

Potential environmental impacts of coal-fired power generation are handled at the state level by the North Carolina Department of Environmental Quality, and North Carolina Department of Health and Human Services. Below is additional information you may find helpful.

## If a well is within 1,500 feet of a Duke Energy coal-fired facility:

After the passing of the 2014 Coal Ash Management Act (<a href="https://www.ncleg.net/Sessions/2013/Bills/Senate/PDF/S729v7.pdf">https://www.ncleg.net/Sessions/2013/Bills/Senate/PDF/S729v7.pdf</a>), the North Carolina Department of Environment and Natural Resources requires Duke Energy to pay for the testing of all water supply wells within 1,500 feet of each of the utility's 14 coal-fired electrical generating facility boundaries.

A report from Duke Energy with findings from well tests can be found at <a href="https://www.duke-energy.com/">https://www.duke-energy.com/</a> /media/pdfs/our-company/ash-management/groundwater/marshall-csa-executive-summary-2018.pdf?la=en.

More information is available at <a href="https://deq.nc.gov/about/divisions/water-resources/water-resources-hot-topics/dwr-coal-ash-regulation/well-test-information-for-residents-near-duke-energy-coal-ash-impoundments">https://deq.nc.gov/news/hot-topics/coal-ash-impoundments</a> and on how the state is moving forward at <a href="https://deq.nc.gov/news/hot-topics/coal-ash-nc/moving-forward-coal-ash-nc/moving-forward-coal-ash-impoundments">https://deq.nc.gov/news/hot-topics/coal-ash-impoundments</a> and on how the state is moving forward at <a href="https://deq.nc.gov/news/hot-topics/coal-ash-nc/moving-forward-coal-ash-impoundments">https://deq.nc.gov/news/hot-topics/coal-ash-impoundments</a> and on how the state is moving forward at <a href="https://deq.nc.gov/news/hot-topics/coal-ash-nc/moving-forward-coal-ash-impoundments">https://deq.nc.gov/news/hot-topics/coal-ash-impoundments</a> and on how the state is moving forward at <a href="https://deq.nc.gov/news/hot-topics/coal-ash-nc/moving-forward-coal-ash-impoundments">https://deq.nc.gov/news/hot-topics/coal-ash-impoundments</a> and on how the state is moving forward at <a href="https://deq.nc.gov/news/hot-topics/coal-ash-nc/moving-forward-coal-ash-impoundments">https://deq.nc.gov/news/hot-topics/coal-ash-impoundments</a> and on how the state is moving forward at <a href="https://deq.nc.gov/news/hot-topics/coal-ash-impoundments">https://deq.nc.gov/news/hot-topics/coal-ash-impoundments</a> and state is not the state of the sta

The complete Duke Energy reports on the Marshall Steam Station can be found at <a href="https://www.duke-energy.com/our-company/environment/compliance-and-reporting/ccr-rule-compliance-data">https://www.duke-energy.com/our-company/environment/compliance-and-reporting/ccr-rule-compliance-data</a>.

## For wells more than 1,500 feet from a Duke Energy coal-fired facility:

North Carolina General Statute GS-87-87

(https://www.ncleg.net/EnactedLegislation/Statutes/PDF/ByArticle/Chapter 87/Article 7.pdf) outlines expectations for health departments, including Catawba County Public Health, regarding well testing. Routine well testing is conducted by Catawba County Environmental Health when a new well is drilled as part of the permitting and inspection process. The fee for that process is \$300. Routine testing includes bacteria (total coliform and fecal), nitrate/nitrite, arsenic, barium, cadmium, calcium, chloride, chromium, copper, fluoride, iron, lead, magnesium, manganese, mercury, pH, selenium, silver, sodium, sulfate, total alkalinity, total hardness, and zinc. Those results are given to the homeowner, who is responsible for any follow-up tests or mitigation.

Any testing done beyond those listed are the responsibility of the private well owner. More information can be found at (<a href="http://epi.publichealth.nc.gov/oee/wellwater/howtotest.html">http://epi.publichealth.nc.gov/oee/wellwater/howtotest.html</a>). The state has recommendations for testing frequency, which can be found at <a href="http://epi.publichealth.nc.gov/oee/wellwater/whentotest.html">http://epi.publichealth.nc.gov/oee/wellwater/whentotest.html</a>.

