As the incoming Chair of the Section, I am grateful to report that the Environment, Energy & Natural Resources Section is off to another strong year thanks to the work of Section leadership in recent years and the work of our dedicated NCBA staff.

Many thanks to outgoing Chair Sean Sullivan for helping us put the Section on firm financial footing and for setting a clear path to continue our tradition of meaningful off-site annual meetings each spring.

We have a lot of good things happening in the Section, and we look forward to a great bar year. A handful of items to note:

On August 15, members of the Section Council had an opportunity to meet with leadership of the Department of Environmental Quality (“DEQ”), including Secretary Michael Regan, General Counsel Bill Lane, and Senior Policy Advisor Mary Penny Kelley. The meeting was held at DEQ Headquarters in Raleigh and was an informal discussion of DEQ priorities and policies as well as major issues that DEQ is dealing with currently. It was a good reminder of the wide array of issues that DEQ staff must address on a daily basis. Section Council members expressed concern regarding potential impacts to DEQ operations resulting from budget reductions and provided input on potential improvements to the permitting process for projects requiring multiple DEQ permits. Thanks to Section members Bill Lane and Mary Penny Kelley for helping to schedule the meeting.

The first Section Council meeting of the year was held on August 25 at the NCBA Bar Center.

GenX: Regulating Emerging Contaminants in Water Supplies

By Robin W. Smith

Background
In a December 2016 research paper, N.C. State University professor Dr. Detlef Knappe documented the presence of the perfluorinated compound known as “GenX” in the Cape Fear River. The river provides drinking water for the Cape Fear Public Utility Authority (serving Wilmington-New Hanover County) and several smaller water systems. When the findings became more publicly known in June 2017, residents raised concern about health risk and the adequacy of federal/state regulation.

EPA began studying the effects of perfluorinated compounds (used in products such as firefighting foam, water repellants and Teflon) over fifteen years ago. EPA worked with chemical companies to phase-out the two compounds most commonly used, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), because of concerns about persistence in the environment and human health risk. In 2009, DuPont began manufacturing GenX, a chemically distinct perfluorinated compound, at its Fayetteville Works as a replacement for PFOA. The Chemours Company, a DuPont spin-off, now operates the Fayetteville plant which is located upstream of drinking water intakes for Cape Fear Public Utility Authority (CFPUA) and other water systems.

GenX has uncertain health and environmental risks and no federal standards exist to guide state permitting and enforcement action. EPA has not adopted a drinking water standard for GenX, identified the compound as a priority water pollutant, or set effluent guidelines for discharge of the chemical under a National Pollutant Discharge Elimination System (NPDES) permit. This article will focus on the key federal laws involved; gaps in those laws; and the state’s responsibility to act in the absence of federal standards. Although the article uses known facts about the GenX situation as illustration, it should not be read as an opinion on any entity’s legal liabilities.

The Toxic Substances Control Act (TSCA)
EPA regulates manufacture and importation of chemicals under the Toxic Substances Control Act of 1976. The TSCA provisions most relevant to GenX (in Section 5 of the Act) require a manufacturer to notify EPA before manufacturing a new chemical. Based on review of information submitted with the notice, EPA may find the new chemical is “not likely to represent an unreasonable risk” and approve manufacture. If EPA doesn’t have sufficient information to evaluate environmental and health effects or the available information suggests an unreasonable risk of harm,

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in Cary. Ken Jennings of Duke Energy and Section member Brett Breitschwerdt made a presenta-tion summarizing the recently enacted NC House Bill 589 (Session Law 2017-192), which made substantial changes to renewable energy policy in North Carolina and altered the relationship between renewable energy facilities and electric utilities. The next Council meeting will be at the Bar Center on November 10.

On November 16-17, the Section is co-sponsoring with the Administrative Law Section and the Government & Public Sector Section a CLE titled “The Only Constant is Change: 2017 Leg-islative, Executive, and Judicial Updates” at the Bar Center. Section Secretary Jeff Cherry will give a presentation about environmental legislative developments in the last legislative session. Please keep an eye out for the registration brochure from the NCBA.

