Table 1 - Bulletin Action Types (Bulletins do not necessarily contain all Action Types)

Action Types	JIG Bulletin Action Type Definition
JS	Change to JIG Standard – to be adopted by JV and/or Operator to continue to meet the JIG Standard(s) (JIG 1, 2, 4) (**)
RP	JIG Recommended Practice which the JV should consider adopting as its own practice (**)
I	Issued for information purposes only
Note (**) If the JV agreements require any of the JIG Standards and/or any of the JIG Common Processes as the governing operational standard, then adoption of changes to applicable JIG Standards and/or Common Processes should not be considered optional by the JV Board.	

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