Task Group on NSF 385
Teleconference Meeting Summary DRAFT
August 24, 2023

Attendees:

Jim Bell	Bio-Microbics, Inc.
Colin Bishop	Anua
Mike Braden	LBC Manufacturing
Kathryn Foster	NSF
Brad Hennig	NSF
Anish Jantrania	Texas A&M
Jim Meyer	Norweco, Inc.
Kaitlin Rinke	NSF
Larry Schantz	Aerobic Guard, LLC
Kevin Sherman	SeptiTech, Inc.
Fraser Sneddon	Sun-Mar Corp.
Jason Snider	NSF
Brian Wakefield	Aerobic Guard, LLC

Discussion

J. Bell welcomed everyone and called the meeting to order. J. Snider took roll and read the anti-trust statement. Six of the 10 voting members were present (60%) which did represent a quorum.

The group began with a review of the previous meeting summary.

Motion by K. Sherman	Approve the previous meeting summary.
Second:	J. Meyer
Discussion:	None.
Vote:	All in favor
Motion:	Carries

The first agenda item was a discussion around the terms Default tank & test contact chamber as they are used in Standard 385. J. Snider explained that during the previous publication review, it was noticed that the terms were used interchangeably, and that the language wasn't clear that the intent was that a "default tank" was a tank provided by the certifying body if the manufacturer did not include one for testing. The group discussed ways to clarify this, including a potential definition added to the Glossary Standard (437). Eventually the group decided to just revise the language in section 6.5.2 (and similar language in 8.6.2) in the standard:

— the manufacturer shall specify all key elements for effective chlorination, including but not limited to, design flow conditions, minimum contact time, and minimum contact tank volume. If a chlorine dispenser is submitted for testing without a manufacturer-specified mixing tank or contact chamber, it shall be tested and evaluated by attaching the chlorine dispenser to a ~~default tank (hereinafter referred to as "test contact chamber"). This tank shall be a mixing tank or contact chamber of the minimum volume and flow path specified by the manufacturer;~~ tank supplied by the test site that meets the minimum volume and flow path specified by the manufacturer.

Motion by J. Meyer	Send proposed language to JC approval ballot
Second:	K. Sherman
Discussion:	None.
Vote:	All in favor
Motion:	Carries

The group moved on to discuss the 3 topics that were part of the WWT-2019-8 – 385 revisions issue paper. J. Bell explained that the UVT portion had been balloted and approved by the JC and was in the 2022 publication of 385. The photorepair topic had been tabled by a motion at the April Joint Committee meeting. J. Bell asked the group for more information on whether ozone off-gassing was an issue. He

shared potential language to add to the Ozone section of the standard to potentially address the concerns of the issue paper. B. Wakefield stated that ozone off-gassing could be an issue in a confined space, but should not be of concern in open air. J. Bell asked for confirmation that ozone systems would be installed outside, and B. Wakefield confirmed this was the case, so there shouldn't be any concern about exposure to off-gassing. J. Bell suggested an informative note could be added to Standard 385, while removing the Ozone loss evaluation section (8.6.2) since off gassing was not a concern. K. Foster suggested looking to Informative Annex I-1 of Standard 50 (Recreational Water Facilities) for language that provided guidance on ozone off-gassing. The group discussed whether there was a need for informative language for instance where ozone equipment may be installed indoors. A. Jantrania asked if ORP controllers could be utilized in this application as they are in swimming pools.

After some wordsmithing, the group arrived at:

8.3 Design and construction

All ozone disinfection devices shall comply with the requirements of Sections 8.3 through 8.5.

NOTE-- For ozone systems intended for indoor use, OSHA regulations should be followed. Ozone is considered toxic above certain concentrations in air. If the ozone concentration in the water exceeds the equilibrium state, the excess ozone will be emitted into the air. The Occupational Safety and Health Administration (OSHA) has set a short-term exposure limit of 0.3 ppm (0.6 mg/m^3) and long-term exposure limit 0.1 ppm (0.2 mg/m^3) time weighted average, over 8 h/d, 5 d/wk.

When the equipment is located in an enclosed room, consideration should be given to having adequate exhaust in case of ozone releases. The exhaust system should provide a minimum of three air changes per hour to comply with the OSHA limits. In addition, an ambient air ozone monitor should be installed. Ozonation systems, which operate under vacuum, should not present a danger of ozone leaks into the treatment room.

Motion by F. Sneddon	Send proposed language to TG straw ballot
Second:	K. Sherman
Discussion:	None.
Vote:	All in favor
Motion:	Carries

Action items

J. Snider to prepare default tank language and send to JC approval ballot.
J. Snider to prepare straw ballot for Ozone language.
Next teleconference date: October 19, 2023