

October 29, 2024

2024 Updates on Waste Management in NC





DWM's Role in DEQ

Department of Environmental Quality - Waste Management

- Protection of groundwater
- Lead remediation
- Facilitate redevelopment
- Perform compliance activities
- Issue Permits
- Emergency Response



Division of Waste Management Mission

To prevent harmful releases of waste to the environment and clean up existing contamination.





Department of Environmental Quality - Waste Management

Core Program Areas

- Brownfields Redevelopment
- Hazardous Waste
- Solid Waste
- Superfund
- Underground Storage Tanks
 Petroleum releases above and below ground
- Utility-Scale Solar Projects





Waste Management Summary Information SFY 2023-24



Contaminated land redeveloped in productive economic use: 1016 acres



Private capital funding in Brownfields redevelopment: over \$1.92 billion



Number of inspections performed: 5891



Number of homes/businesses provided alternative drinking water due to contamination of water supply wells: 808







Waste Management 2024 Session Legislation

SL 2024-1 (SB 508) Budget Technical/Other Corrections:

Repealed the provision in SL 2023-134 (2023 Appropriations Act) that removed "auxiliary containers" from statutory definition of solid waste.

SL 2024-45 (SB 607) Regulatory Reform Act of 2024

- Reduced Department's quarterly reporting on coal combustion residuals to be annual only.
- Clarified septage permit requirements for certain food service establishments handling grease septage.

SL 2024-32 (SB 355) NC Farm Act of 2024

 Added Type 1 Compost facilities to the definition of agricultural operation under G.S. 106-701, providing right to farm/nuisance lawsuit protections.

Department of Environmental Quality - Waste Management

DWM Organizational Changes

- Solid Waste Section Chief Jason Watkins
- Developing Utility Scale Solar Management Program under DWM Deputy Director Adam Ulishney
- Bernard Allen Special Sampling Unit



2024-2034

North Carolina
Solid Waste and
Materials Management Plan





- Advancing Waste Reduction
- Growing the Circular Economy
- Developing Infrastructure & Optimizing Material Recovery
- Ensuring Public Health & Safety
- Educating & Engaging with the Public



Utility-Scale Solar Management Program

- S.L. 2023-58 added new statutes as Part 2J of Article 9, Chapter 130A, (G.S. 130A-309.240 - .243) that govern registration, decommissioning and financial assurance requirements for utilityscale solar projects (2 MW AC, not for own use).
- These statutes serve to protect landowners from having to fund decommissioning at the end of the project's life for new projects.



Utility-Scale Solar Management Program

- As a result of SL 2023-58, a new
 Program has been established under the
 DEQ Division of Waste Management.
- Webpage:

 https://www.deq.nc.gov/about/divisions/w
 aste-management/utility-scale-solar-management-program
- Guidance and program information can be found on the webpage.

Utility-Scale Solar Management Program



The Division of Waste Management, Utility-Scale Solar Management Program administ the requirements applicable to utility-scale solar projects as mandated in North Carol 2023-58, Part II and III.

North Carolina <u>Session Law (SL) 2023-58</u> requires the owner of a utility-scale solar progenerating two (2) or more megawatts (MW) alternating current (AC) that is directly coelectrical grid to:

- . Properly decommission the project upon cessation of operations and restore the pr
- Register with the North Carolina Department of Environmental Quality (NCDEQ) are
- Submit a decommissioning plan and establish financial assurance for new and nutility-scale solar projects.

Additional information on these requirements is provided below.



NORTH CAROLINA DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WASTE MANAGEMENT
UTILITY-SCALE SOLAR MANAGEMENT PROGRAM

Utility-Scale Solar Project Decommissioning and Financial Assurance Guidance

North Carolina <u>Session Law (SL) 2023-58</u> requires the owner of a utility-scale solar project capable of generating two (2) or more megawatts (MW) alternating current (AC) that is directly connected to the electrical grid to:

- Properly decommission the project upon cessation of operations and restore the property.
- Register with the North Carolina Department of Environmental Quality (NCDEQ) and pay a fee.
- Submit a decommissioning plan and establish financial assurance for new and rebuilt/expanded utility-scale solar projects.

Who must comply

Only <u>utility-scale solar projects</u> capable of generating <u>2 or more_MWAC</u> that are directly connected to the local or regional electrical grid with the ability to deliver power to the electrical grid must comply with the requirements set forth in SL 2023-58.

