

DMM Program Policy 7

Biosolids Recycling in New York State – Interim Strategy for the Control of PFAS Compounds

Additional Information

July 2023

Purpose

The purpose of the Policy is to reduce the potential environmental impact associated with the recycling of biosolids that may contain per- and polyfluoroalkyl substances (PFAS). The technical standards applicable to the recycling of biosolids are found in 6 NYCRR Part 360, 361-2, and 361-3. Under clauses 361-2.4(e)(1)(ii)(e), 361-3.2(d)(8)(ii)(e), 361-3.3(d)(6)(ii)(e), in Part 361 effective November 4, 2017, DEC may require analyses of biosolids for additional pollutants based on the characteristics of the waste and information from the pretreatment program and other sources. In addition, all solid waste management facilities, including biosolids recycling facilities, are obligated under subdivision 360.19(b) to protect groundwater and to not allow leachate to enter groundwater, unless under the authority of a State Pollutant Discharge Elimination System Permit. Control of the amount of PFAS in biosolids that are recycled is needed to control the potential for leachate to contain these pollutants.

This Policy is limited to those water resource recovery facilities (WRRFs) that recycle the biosolids they generate through land application in agriculture, composting, and other means. The Policy does not govern other aspects of biosolids recycling or PFAS control, which may be subject to other Department regulations or policies.

The data obtained from implementation of the Policy will be used, in part, for a potential future rulemaking concerning the recycling of biosolids. The Policy itself is not part of a rulemaking.

Summary of the Scope

Within 180 days of the issuance of this policy, all currently permitted 361-2 and 361-3 facilities that accept biosolids must sample each biosolids source (water resource recovery facility) and submit the results to DEC. For proposed facilities that are not yet permitted on August 1, 2023, analyses must be submitted with the

permit application. DMM will provide a notification form for use by the facility. Prior to sampling, the facility must provide a completed notification form to the DMM, including the name of the biosolids source(s) that will be sampled, the laboratory that will be used, and the timing of the sampling. All samples must be collected in accordance with the sampling protocols outlined in Appendix B of the NYSDEC guide Sampling, Analysis, and Assessment of Per- and Polyfluoroalkyl Substances (PFAS), April 2023 (https://www.dec.ny.gov/docs/remediation_hudson_pdf/pfassampanaly.pdf). Only personnel trained to sample for these substances, as determined by DMM, are allowed to collect samples for analysis.

The required test method is Draft EPA Method 1633 unless an alternative is allowed by DEC. The requirement for use of certified laboratories and certified methods under 6 NYCRR 360.6(b) is waived since these certifications do not currently exist. The samples must be analyzed for all the PFAS compounds provided by the test method, not PFOA and PFOS alone. The laboratory used must be acceptable to DMM.

NOTE: DEC will conduct the initial sampling and provide funding for analysis for all facilities subject to this policy. The samples will be sent to a research laboratory under contract with DEC.

After the initial sampling event, all permitted 361-2 and 361-3 facilities that accept biosolids must sample each biosolids source at a frequency determined by DEC, based on the quantity recycled, potential PFAS sources to the wastewater treatment plant, and previous analytical results.

An Interim Strategy

This interim policy will remain in place until EPA issues risk-based standards applicable to biosolids that will be recycled, and DEC completes a rulemaking to incorporate those standards, or more stringent standards if deemed appropriate. This policy will also provide data for DEC to use in the development of the rulemaking once the EPA standards are issued to determine the impacts the EPA standards will have on New York State facilities.

The future rulemaking will also consider issues outside the scope of the interim policy but related to PFAS in biosolids that are recycled. These include the requirement for routine testing, the inclusion of other PFAS compounds, testing of biosolids products, and other related issues.

Primary Issues Raised by Public Comments

DEC received comments from 21 entities concerning the Policy, including environmental organizations, municipalities, biosolids management companies, and citizens. The comments included support for the purpose of the Policy but recommendations for more stringent or less stringent criteria, opposition to biosolids recycling in general, and issues that are beyond the scope of the Policy such as the testing of landfill leachate. The following summary provides a list of major issues raised during the public comment period.

