HOUSE BILL 1228*

Short Title:	Governor's Coal Ash Action Plan.	(Public)
Sponsors:	Representatives McGrady, Samuelson, and Hager (Primary Sponsors). *For a complete list of Sponsors, refer to the North Carolina General Assembly Web Site.*	
Referred to:	Environment, if favorable, Public Utilities and Energy.	

May 28, 2014

A BILL TO BE ENTITLED

AN ACT TO (1) CHANGE NOTIFICATION REQUIREMENTS APPLICABLE TO DISCHARGES OF WASTEWATER; (2) ESTABLISH COAL COMBUSTION PRODUCTS IMPOUNDMENT WATER MONITORING PROGRAM; (3) IDENTIFY AND ADDRESS UNPERMITTED WASTEWATER DISCHARGES AT COAL COMBUSTION PRODUCTS IMPOUNDMENT SITES; (4) AMEND S.L. 2009-390; (5) REQUIRE EMERGENCY ACTION PLANS FOR HIGH AND INTERMEDIATE HAZARD DAMS; (6) CHANGE NOTIFICATION REQUIREMENTS APPLICABLE TO DAM REPAIRS; (7) INCREASE COAL COMBUSTION PRODUCTS IMPOUNDMENT INSPECTION REQUIREMENTS; (8) MODIFY THE DEFINITION OF SOLID WASTE TO INCLUDE REMOVED COMBUSTION PRODUCTS; (9) PLACE A TEMPORARY MORATORIUM ON THE USE OF COAL COMBUSTION PRODUCTS AS STRUCTURAL FILL; AND (10) ESTABLISH REQUIREMENTS FOR COAL COMBUSTION PRODUCTS IMPOUNDMENT CLOSURE.

Whereas, the issue of coal ash storage has not been adequately addressed in North Carolina for more than six decades; and

Whereas, on February 2, 2014, an estimated 39,000 tons of coal ash was released into the Dan River following the failure of a stormwater pipe under a utility coal ash impoundment pond in Eden, North Carolina; and

Whereas, the Department of Environment and Natural Resources ("Department") finds that coal combustion products have settled into the sediment of the river bottom and will require an extensive clean-up plan to complete remediation; and

Whereas, the Department is in the process of reassessing previous efforts at achieving compliance at coal ash facilities and developing short term and long term policies in light of the Dan River spill, violations discovered in light of increased inspections of coal combustion products disposal facilities and anticipated new federal regulations on coal combustion products; and

Whereas, it is the intent of the Department to ensure that spills of wastewater are reported to the Department in a defined and adequate time frame; and

Whereas, it is the intent of the Department to protect surface water and groundwater resources for their best usage; and

Whereas, it is the intent of the Department to ensure that all unpermitted wastewater discharges are eliminated or addressed in an environmentally responsible manner; and

Whereas, it is the intent of the Department to equally subject all dams under jurisdiction of G.S. 143-215.23 to the requirements of statute and administrative code; and

Whereas, it is the intent of the Department for the owners of all dams under jurisdiction of G.S. 143-215.23 deemed intermediate and high hazard by the Department to prepare at their own cost documents that describe full and adequate response to emergency situations at their dams and to submit those documents to the Department; and

Whereas, it is the intent of the Department to ensure that emergency situations at dams are reported to the Department in a defined and adequate time frame; and

Whereas, the it is the intent of the Department to increase oversight of dam structure integrity to protect the health and safety of the public; and

Whereas, state law exempts coal combustion products removed from impoundments from being defined as a solid waste; and

Whereas, the Department finds that consistent environmental standards should apply to coal combustion products removed from impoundments for management or disposal and coal combustion products managed or disposed of as a solid waste; and

Whereas, the Department finds the federal Environmental Protection Agency is under consent decree to complete new regulations by December 2014 for coal combustion products that are proposed to bring consistency to requirements for large fills such as structural fills and landfills; and

Whereas, the Department finds that conversion and closure of coal ash storage ponds is necessary for protection of the health and safety of the public; Now, therefore,

The General Assembly of North Carolina enacts:

PART I. NOTIFICATION REQUIREMENTS APPLICABLE TO DISCHARGES OF WASTEWATER

SECTION 1. G.S. 143-215.1C reads as rewritten:

"**§ 143-215.1C. Report to wastewater system customers on system performance; <u>report discharge of untreated wastewater and wastewater containing coal combustion products to the Department; publication of notice of discharge of untreated wastewater and waste.</u>**