Planning is underway for the 2018 Annual Meeting of the Section on May 18-19, 2018 at the Asheville Renaissance Hotel. We are planning a joint conference with the environmental sections of the Georgia Bar Association and the South Carolina Bar Association and plan to have presenta-tions on topics of nationwide and regional interest as well as North Carolina-specific topics. It will be a great opportunity to network with speakers and practitioners from out of state, touch base with our Section colleagues from across the state, and enjoy a spring weekend in the mountains. We hope to have speakers from both EPA Region IV as well as DEQ, and the Section has invited DEQ Secretary Michael Regan to address the North Carolina attendees.

With the change in administrations in both Raleigh and Washington, DC and notable envi-ronmental policy shifts, it is an interesting time to practice environmental law. We look forward to a good year and an exciting annual meeting next spring.
EPA can require additional testing or limit release of the chemical to the environment. Out of concern that GenX may have risks similar to those associated with PFOA and PFOS, EPA approved manufacture of GenX under a 2009 TSCA consent order that required DuPont to effectively eliminate release of GenX in wastewater and air emissions from the Fayetteville manufacturing operation.

The problem: TSCA only covers chemicals manufactured or imported into the United States; it does not apply to a compound produced as a by-product of an industrial process. The TSCA consent order requiring DuPont to eliminate GenX from wastewater discharges and air emissions associated with manufacture of GenX did not prohibit discharge of GenX created as a by-product of an unrelated process. The current manufacturer, Chemours Company, has indi-cated that a separate vinyl ether operation at the Fayetteville Works produces GenX as a byproduct and discharges from that operation are the likely source of GenX in the Cape Fear River. Discharge of GenX as a byproduct of other industrial processes would have to be addressed under different laws – most likely the Clean Water Act.

Clean Water Act
The Clean Water Act requires a permit to discharge waste to rivers, lakes, streams and coastal waters. The National Pollutant Discharge Elimination System (NPDES) permit puts specific limits on pollut-ants in the wastewater discharge based on environmental and health effects. EPA has set technology-based effluent guidelines for cate-gories of industries, including chemical plants. But the guidelines do not cover all pollutants or every possible type of waste stream. EPA’s current effluent guidelines for chemical plants do not include a limit for discharge of GenX. In the absence of an existing EPA effluent guideline, the NPDES permit writer must set the discharge limit on a case-by-case basis applying factors set out in the Clean Water Act. Like other states, North Carolina has the authority to is-sue NPDES permits by delegation from EPA, so the responsibility to develop case-by-case effluent limits falls on the state water quality program. The permitting process relies on the applicant to disclose the pollutants likely to be discharged in the wastewater. (One ques-tion with respect to GenX is whether DuPont/ Chemours provided complete information to state permit writers in applying for an NPDES permit to cover multiple processes at the Fayetteville Works.)

The problem: Federal effluent guidelines can lag behind develop-ment of new chemicals and evolving knowledge about risk presented by those new chemicals. In the absence of federal effluent guidelines, the burden will be on the state water quality staff to set permit limits based on review of the environmental and health effects of the unregulated contaminant. That may require state staff to research and evalu-ate limited, inconclusive or conflicting data to develop those limits.

Safe Drinking Water Act
The Safe Drinking Water Act (SDWA) does not prevent contami-nants from reaching groundwater or surface water, but requires public water systems to deliver treated water that meets minimum national drinking water standards. EPA has adopted drinking water standards for 88 contaminants. Public water systems must monitor for those contaminants and provide water treatment sufficient to meet national standards. Given the number of compounds manu-factured or created as a by-product of industrial activities, drinking water standards do not exist for most contaminants. EPA has not adopted a drinking water standard for GenX or any other perfluori-nated compounds, including PFOA and PFOS.