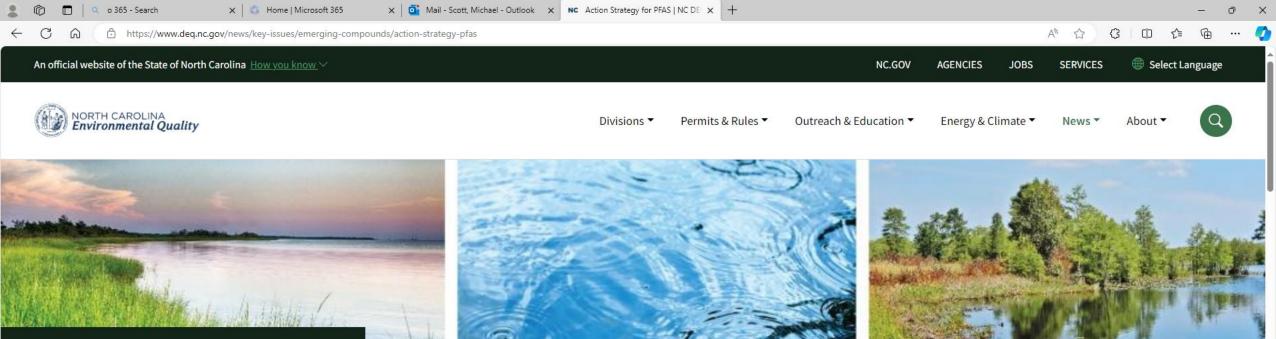
- The requirements to <u>decommission/restore the site</u>, to <u>register</u> with NCDEQ, and <u>pay a fee</u> apply to existing
 and new utility-scale solar projects.
- The requirements for submittal of a <u>decommissioning plan and financial assurance</u> apply to utility-scale solar projects:
- For which applications for certificates of public convenience and necessity (CPCN) are pending or submitted on or after November 1, 2025 and
- Generating solar energy or are interconnected to a transmission facility on November 1, 2025, that are rebuilt or expanded after November 1, 2025.

These requirements <u>do not apply to</u> utility-scale solar projects smaller than 2 MWAC, or to renewable energy facilities owned or leased by a retail electric customer intended primarily for the customer's own use or to offset the customer's own retail electrical energy consumption at the premises or for net metering.

When is the compliance date?

The requirements become effective November 1, 2025

- The requirements to properly <u>decommission upon cessation of operation and restoration of the site</u> apply as of November 1, 2025 to existing and new utility-scale solar projects.
- The owner of a utility-scale solar project must register with NCDEQ and pay a fee as follows:
 - By November 1, 2025, or at least 90 days prior to the commencement of construction of the project if the project is to be constructed after November 1, 2025; and
- At least 90 days prior to commencement of a rebuild or expansion of a utility-scale solar project.
- The owner of a utility-scale solar project must submit a <u>decommissioning plan and establish financial assurance</u> as follows:
 - By November 1, 2025, or prior to commencement of construction of the project if the project is constructed after November 1, 2025, and
 - Prior to commencement of a rebuild or expansion of a utility-scale solar project



Action Strategy for PFAS





News > Key Issues > Emerging Compounds > Action Strategy for PFAS

North Carolina is working aggressively to address the impacts of PFAS, or per- and polyfluoroalkyl substances, in our state. PFAS compounds are widely used in commercial and consumer products such as food packaging, water- and stain-repellent fabrics, nonstick products and firefighting foams. PFAS are known as "forever chemicals" because they don't break down in the environment. PFAS have been linked to health effects in humans and animals.

To protect residents from future exposures and reduce environmental pollution, DEQ has developed a comprehensive Action Strategy to address DFAS contamination in a proactive systematic way. This

Emerging Compounds

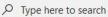
Understanding PFAS

Action Strategy for PFAS

Air Quality Work on Emerging Compounds

































NCDEQ Actions on PFAS IMACs

- The Director of the NCDEQ Division of Water Resources (DWR) received a request in accordance with 15A NCAC 02L .0202 to establish interim maximum allowable concentrations (IMACs) for eight PFAS: PFOA, PFOS, HFPO-DA (GenX), PFNA, PFBS, PFBA, PFHxA, and PFHxS.
- DWR accepted comments on the proposed IMACs until October 4, 2024.
 See the DWR website with the public notice here:
 https://www.deq.nc.gov/about/divisions/water-resources/water-planning/classification-standards/groundwater-imacs
- IMACs were established parallel to rulemaking activity for PFOA, PFOS, and GenX groundwater standards.

