## **Industrial SPDES Permit Fact Sheet Addendum**

## I. BACKGROUND INFORMATION

The business of this facility involves the transportation, treatment, storage, and disposal of hazardous wastes.

Chemical Services, LLC (CWM) operates an Aqueous Waste Treatment System (AWTS) for treatment of on-site landfill leachates, other site-generated wastewaters, and off-site receipts of liquid wastes. The AWTS discharges through outfall 01A to Facultative Ponds 1, 2 and 3 (Fac Ponds) where the treated effluent accumulates, equalizes, and mixes with atmospheric precipitation. The Fac Ponds are not intended to provide additional treatment except for further reductions in Biochemical Oxygen Demand (BOD). The treated wastewater in the final Fac Pond (Fac Pond 3) is batch discharged through outfall 001, typically once per year when there is an open landfill, over a several day period to the Niagara River after first being tested to ensure compliance with discharge limits. Except for BOD, outfall 001 discharge quality is a long term average of outfall 01A discharges plus precipitation. Site stormwater runoff is currently discharged through outfalls 002, 003 and 004.

The latest SPDES permit for the facility became effective on June 1, 2015 and expires on May 31, 2020.

On April 23, 2015, the permittee requested a permit modification to authorize discharges related to construction and operation of a proposed hazardous waste landfill, referred to as Residuals Management Unit - Two (RMU-2). Fac Pond 3 is within the footprint of RMU-2 so CWM has proposed construction of a new pond, Fac Pond 5, to replace Fac Pond 3. Proposed Fac Pond 5 (24.7 million gallon capacity) will be substantially smaller than the pond it is replacing (Fac Pond 3 = 51.4 million gallon capacity). CWM has indicated that the reduction in Fac Pond capacity will not prevent it from achieving SPDES permit limits. As noted above, the Fac Ponds are only relied upon for BOD reduction and concentration equalization. Stormwater runoff associated with RMU-2 will be tributary to outfalls 002 and 003.

By letter dated June 18, 2015, the Department notified CWM that the RMU-2 SPDES permit modification request was incomplete. In response, CWM submitted supplemental information on August 20, 2015. By letter dated October 19, 2015, the Department notified CWM that the request remained incomplete. On November 19, 2015, CWM submitted revised information which was determined to be complete. A modified SPDES permit was subsequently drafted and a Notice of Complete Application was published on February 12, 2016 (original draft permit). The public comment period was from February 17, 2016 to March 21, 2016. During the draft permit public comment period, comments were submitted by Vincent Agnello, Citizens Campaign for the Environment, U.S. Environmental Protection Agency (EPA) and Amy Witryol. Upon review of these comments it was determined that several changes to the draft permit were appropriate and, consequently, a second draft permit has been developed. These changes are summarized in Section II below.

This is an addendum to the fact sheet which accompanied the June 1, 2015 permit renewal.

## II. SUMMARY OF PROPOSED PERMIT CHANGES

Following is a brief summary of the most significant proposed changes in the revised draft permit as compared to the currently effective permit, as well as the original draft permit, where appropriate:

The compliance schedule for interim mercury limits at outfalls 001 and 01A has been deleted. A review of monitoring data collected since the permit renewal was issued indicates that final limits are currently attained so there is no further need for interim limits. Additionally, a 12 month rolling average mercury limit has been included at outfall 01A in conformance with DEC mercury policy (DOW Policy 1.3.10).

Reporting of the 12 month rolling average will begin after 12 months of data have been collected following issuance of the permit modification.

The schedules for interim PCB Aroclor limits at internal stormwater outfalls 02A, 02B, 02C and final stormwater outfalls 002, 003 and 004 have been modified so that these limits will expire June 1, 2019 or the date that CWM begins receiving RMU-2 waste, whichever is sooner.

Based on information provided by CWM since the original draft permit was publicly noticed, PCB Aroclor limits have been added to outfall 01A to further minimize the discharge of PCBs through outfall 001. Limits are set at the analytical Minimum Level, effective upon permit modification with one exception. A statistically based interim limit<sup>1</sup> for Aroclor 1242 is effective from the permit modification until the date that RMU-2 begins receiving waste. This will provide time for CWM to institute improvements in discharge quality.

The presence of Polychlorinated Dibenzo-p-Dioxins and Polychlorinated Dibenzofurans (PCDD/PCDF) in site leachate generated from RMU-1 has been documented based on information provided by CWM since the original draft permit was publicly noticed. Limits have been added to outfalls 01A and 001. As the water quality based effluent limit is below what can be analytically detected, final compliance limits are equivalent to analytical Minimum Levels. A PCDD/PCDF minimization program has also been included. Consequently, all of these changes has rendered the PCDD/PCDF item in the Schedule of Submittals unnecessary and it has been deleted.