EPA continues to study the need for a national drinking water standard for perfluorinated compounds. EPA’s decision will be based on the likelihood the contaminants will be found in drinking water; the health effects; and the technical/economic feasibility of treating the water to reduce health risk. It isn’t clear what conclusion EPA will reach on PFOA/PFOS and the decision to develop a standard for next generation alternatives like GenX would be even further in the future. The state can adopt drinking water standards to supplement national standards; under North Carolina law, the Commission for Public Health has authority to adopt state drinking water standards.

The problem: In the absence of a state or federal drinking wa-ter standard, a water system has no obligation to monitor for the contaminant or treat the water to remove it. Short of adopting a drinking water standard, EPA sometimes issues a health advisory for a particular contaminant to guide water systems on risk reduc-tion; that information can also be useful in state regulatory deci-sions requiring risk assessment. Health advisories currently exist for a limited number of contaminants. EPA has issued a health advi-sory for PFOA and PFOS (combined) of 70 parts per trillion based on long-term exposure, but EPA has also said that the PFOA/PFOS health advisory does not apply to other compounds like GenX. And although many of the environmental and human health risks associ-ated with PFOA and PFOS have been known for 10-15 years, EPA only issued a health advisory based on long-term exposure in 2016. In the absence of a national drinking water standard or health ad-visory, the state may increasingly be called on to develop its own benchmarks for safe drinking water.

Legislative Action on GenX
In September, the legislature added GenX provisions to House Bill 56 (Amend Environmental Laws). The GenX provisions appropri-ated $185,000 to Cape Fear Public Utility Authority to study water treatment methods and monitor water withdrawn from the Cape Fear River; appropriated $250,000 to UNC-Wilmington (UNC-W) to study concentration of GenX in river sediments, the extent the chemical biodegrades or bio-accumulates, and risk to human health; and required the North Carolina Department of Environmental Quality (DEQ) to report back to the legislature by September 8, 2017 if the Department had not issued a Notice of Violation for the GenX.
discharge. Much of the funding provided to CFPUA will off-set the cost of efforts already underway by the utility to test methods for removing GenX from drinking water. The funding could also cover CFPUA’s one-year contract with UNC-Wilmington to analyze raw water and treated water samples for additional perfluorinated compounds and advise the utility on water treatment. The UNC-W study could expand understanding of GenX, but has a very short timeline requiring a report back to legislature by April 1, 2018.

The bill does not allocate additional funding to either DEQ or the Department of Health and Human Services for response to emerging contaminants. Governor Cooper had requested $2.5 million to provide more resources for water quality monitoring; inspection of NPDES-permitted facilities; permit reviews; and development of health advisories for unregulated contaminants. Instead, DEQ faces a $1.8 million budget reduction for 2017-2018. So far, legislative action has focused solely on supporting local response to existing GenX contamination in the Cape Fear River, treating GenX as an isolated problem. In the long term, a broader legislative response may be required since many other contaminants will fall into these same gaps in federal regulation. The state already faces similar concerns about 1,4-dioxane in the Haw River. Both the state House and Senate have established special select committees to look into GenX issues and those committees could make recommendations for further legislative action in 2018.

Enforcement
On September 7, 2017, DEQ filed a complaint and request for a temporary injunction against Chemours Company. The complaint alleged both a failure on the part of Chemours to disclose information about the discharge of GenX during the NPDES permitting process and potential violations of state groundwater standards based on detection of GenX in water supply wells near the Fayetteville Works. DEQ and Chemours quickly entered into a partial consent agreement that requires Chemours to completely eliminate the discharge of GenX. The partial consent agreement does not resolve the alleged groundwater violations or past failure to disclose information about the presence of GenX in the permitted discharge to the Cape Fear River.

Chemours has also become the target of criminal investigations. The U.S. Attorney’s Office for the Eastern District of North Carolina reportedly issued a subpoena to DEQ for documents related to the Chemours NPDES permit and compliance records. Governor Roy Cooper asked the State Bureau of Investigation and DEQ to undertake their own review to determine whether there is a basis for state criminal action.