Routine testing can be repeated at any time by request of the homeowner. If wells are outside of the state-set 1,500-foot boundary, testing can be conducted by individual homeowners through Catawba County Environmental Health for a \$285 fee. Additionally, homeowners can contact Catawba County Environmental Health at (828) 465-8270 to have an Environmental Health Specialist collect "coal ash" well water samples for testing. A \$170 fee applies. Once the collection is performed, well water samples are sent to the North Carolina Public Health Laboratory. Results can take up to 1-2 months and include aluminum, antimony, arsenic, barium, beryllium, boron, cadmium, calcium, chloride, chromium, cobalt, copper, iron, lead, magnesium, manganese, mercury, molybdenum, nickel, pH, potassium, selenium,

sodium, strontium, sulfate, thallium, total alkalinity, total dissolved solids, total hardness, total suspended solids, vanadium, and zinc. Hexavalent chromium is a separate, standalone test; however, it is often done in conjunction with coal ash testing. That test is \$155.

The state Public Health laboratory does not have the ability to test radionuclides, which include gross alpha, gross beta, uranium, and radium 226/228. There is a private lab, Pace Analytical in Huntersville, that can test for those items. Their phone number is (704) 875-9092.

If additional testing is desired, homeowners can reach out to a certified laboratory. To find a laboratory that tests for specific possible contaminants, go to

https://slphreporting.ncpublichealth.com/Certification/CertifiedLaboratory.asp. Information on particular contaminants can be found at http://epi.publichealth.nc.gov/oee/wellwater/by contaminant.html.

## Information regarding lake water safety

Testing for bodies of water is conducted on the state level. Concerns regarding the lake can be directed to the North Carolina Department of Environmental Quality (<a href="https://deq.nc.gov/about/divisions/water-resources">https://deq.nc.gov/about/divisions/water-resources</a>) or the U.S. Environmental Protection Agency (<a href="https://www.epa.gov/">https://www.epa.gov/</a>).

The North Carolina Department of Health and Human Services issued a fish consumption advisory for Lake Norman in Catawba, Iredell, Lincoln and Mecklenburg counties in August 2017. The advisory was issued following a review of fish tissue data for the hybrid striped bass that found elevated levels of polychlorinated biphenyls (PCBs) in hybrid striped bass in this waterway. This fish consumption advisory is based on an increased risk for liver and immune system effects for individuals that eat hybrid striped bass contaminated with PCBs. Because of PCB contamination in the hybrid bass, it is recommended that people not eat more than two meals per week of hybrid striped bass from Lake Norman. The PCB fish contamination does not present a known health risk for persons engaging in recreational activities such as wading, swimming, boating, handling fish or touching the water. The advisory can be found at <a href="http://epi.publichealth.nc.gov/oee/fish/advisories.html">http://epi.publichealth.nc.gov/oee/fish/advisories.html</a>.

Because fish spend their entire lives in the water, chemicals that occur within their aquatic environments can be incorporated into their tissues over time. They are used as a bellwether to monitor water quality through tissue testing. For more information on fish testing, go to <a href="https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page/intensive-survey-branch/fish-tissue-data">https://deq.nc.gov/about/divisions/water-resources-data/water-sciences-home-page/intensive-survey-branch/fish-tissue-data</a>.

Depending on the potential contaminants you are concerned about, there may be additional information available at <a href="http://epi.publichealth.nc.gov/oee/programs/wellwater.html">http://epi.publichealth.nc.gov/oee/programs/wellwater.html</a>.

Information on the Water Sciences Section of the Division of Water Resources can be found at <a href="https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page">https://deq.nc.gov/about/divisions/water-resources/water-resources-data/water-sciences-home-page</a>.

## Additional contacts for water quality/coal ash

To speak with someone in the North Carolina Department of Health and Human Services Occupational and Environmental Epidemiology section, call (919) 707-5900 and tell them you are calling regarding coal ash.

To speak with someone in the North Carolina Department of Environmental Quality (formerly Department of Natural Resources) in the Water Quality section, call (919) 807-6464.