

Drinking Water Additives Joint Committee
November 28 & November 29, 2006
NSF International, Ann Arbor, Michigan
Draft Meeting Summary

This document is part of the NSF International Standards process and is for NSF Committee uses only. It shall not be reproduced, or circulated, or quoted, in whole or in part, outside of NSF activities, except with the approval of NSF.

-
-
-

F. Regenerated and Reactivated Process Media (DWA-2006-1)

D. Purkiss presented his issue paper to the Joint Committee.

NSF has received inquiries from State Drinking Water Agencies and utilities from Maine to California due to the following: a few companies are claiming that regenerated media is Certified to NSF/ANSI 61, and other companies are claiming that they could take spent media from a water treatment plant and regenerate it off-site, or in a mobile unit, and it would retain its original certification to NSF/ANSI 61.

Historically, NSF has not certified regenerated media. NSF's current position is that products lose their NSF Certification if they are contaminated and/or lose traceability from the original certified production facility.

However, currently at least one other certifier has certified regenerated media. Yet NSF Standard 61 procedures for toxicology review and product testing and evaluation are based on the assumption that all ingredients, processing aids, and contaminants are known. This is not the case for regenerated media. Therefore, NSF's position is that the current criteria in NSF/ANSI 61 do not adequately address regenerated media.

D. Purkiss presented the following options to the JC:

- Option 1: NSF/ANSI 61 specifically excludes regenerated media.

Proposed Language:

"...The products that are covered include, but are not limited to, process media used in the following processes: ion exchange, adsorption, oxidation, aeration, and filtration. ***Regenerated media including reactivated adsorption media is excluded from this standard....***"

- Option 2: NSF/ANSI 61 includes criteria to address the toxicology review and testing and evaluation of regenerated media.

Since contaminants on spent media will vary between each water treatment plant, and on a seasonal basis within a water treatment plant, a) a wide battery of chemical tests will be needed on the regenerated media, and b) each lot of regenerated media should be tested.

Draft proposal:

Lot by lot testing would probably require on-site analytical facilities. A separate Annex is proposed to address the frequency of inspections by a certifier of the regeneration and analytical facilities. Minimum criteria in the standard should be established to ensure a minimum level of oversight by certification organizations.

Proposed annex:

1.) Quarterly unannounced inspections of each regeneration facility to verify:

- That the company is segregating and returning media to the same water treatment plant after regeneration if this is a requirement of the water treatment plant;
- That the company is using containers dedicated to transporting drinking water media and has valid washout and container closure tickets available for inspection by the water treatment facility;

- That equipment used in the regeneration of the media are dedicated to drinking water media regeneration, and controls are in place to prevent cross-contamination of virgin material and regenerated media from spent media, waste, and regeneration processes;
- Analytical capabilities, quality control programs, and review of test records.

2.) Each lot of regenerated or reactivated media shall require analyses and evaluation according to Section 3, Table 3.1 Minimum Test Batteries: Regenerated Media, metals, radionuclides, VOCs, pesticides; base product specific analyses from 3.1; and other analyses identified via Section 3.3.3.

D. Purkiss stated that the proposed draft is located in the meeting packet.

D. Purkiss requested a motion to ballot the language to exclude regenerated media from NSF/ANSI 61 or to ballot the proposed criteria, and/or to form a task group to investigate this subject further.

G. Regenerated and Reactivated Process Media (DWA-2006-10)

J. Harrison presented his issue paper to the JC. He stated that it is very common for water treatment media to be taken offsite and regenerated. It has been happening for decades, but whether this regenerated media maintains its certification has never been addressed. There are various arsenic media that can be regenerated. However, throwaway media companies have been using the certification issue for a competitive angle.

J. Harrison stated that the regeneration site is akin to the manufacturing site, and that therefore, the regenerated media should also meet the same standard that virgin resin must meet. He agreed with D. Purkiss that there must be a consistent procedure. He sees the options as: 1) allow the certifiers to make the decision on how to certify regenerated media, 2) do not allow regenerated or reactivated media, or 3) form a task group to add regenerated media to the standard. WQA has developed a procedure to verify that all chemicals in the regeneration process are NSF/ANSI 60 certified. It is also verified that there is no commingling, and the product is retested. J. Harrison stated that WQA took the California DHS procedure into consideration.

J. Harrison pointed out that for many companies, regeneration onsite is too complex. Additionally, the state of New Hampshire wants to allow commingling for economic reasons. However, testing each batch makes cost prohibitive. Certifiers don't test every lot in other product types. They cannot assure QC for each and every product produced.

J. Harrison asked the JC to make a decision about whether this should be addressed by the Standard. He proposed assembling a task group, consisting of both certifiers and manufacturers, to come up with a reasonable process.

Motion: J. Cleland moved to form a task group to include requirements for reactivated/regenerated process media. R. Winton seconded.

Discussion: P. Greiner stated that the task group also needs utility representation.

F. Lemieux brought up the question of what types of contaminants to look for in regenerated media. A. Olah stated that since this is a post-consumer product, it opens Pandora's box since there are an unknown number of contaminants. NSF Standards for plastic pipe do not allow these materials in potable water pipe.

J. Ballanco stated that a separate standard could be drafted to regulate these facilities. He suggested that the end product must meet NSF/ANSI 61, but the facilities could be certified under a different process standard.

Vote: All in favor.

Motion passes. Volunteers for the task group include D. Purkiss (chair), J. Harrison, F. Lemieux, M. Schock, T. Palkon, R. Winton, J. Kempic, F. DiFolco, and A. Ewing.

Comment: R. Church stated that certification criteria should not be a part of NSF/ANSI 60 or 61. The task group should be guided by NSF on what kind of language to incorporate into these existing standards. R. Church stressed that if this is the only way to approach this issue, it should be done in a separate standard.

-
-
-