(a) Report to Wastewater System Customers. – The owner or operator of any wastewater collection or treatment works, the operation of which is primarily to collect or treat municipal or domestic wastewater and for which a permit is issued under this Part and having an average annual flow greater than 200,000 gallons per day, shall provide to the users or customers of the collection system or treatment works and to the Department an annual report that summarizes the performance of the collection system or treatment works and the extent to which the collection system or treatment works has violated the permit or federal or State laws, regulations, or rules related to the protection of water quality. The report shall be prepared on either a calendar or fiscal year basis and shall be provided no later than 60 days after the end of the calendar or fiscal year.

<u>(a1) Report of Discharge of Untreated Wastewater or Wastewater Containing Coal Combustion Products to the Department. – The owner or operator of any wastewater collection or treatment works shall report a discharge of 1,000 gallons or more of untreated wastewater or wastewater containing coal combustion products, or a spill of any amount of untreated wastewater or wastewater containing coal combustion products that reaches waters of the State to the Department as soon as possible but not later than 24 hours after first knowledge of the spill. This reporting requirement shall be in addition to any other reporting requirement applicable to the owner or operator of the wastewater collection or treatment works.</u>

(b) Publication of Notice of Discharge of Untreated Wastewater. – The owner or operator of any wastewater collection or treatment works, the operation of which is primarily to

collect or treat municipal or domestic wastewater ~~and for which a permit is issued under this Part~~ shall:

(1) In the event of a discharge of 1,000 gallons or more of untreated wastewater or wastewater containing coal combustion products to the surface waters of the State, issue a press release to all print and electronic news media that provide general coverage in the county where the discharge occurred setting out the details of the discharge. The owner or operator shall issue the press release within ~~48~~ 24 hours after the owner or operator has ~~determined that the discharge has reached the surface waters of the State.~~ first knowledge of the spill. The owner or operator shall retain a copy of the press release and a list of the news media to which it was distributed for at least one year after the discharge and shall provide a copy of the press release and the list of the news media to which it was distributed to any person upon request.

(2) In the event of a discharge of 15,000 gallons or more of untreated wastewater to the surface waters of the State, publish a notice of the discharge in a newspaper having general circulation in the county in which the discharge occurs and the county immediately downstream and in each county downstream from the point of discharge that is significantly affected by the discharge. The Secretary shall determine, at the Secretary's sole discretion, which counties are significantly affected by the discharge and shall approve the form and content of the notice and the newspapers in which the notice is to be published. The notice shall be captioned "NOTICE OF DISCHARGE OF UNTREATED SEWAGE". The owner or operator shall publish the notice within 10 days after the Secretary has determined the counties that are significantly affected by the discharge and approved the form and content of the notice and the newspapers in which the notice is to be published. The owner or operator shall file a copy of the notice and proof of publication with the Department within 30 days after the notice is published. Publication of a notice of discharge under this subdivision is in addition to the requirement to issue a press release under subdivision (1) of this subsection.

(c) Publication of Notice of Discharge of Untreated Waste as defined in G.S. 143-213(18). – The owner or operator of any wastewater collection or treatment works, other than a wastewater collection or treatment works the operation of which is primarily to collect or treat municipal or domestic ~~wastewater, for which a permit is issued under this Part~~ wastewater shall:

(1) In the event of a discharge of 1,000 gallons or more of untreated waste to the surface waters of the State, issue a press release to all print and electronic news media that provide general coverage in the county where the discharge occurred setting out the details of the discharge. The owner or operator shall issue the press release within ~~48~~ 24 hours after the owner or operator has ~~determined that the discharge has reached the surface waters of the State.~~first knowledge of the spill. The owner or operator shall retain a copy of the press release and a list of the news media to which it was distributed for at least one year after the discharge and shall provide a copy of the press release and the list of the news media to which it was distributed to any person upon request.