Financial Impact of Sampling on Water Resource Recovery Facilities

The Department will be funding the initial sampling and analyses required under the Policy. Therefore, there will be no financial impact associated with the sampling and analysis required under the Policy.

Control of PFAS Needs to Occur in Manufacturing [Consumer Products, etc.]

The Department has a program to implement restriction on the use of PFAS in manufacturing, but that program is outside the scope of this Policy.

Analyzing the Product versus the Biosolids Source

A more comprehensive testing program, including biosolids products, will be evaluated as part of a future rulemaking and is outside the scope of this Policy.

DEC Should be Conducting Studies Regarding PFAS Accumulation in Game Animals Exposed to Fields Where Biosolids Are Used

The Department is actively involved in assessing wildlife impacts associated with PFAS exposure, but the recommended study is beyond the scope of this Policy.

Analyses Should Be Received and Evaluated Before Setting Standards

DEC believes there is sufficient information available to set an interim standard.

The Standard is Unjustifiably Low

As outlined in the Policy, the Department believes there is sufficient information available to justify the interim standard.

Testing Frequency is Not Sufficient

The Policy is intended to provide an initial assessment of PFAS content in biosolids that are recycled. A future rulemaking will evaluate routine testing requirements and other technical criteria applicable to these facilities.

The Standards are Too High Considering Unknowns

DEC believes the standards are appropriate for the interim period considering the current state of knowledge.

The Michigan Strategy is Not Applicable to New York State

DEC is not aware of significant differences in the two states that would affect the interim strategy in the Policy.

Leachate Should be Immediately Banned from Discharge to WRRFs

The Department is currently considering a rulemaking that would address PFAS in landfill leachate and that effort is beyond the scope of the Policy.

Biosolids Should be Banned from Recycling

The recycling of biosolids is allowed under 6 NYCRR Part 361 and this Policy only affects the testing requirements for those practices. A ban on biosolids recycling is outside the scope of the Policy.

Landfill Leachate Proposals Are More Stringent Than the Biosolids Standards

The Department is currently considering a rulemaking that would address PFAS in landfill leachate and that effort is beyond the scope of the Policy.

All Water Resource Recovery Facilities Should be Required to Sample for PFAS

This Policy is based on the regulatory criteria for the recycling of biosolids found in 6 NYCRR Part 361. A requirement for testing at all water resource recovery facilities is beyond the authority found in Part 361 and therefore, beyond the scope of the Policy.

Should Apply to Food Waste Composting Facilities

This Policy is based on the regulatory criteria for the recycling of biosolids found in 6 NYCRR Part 361. Other waste streams are beyond the scope of the Policy but will be considered by the Department in future rulemakings.

DEC Should Develop Means to Monitor and Control PFAS in WRRF Influent and Effluent

DEC regulates the monitoring of influent and effluent through the State Pollutant Discharge Elimination System (SPDES) program, which is not within the scope of this Policy.

The Policy Will Lead to Additional Landfilling and Associated Social, Financial, and Greenhouse Gas Impacts

The Policy provides means to continue recycling if sources are identified and addressed.

The Timeframe to Complete the Sampling and Implement is Too Short

Since DEC is conducting the sampling, the time for implementation should be sufficient.

There is Not Yet a Consensus on the Appropriate Test Method

The test method required in the Policy is currently the method used by DEC in the environmental remediation program and is considered the best method available for this media at this time.

Determining Industrial Sources Can be Extremely Difficult and May Not be Enforceable

Water resource recovery facilities (WRRFs) are currently required to meet heavy metal limits under 6 NYCRR Part 361 prior to recycling. If those limits cannot be met, the WRRF must evaluate potential industrial sources and address the industrial discharges that may be contributing heavy metals. This Policy adds another pollutant to those existing efforts.

The Policy Does Not Address Sampling of the Farm Field and Surrounding Resources

6 NYCRR Part 361 does not have provisions for requiring sampling surrounding resources near a farm and provides limit testing requirements for farm fields. These requirements will be considered as part of a future rulemaking.

Composting Should be Prioritized Over Co-digestion

A policy concerning how organics recycling technologies should be prioritized is outside the scope of the Policy.