Proposed Federal Regulations-HW

Listing of Specific PFAS as Hazardous Constituents – Proposed Rule

- Published February 8, 2024, in the Federal Register (89 FR 8606, February 8, 2024)
- EPA proposed changes to the Resource Conservation and Recovery Act (RCRA) regulations by adding nine specific per-and polyfluoroalkyl substances (PFAS), their salts, and their structural isomers, to its list of hazardous constituents in 40 CFR 261 Appendix VIII.
 - Perfluorooctanoic acid (PFOA),
 - Perfluorooctanesulfonic acid (PFOS),
 - Perfluorobutanesulfonic acid (PFBS),
 - Hexafluoropropylene oxide- dimer acid (HFPO-DA or GenX),
 - Perfluorononanoic acid (PFNA),
 - Perfluorohexanesulfonic acid (PFHxS),
 - Perfluorodecanoic acid (PFDA),
 - Perfluorohexanoic acid (PFHxA), and
 - Perfluorobutanoic acid (PFBA).



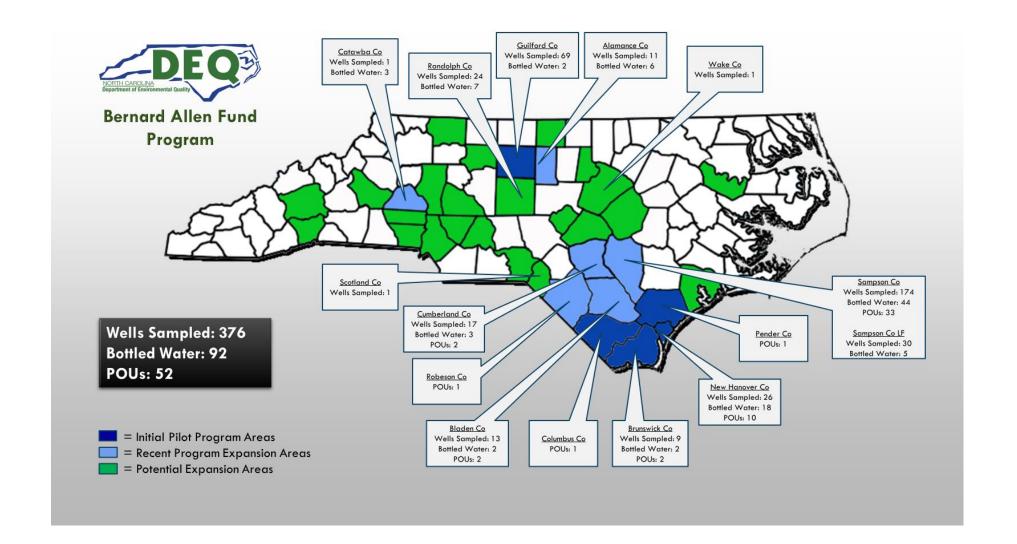
Federal Rulemaking Effort-HW

Solar Panels as Universal Waste & Special Universal Waste Standards for Lithium Batteries

- EPA is in the early stages of a proposed federal rulemaking effort to:
 - Add hazardous waste solar panels to the federal universal waste regulations and
 - To add tailored universal waste standards for lithium batteries.
- The proposed rule is anticipated June 2025
- Read more about this effort on the EPA website: https://www.epa.gov/hw/improving-recycling-and-management-renewable-energy-wastes-universal-waste-regulations-solar



Superfund Bernard Allen Drinking Water Program





Brownfields Program



- Objective: Encourage Safe Reuse of Abandoned Environmentally Impacted Properties, combining economic development with public health protection.
- Means: Provide a brownfields agreement to limit liability for prospective developers of brownfield sites, treating them differently than the parties responsible for contaminating them.

<u>Authorized by:</u> N.C.G.S. 130A-310.30 et seq., the Brownfield Property Reuse Act and funded by EPA grant and State Fees.



Department of Environmental Quality - Waste Management

Brownfields Program

- VI Team Developed Decision Matrix for VI Mitigation and Performance Testing
- Grant Development Team Leadership and Grant Writing for 2 Transformative Grants
- PTP Team Leadership and development of Process Information Required for New Data Management System in MS Dynamics



Brownfields Program



MARC Grant from US EPA

- Awarded \$2 MM Brownfields Assessment Grant over 5 years
- Environmental Assessment in disadvantaged/selected communities to encourage brownfields redevelopment
- 1 FTE, \$1.4 million contractual assistance
- Bipartisan Infrastructure Law (BIL) Section 128(a) Grant
 - Funding \$5.8 million over 5 years (starting January 2023)
 - 10 FTE for LUR Stewardship through Property Mgmt. Unit



EQUIS: Environmental Quality Information Systems

- An advanced environmental data management and decision support system. Thousands of organizations use EQuIS to manage large amounts of data pertaining to environmental chemistry, biology, geology, geotechnical, hydrology, limnology, air, and associated compliance monitoring activities.
- This new tool speeds up workflows eliminating unnecessary lag time and expands the capabilities of what staff can do with data collected from multiple sources.
- Key to the success of EQuIS is the ability to take in external data submissions (EDDs). This reduces the amount of staff time spent on manipulating and formatting datasets.





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