



## WORKSHOP

# Microbial Growth in BioDiesel Supply and Distribution Systems

Date: April, 3rd 2014

Location: Paris

from 09h00 to 16h15

### *October 2009*

Aqua-tools and its partners organized in London (UK) and Antwerp (Belgium) a successful workshop on **understanding the nature and cost of uncontrolled microbial contamination in fuel systems** and using both new and traditional rapid tools to diagnose fuel systems for uncontrolled microbial contamination using the ATP G2 test to identify microbial loads in fuels.

### *March 2011*

CONCAWE - oil companies' European association for environment, health and safety in refining and distribution, DGMK and Energy Institute has done an interesting workshop on Microbial Growth in fuel Supply and Distribution Systems in Brussels (Belgium)

### *April 2014*

3 years after the CONCAWE workshop, Aqua-tools has decided to make a **new point** on **Microbiological Growth Study of Biodiesel in 2014**.

**Working day targets are to focus on additional impacts of introduction of FAME's (Fatty Acid Methyl Esters) on diesel**, to understand **origins of microbial contamination**, to introduce a faster microbial detection tool by ATP G2 (ASTM D7687 – 11) as a complementary test , and a review of available treatments and how to apply them, with customers experiences,...

# Preliminary program

09h00 - 10h00      **Coffee and Registration**

10h00 - 10h10    Opening Remarks and Speakers introduction  
*Marc Raymond - CEO -Aqua-tools / France*

10h10 - 10h45      **Introduction**

**Status of Biodiesel in Europe**

What is biodiesel?

Why use biodiesel?

Production of biodiesel in the EU

*Mrs Maurizi – EBB- European Biodiesel Board / Belgium*

10h45 - 11h45      **Fuel Microbiology Basics**

**Fundamentals of Microbial Growth**

Microbial Growth and the Fuel Supply and Distribution System

What are microbes and how did they get in my fuel supply system anyway?

What are the environmental factors that affect growth in fuel systems?

*Dr. Christine Gaylarde - Visiting researcher, Dept. Microbiology and Plant Pathology, University of Colorado, USA*

11h45 - 12h30      **Treatment – Practical strategy**

**What can we do to keep this microbial contamination of fuels (diesel fuels, fuel oil) under control?**

Review of Chemical and alternative solutions

How, where and when can I apply them

*(Mr. Ingo Krull, Market Manager Technical Biocides - Schülke & Mayr / Germany)*

12h30 - 13h15      **Lunch**

13h15 - 14h45

## Measurement & Monitoring

Principles of selection of representative sampling and monitoring from various points in supply chain.

Terminals, road tankers, filling stations, to identify sources of microbial contamination: Determine levels of microbial activity, Locate critical control points.

*(Dr. Frederick J. Passman, BCA / USA)*

Review of Laboratory test procedure – advantages / inconvenients

*(Mr. Ralp Weyandt - SGS Institut Fresenius / Germany)*

Review of Microbiological available on field - Rapid test kit for Fuel, Biofuel by using ATP G2 to be used on field.

*(Dr. Frederick J. Passman, BCA / USA)*

14h45 - 16h15

## Practical industry experience

### **Biofuels implementation project 2011**

Example of Recommendations for Diesel fuels.

Housekeeping practice to reduce and prevent microbe growth and distribution chain good – Customer experience back

*( M. Marc Raymond, aqua-tools , France )*

### **Impact of Biodiesel at retail site**

How microbes effect retail sites

Maintenance Programs

*(Europe)*

### **Upstream and downstream Fuel Management**

How can forecourt retailers and storage managers keep water out, get rid of bugs, and stop clogged filters?

The challenges with bio fuels

Bio Fuel must be truly fit for purpose at the point of sale.

*(Mr. Thomas Schmidt, SGS OGC / Germany)*

## Main Reception

16h15 - 16h30 General Discussion

One to one Question and Answer Session