Robin Smith has a solo practice in environmental law and policy consulting following a career as an environmental lawyer in state government.
N.C. General Assembly Restructures the Renewable Energy Industry with House Bill 589

By Karen Kemerait

On the last day of the 2017 session, the North Carolina General Assembly passed the “Competitive Energy Solutions for NC” bill (HB 589) that, among other things, restructures how North Carolina implements the federal Public Utilities Regulatory Policy Act of 1978 (“PURPA”). This legislation was the result of over nine months of negotiations among a diverse group of stakeholders and was signed into law by Governor Roy Cooper on July 27, 2017, and it makes some of the most comprehensive changes in energy policy in North Carolina in a decade.

North Carolina currently has 6,916 MW of installed renewable energy capacity. Of that, 3,287 MW is solar energy. North Carolina is ranked second in the country for solar energy generation.

Prior to the enactment of HB 589, public utilities, such as Duke Energy, were required to purchase renewable energy from a qualified facility at an “avoided cost” rate that is set by the North Carolina Utilities Commission. Standard contracts have been provided to qualified facilities of 5 MW or less, and were offered at 5, 10, and 15-year terms.

The Competitive Energy Solutions for NC law restructures how renewable energy will be purchased and sold in North Carolina. Below are some of the key provisions:

**Small Power Producers**
Qualifying facilities that are eligible for standard contracts at the avoided cost rate are reduced to small power producers that produce 1 MW or less of capacity. Larger scale solar production will be shifted to a new competitive bidding process.

The standard contracts now offered are limited to 10 years at the avoided cost rate. Once an electric public utility has purchased 100 MW of capacity from small power producers, the contracts will only be available to small power producers of 100 kW or less of capacity. Other small power producers will have to negotiate with the electric utilities for contracts for a fixed five-year term.

The fixed five-year terms do not apply to swine and poultry waste facilities, hydroelectric facilities of up to 5 MW, landfill gas, manure digester gas, agriculture waste gas, sewer gas, and sludge gas, allowing them to enter into fixed-term contracts for longer periods. The new law also provides for an expedited review process for interconnection of swine and poultry waste-to-energy projects of 2 MW or less.

**Competitive Bidding Process**
The competitive bidding process for larger renewable energy producers requires public utilities, including Duke Energy, to submit request for proposals (RFPs) for a total of 2,660 MW over a 45-month period. The bidding process will be overseen by an independent administrator. The public utility will have authority to determine the location and allocated amounts of renewable energy projects within its service territory, and will have the right to control the operation and dispatch of third-party facilities. Electric public utilities can purchase renewable energy facilities from third-parties, and they are also permitted to construct their own renewable energy facilities for up to 30% of the amount of the competitive procurement requirement.

The initial request for proposals of 2,660 MW will be reduced if the utilities have power purchase agreements (from small producers) for more than 3,500 MW of capacity not subject to economic dispatch or curtailment.

**Distributed Resources Access Act**
As part of the compromise among the stakeholders, the new law allows for third-party leasing of solar energy, which was previously prohibited. This allows customers to enter into power purchase agreements with solar companies to operate a solar energy system on their property and purchase all of the energy produced by the system.

**Moratorium on Wind Energy**
Finally, the new law places a moratorium on new and modified permits for wind energy producers until December 31, 2018 so the State can study the impacts of wind energy on military operations in the State. North Carolina currently has one wind energy farm in Perquimans and Pasquotank Counties, the Amazon Wind Farm US East, that was completed in February 2017 and produces 208 MW of energy. The moratorium only affects new and modified permits; but it will likely impact the planned expansion of the project, which was intended to increase production to 300 MW. Two other proposed wind farms, in Chowan County and Tyrell County, could be derailed by the moratorium. However, along with his signature on the new law, Governor Cooper issued an executive order, “Promoting Wind Energy Development” ordering the state to proceed with the review and processing of wind energy permit applications such as those in Chowan and Tyrell County.

**New Rules Being Promulgated by the Utilities Commission**
As required by HB 589, the Utilities Commission initiated a rule-making procedure this past summer to determine how HB 589 will be implemented, and invited Duke Energy, the Public Staff, and interested parties to file proposed rules and comments. Duke Energy, the Public Staff, and solar industry participants, including the NC Clean Energy Business Alliance and the NC Sustainable Energy Association, filed proposed rules and comments. The Utilities Commission is expected to adopt final rules to implement HB 589 in the middle of October 2017.