A special condition requiring pretreatment of B003 waste has been added to the permit. This requirement was suggested by CWM as a means of further reducing PCB levels tributary to the wastewater treatment system.

A special condition prohibiting discharge of SLF 1-7 landfill leachate has been added to the permit. The SLF 1-6 prohibition was suggested by CWM as part of its November 2015 Antidegradation Demonstration Supplement For Bioaccumulative Chemicals Of Concern (BCC). SLF 7 leachate is currently sent offsite so this prohibition is consistent with current practice.

In response to a comment from EPA on the original draft permit, a special condition prohibiting an increased loading of BCCs to the environment due to RMU-2 operation has been added to comply with antidegredation requirements.

The mercury minimization program requirements have been updated to include the "bulk chemical evaluation" component of the recently updated DEC mercury policy.

A new monitoring locations page has been added to the permit (page 30) to reflect conditions after initiation of RMU-2 construction.

Other changes unrelated to the proposed RMU-2 landfill which represent correction of minor errors present in the 2015 permit renewal:

The settleable solids units for outfalls 002-004 were mistakenly labeled as "mg/l" when they should have been "ml/l", consistent with the previous permit. The units have been corrected to "ml/l".

The interim and final periods specified in Footnote 3 have been clarified.

<sup>&</sup>lt;sup>1</sup> Statistical calculations are based on procedures in TOGS 1.2.1

Footnote 1 has been applied to outfall 001 pesticide, PCB and WET testing parameters. The revised draft permit may be further revised as additional data and/or public comments are received.

## III. ANTIDEGRADATION ANALYSIS

The Niagara River and Lake Ontario are listed on the New York State Section 303(d) list of impaired waters due to dioxin, mirex, and PCBs. The Niagara River is also listed as a waterbody requiring verification of impairment due to organochlorine pesticides, hexachlorobenzene, and PAH contamination. There is also a statewide fish consumption advisory due, in part, to mercury contamination.

Antidegradation procedures specified in 40 CFR Part 132 Appendix E, II, B require that the permitting authority "shall ensure that the level of water quality necessary to protect existing uses is maintained" and that "where water quality does not support the designated uses of a waterbody or ambient pollutant concentrations exceed water quality criteria applicable to that waterbody, the Director shall not allow a lowering of water quality for the pollutant or pollutants preventing the attainment of such uses or exceeding such criteria."

In addition to being subject to the regulations set forth in Part 700 *et seq.* of Title 6 of the New York Codes, Rules and Regulations (6 NYCRR), CWM, as a discharger to the Great Lakes System, is subject to the 1995 Final Water Quality Guidance, also referred to as the Great Lakes Initiative (GLI), codified in Section 132 of Title 40 of the Code of Federal Regulations. The GLI established stringent water quality based requirements, particularly regarding BCC\*, such as mercury, dioxin and PCBs. That regulation requires the state agency to adopt an antidegradation policy consistent with Appendix E of 40 CFR Part 132 to protect against the lowering of existing water quality. Accordingly, CWM is also subject to two antidegradation policies issued by the Department: (1) Organization and Delegation Memorandum #85-40, entitled "Water Quality Antidegradation Policy," and (2) TOGS 1.3.9, entitled "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985."

TOGS 1.3.9 is applicable to CWM (part 1 of the policy) and submission of an antidegradation demonstration (part 2 of the policy) was necessary. In preparing the original draft permit, the Department determined that construction and operation of the proposed RMU-2 has the potential to result in an increased discharge of BCCs from the CWM site to the Great Lakes Basin. On November 19, 2015, CWM submitted an antidegradation demonstration which contained the necessary elements outlined in the policy, including a pollution prevention alternatives analysis, an alternate or enhanced treatment analysis, and an analysis of important social or economic development.

Upon reexamination of this submission and consideration of comments from EPA and other stakeholders on the original draft permit, together with other available information (e.g. additional monitoring data), the Department determined that additional permit requirements are necessary to not allow a lowering of water quality for the receiving water. With the additional requirements summarized in the aforementioned Summary of Proposed Permit Changes section, the Department has determined that the permit will not allow a net increase in BCC loading and other pollutants to the Niagara River. Therefore, antidegradation requirements). In addition, a special condition prohibiting an increased loading of BCCs to the Great Lakes Basin due to RMU-2 operation has been added to the revised draft permit.

\* BCCs include Chlordane; 4,4'-DDD; 4,4'-DDE; 4,4'-DDT; Dieldrin; Hexachlorobenzene; Hexachlorobutadiene; Hexachlorocyclohexanes; alpha-BHC; beta-BHC; delta-BHC; gamma-BHC; Mercury; Mirex; Octachlorostyrene; PCBs; Pentachlorobenzene; Photomirex; 2,3,7,8-TCDD; 1,2,3,4-Tetrachlorobenzene; 1,2,4,5-Tetrachlorobenzene; and Toxaphene.