(2) In the event of a discharge of 15,000 gallons or more of untreated waste to the surface waters of the State, publish a notice of the discharge in a newspaper having general circulation in the county in which the discharge occurs and the county immediately downstream and in each county

downstream from the point of discharge that is significantly affected by the discharge. The Secretary shall determine, at the Secretary's sole discretion, which counties are significantly affected by the discharge and shall approve the form and content of the notice and the newspapers in which the notice is to be published. The notice shall be captioned "NOTICE OF DISCHARGE OF UNTREATED WASTE". The owner or operator shall publish the notice within 10 days after the Secretary has determined the counties that are significantly affected by the discharge and approved the form and content of the notice and the newspapers in which the notice is to be published. The owner or operator shall file a copy of the notice and proof of publication with the Department within 30 days after the notice is published. Publication of a notice of discharge under this subdivision is in addition to the requirement to issue a press release under subdivision (1) of this subsection."

PART II. COAL COMBUSTION PRODUCTS IMPOUNDMENT WATER MONITORING PROGRAM

SECTION 2. Article 21 of Chapter 143 of the General Statutes is amended by adding a new section to read:

"**§ 143-215.1D. Coal combustion products impoundment water monitoring program.**

(a) Groundwater Assessment – Owners of coal ash impoundments located at all investor-owned public utilities shall conduct groundwater monitoring according to the following schedule and procedures:

(1) No later than 45 days from enactment of this Act, the owner shall submit to the Division of Water Resources a Plan of proposed assessment activities to evaluate groundwater impacts from all coal combustions products impoundments located at all investor owned public utilities. At a minimum the plan shall:

a. Identify all receptors and significant exposure pathways.

b. Assess horizontal and vertical extent of soil and groundwater contamination for all contaminants confirmed to be present in groundwater in exceedance of groundwater quality standards and all significant factors affecting contaminant transport.

c. Identify the geological and hydrogeological features influencing the movement, chemical, and physical character of the contaminants.

d. Propose a schedule for continued groundwater monitoring.

Upon review and approval by the Division of Water Resources, the investor-owned public utility shall initiate assessment activities.

(2) No later than 180 days from the Division of Water Resources' written approval of the Plan required under subdivision (1) of subsection (a) of this section, or a time frame otherwise approved by the Division of Water Resources, the owner shall submit a Report detailing the findings of the Plan. The Report shall set forth the extent of any and all exceedances of the groundwater quality standards.

(3) No later than 270 days from the Division of Water Resources' written approval of the Plan required under subdivision (1) of subsection (a) of this section, or a time frame otherwise approved by the Division of Water Resources, the owner shall submit to the Division of Water Resources a proposed Corrective Action Plan. The Corrective Action Plan shall, at a minimum, contain:

a. A listing of all exceedances of the groundwater quality standards including any exceedances that the owner asserts are the result of natural background conditions.

b. Except as provided in subsubdivision f. of this subdivision, a description of the proposed corrective action employing the best available technology for the restoration of groundwater quality to the level of the groundwater quality standards and reasons for its selection.

c. Specific plans, including engineering details where applicable, for restoring groundwater quality.

d. A schedule for the implementation of the proposed corrective action plan.

e. A monitoring plan for evaluating the effectiveness of the proposed corrective action and the movement of the contaminant plume.

f. The owner may request alternative remediation as provided for under the requirements of 15A NCAC 2L .0106 (k), (l), or (m).

(4) No later than 30 days from the Division of Water Resources' approval of a Final Corrective Action Plan, the owner shall implement the Final Corrective Action Plan in accordance with a schedule established by Division of Water Resources. The approval of a Final Corrective Action Plan is not a final agency action pursuant to G.S. 150B.

(b) Drinking Water Assessment. – Within 60 days of enactment of this Act, owners of coal ash impoundments located at all investor-owned public utilities shall conduct and submit to the Division of Water Resources a water supply receptor survey. The Survey shall identify all receptors within a radius of 2,640 feet (0.5 mile) from the established compliance boundary of each impoundment. The owner shall sample each receptor identified by the Division of Water Resources. For any well exceeding the groundwater standards, the owner shall replace the water supply with a supply of potable drinking water.

(c) Annual Reporting Requirement. – In addition to any other reports required by the Division of Water Resources, the owners of coal combustion products impoundments located at all investor owned public utilities shall submit an annual report to the Division of Water Resources no later than January 31 of each year. The Annual report shall include a summary of all monitoring data collected over the year, status of Plans and Final Corrective Action Plans, and a summary of water supply receptor survey results."