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The Ghost of Brownfields Past

By Dixon Snukals

Earlier in your career, you represented a client during the purchase negotiations for a property participating in the North Carolina Brownfields Program. The negotiations went well, and the seller agreed to be responsible for response actions required by the Brownfields agreement. The property was previously home to a laundromat, but with appropriate land use restrictions in place, your client was able to develop the property into a successful retirement home. Recently, you got a surprise call from your client. Your client was not happy.

You learn that your client just received an email from the North Carolina Division of Waste Management ("DWM") notifying them that a Land Use Restriction Update ("LURU") was not timely submitted for the property. The email informs your client that the property is currently not in compliance with the Brownfield agreement. But that's not all. Because of the noncompliance, DWM has taken this opportunity to request further investigation into whether vapor intrusion mitigation is necessary. DWM is particularly concerned about the presence of trichloroethylene ("TCE") beneath the building. It now wants an evaluation of the vapor intrusion pursuant to the recent assessment guidance that it issued in February 2017.

Your client wants to know, can the DWM do this? Unfortunately for your client, the answer is yes. Because the site was deemed noncompliant for the LURU deficiency, DWM was able to look further into the agreement and determined that vapor intrusion testing was necessary. Typically, DWM does not use these types of technical deficiencies to require additional site evaluation. But your client's property has TCE.

When the Brownfields agreement for the property was completed in the mid-2000s, vapor intrusion was not as thoroughly understood at it has become in recent years. Furthermore, TCE has been studied in more depth by the EPA, which revealed a previously unknown potential for risk to unborn children. Evaluation of vapor intrusion potential at Brownfields sites, especially those with TCE, has become a priority focus for DWM, and vapor intrusion mitigation for those sites is commonly found in newer Brownfields agreements. If your client enters into a Brownfields agreement with DWM today, it is likely that it will have to contemplate vapor intrusion mitigation.

If your client entered into a Brownfields agreement before 2005, and your client operates a school, daycare, or other residential facility with sensitive receptors, there is the potential that DWM will want to investigate vapor intrusion potential at your client's property at some point in the near future. As the hypothetical above suggests, DWM will be vigilant for technical compliance issues at these sites to require further investigation.

DWM could also exercise its authority under the "reopener clause" of the agreement to require vapor intrusion remediation. All Brownfields agreements contain a provision that allows DEQ to require additional remediation of the site if:

- DEQ obtains new information about a contaminant associated with the Brownfields Property or exposures at or around the Brownfields Property that raises the risk to public health or the environment associated with the Brownfields Property beyond an acceptable range and in a manner or to a degree not anticipated in this Agreement.

Before 2005, soil remediation for TCE impacted sites would have been common, but vapor intrusion evaluations were not. Within the past decade, scientific studies have revealed new information about the health effects of TCE exposure on the most vulnerable populations (pregnant women, children, and the elderly). If DWM cannot force vapor intrusion evaluation through technical noncompliance, it will undoubtedly rely on TCE research developments as a basis for reopening the Brownfields agreement.

If your client's Brownfields site meets the criteria for TCE re-evaluation (i.e. pre-2005 and houses vulnerable populations), it is likely that DWM is already looking for ways to initiate a vapor intrusion investigation. Given these actions by DWM, it may be advisable to reach out to those Brownfields clients that could be impacted to alert them to DWM's heightened focus on vapor intrusion issues. This might be a good opportunity to remind them of the importance of timely submitting their LURU certifications and otherwise complying with their Brownfields agreement. Even technical compliance, though, may not avoid further review, since DWM has indicated that it will eventually look at old Brownfield sites where vapor intrusion analysis was not previously considered, but may now be required.

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As the Section learned at its annual CLE in the Spring, the Department is championing three priorities: Healthy Environment; Environmental Gains with Infrastructure Improvements; and Energy. Each priority includes working themes that guide DEQ’s activities and approaches across the regulatory and nonregulatory programs the agency administers. Significant developments have occurred in each area.

GenX
In June, the emerging chemical GenX was discovered in the Cape Fear River, originating in wastewater discharged by the Chemours facility in Fayetteville. Since then, DEQ has worked with colleagues in the state Department of Health and Human Services (DHHS) to notify the public; successfully gotten Chemours to cease wastewater discharges of GenX and two other fluorinated compounds from the facility; initiated sampling and analysis of surface and groundwater resources in the Cape Fear River basin; ensured the company provided bottled water to residents with drinking wells with exceedingly high levels of fluorinate compounds; and responded to a multitude of inquiries from citizens, the media, legislators, and the United States Environmental Protection Agency.

Science Advisory Board
On August 1, 2017, Governor Cooper expanded a science panel to advise state officials on protecting public health and the environment from new or unregulated chemicals, including GenX and hexavalent chromium. DEQ Secretary Michael Regan and DHHS Secretary Mandy Cohen executed a new charter that expanded the scope of what was the Secretary’s Science Advisory Board on Toxic Air Pollutants into the new Secretaries’ Science Advisory Board. The board’s chairman, Dr. Jamie Bartram, has been named and the first Board meeting occurred on Monday October 23, 2017. Among its new duties, the Board is directed to perform or recommend reviews and evaluations of contaminants released to the environment; act as consultants to DEQ as the agency determines whether and how to regulate releases of contaminants; assist both agencies in identifying contaminants of emerging concern and whether the contaminants should be studied further; assist the secretaries in providing expertise to evaluate the human and environmental impacts of exposure to hazardous contaminants; and provide input to DHHS as the agency establishes health goals for emerging contaminants.

Infrastructure During Disaster Recovery
In the fall, the Governor’s Disaster Recovery Office requested that DEQ’s Division of Water Infrastructure work with the State Water Infrastructure Authority (Authority) to prioritize up to $10 million of the available funds under the Community Development Block Grant Infrastructure program for the lesser-impacted disaster counties impacted by Hurricane Matthew. In sum, the Authority may adjust project rankings based on the priority and supporting written documentation. Projects that may qualify include those that: re-...

Offshore Energy
In both July and August, DEQ submitted comments expressing concern over federal actions that aim to advance the exploration and development of oil and gas resources in the State’s Outer Continental Shelf lands (those lands under federal jurisdiction that are located more than three nautical miles from shore). Governor Roy Cooper and his administration opposed offshore oil and gas due to the overwhelming economic and environmental costs of the activity. Expert staff from several divisions within DEQ contributed to the comments that were submitted to the National Oceanic and Atmospheric Administration and the Secretary of the Interior on the state’s behalf.

Energy Policy Council
DEQ also administers and directs some of the work of the Energy Policy Council. The council met on August 16, 2017 to explore the issues surrounding energy infrastructure. Immediately preceding the meeting, DEQ hosted a forum of TED-style speakers that addressed a wide variety of topics on infrastructure such as integrating renewable resources on to the electric grid and electrifying the transportation sector. Pursuant to G.S. 113B-2(c), the purpose of the council is to serve as the central energy policy planning body of the state by empowering it to communicate and cooperate with federal, state, regional, and local bodies and agencies to develop a coordinated energy policy. The council is scheduled to meet next at 10:30 a.m. Nov. 9 in the OSBM Commission Conference Room, 5th Floor of the Department of Administration building, 116 West Jones St., Raleigh, NC 27604.

Jennifer Mundt joined the N.C. Department of Environmental Quality as the Policy and Innovation Advisor in April 2017. Jennifer has devoted her career to environmental policy. Most recently, she spent more than a decade as a nonpartisan legislative analyst serving the North Carolina General Assembly. While at the legislature, she helped craft environmental, energy and public health legislation and policy. Jennifer earned bachelor’s degrees in environmental science and political science from Virginia Tech and a master’s degree in Public Health from the Gillings School of Global Public Health at the University of North Carolina at Chapel Hill.