PART III. IDENTIFY AND ADDRESS UNPERMITTED WASTEWATER DISCHARGES AT COAL COMBUSTION PRODUCTS IMPOUNDMENT SITES

SECTION 3. Article 21 of Chapter 143 of the General Statutes is amended by adding a new section to read:

"**§ 143-215.1E. Identify and address unpermitted wastewater discharges at coal combustion products impoundment sites.**

(a) Owners of coal combustion products impoundments located at all investor-owned public utilities shall implement the plan described in subsections (b) through (h) of this section to identify and address any unpermitted discharges to surface waters at those coal combustion products impoundment sites.

(b) No later than 90 days from enactment of this act, the owner shall submit a topographic map at a scale approved by Division of Water Resources that indicates the locations of all outfalls from engineered channels designed and/or improved for the purpose of collecting water from the toe of the coal combustion products impoundments. For each outfall, the map will:

(1) Specify its latitude and longitude.

(2) Specify whether the discharge is continuous or intermittent.
(3) Provide an average flow measurement, including a description of the method used to measure flow.

With the topographic map, the owner will submit to the Division of Water Resources a schedule according to which the owner shall conduct water quality sampling of the toe drain outfalls in order to further characterize the discharging water. No later than 30 days from receipt of the map and sampling schedule, Division of Water Resources will provide the owner with review comments, either approving the plan or noting any deficiencies to be corrected and a date by which a corrected map and/or sampling schedule is to be submitted for further review and comment. Within 30 days of approval of the schedule by the Division of Water Resources, the owner shall begin to sample the toe drain outfalls in accordance with the schedule and submit the samples for water quality analysis. Water quality analyses shall include the same parameters required for a coal-fired power plant per EPA Application Form 2C – Wastewater Discharge Information, Consolidated Permits Program (EPA Form 3510-2C, August 1990). If the owner demonstrates to the satisfaction of Division of Water Resources that sampling of a toe drain outfall is unlikely to generate usable data or is otherwise infeasible, the owner will not be required to sample that toe drain outfall.

(c) No later than 180 days from the enactment of this act, the owner shall submit a topographic map at a scale approved by the Division of Water Resources that indicates the locations of any seeps or drains reflecting discharges from the ash ponds but are not captured by an engineered channel identified pursuant to subsection (b) of this section. For any seep so identified that is believed to not reflect flows from any of the ash ponds, the owner shall provide to the Division of Water Resources the basis for such belief, including hydrological data or water quality testing information. For the seeps from the impoundments, the map will:

(1) Specify its latitude and longitude.
(2) Specify whether the discharge is continuous or intermittent.
(3) Provide an average flow measurement, including a description of the method used to measure flow.
(4) Specify whether the discharge from the seep reaches surface waters.
(5) If the discharge from the seep reaches surface water, identify the location where the seep reaches surface water on the map to include latitude and longitude.

(d) No later than 180 days from the enactment of this act, the owner shall submit a plan to determine whether toe drain or seep discharges from the impoundments have reached surface waters of the state and are causing violations of surface water quality standards. The plan shall include the following:

(1) Sampling locations upstream and downstream within all channels that potentially carry such discharges.
(2) Water quality analyses shall include the same parameters required for a coal-fired power plant per EPA Application Form 2C – Wastewater Discharge Information, Consolidated Permits Program (EPA Form 3510-2C, August 1990).
(3) Frequency and duration of the sampling activities.
(4) Reporting requirements.

No later than 30 days from receipt of the plan, the Division of Water Resources will provide the owner with review comments, either approving the plan, or noting any deficiencies to be corrected and a date by which a corrected plan is to be submitted for further review and comment or approval. Within 180 days from the Division of Water Resources' approval of the plan, the owner will implement and complete the plan and submit a report summarizing that work and its results.

(e) If the Division of Water Resources determines, based on information submitted pursuant to subsections (b) through (d) of this section, that discharges, whether from toe drains or seeps, are causing a violation of G.S. 143-215.1 or any other law, it shall so notify the owner. Within 120 days of such notification, the owner shall do one of the following:

(1) Stop the discharge.

(2) Capture and route the discharge so that it is discharged through an NPDES permitted outfall.

(3) Address the seep using Best Management Practices approved by the Division of Water Resources pursuant to subsection (f) of this section.

(4) Propose alternative Best Management Practices subject to the approval of the Division of Water Resources.

(5) Apply for an NPDES discharge permit or permit amendment to regulate the discharge.

(f) No later than 180 days from the date of enactment of this act, The owner shall submit to the Division of Water Resources for approval a set of best management practices designed to prevent unpermitted discharges of pollutants from the ash ponds to surface waters. Thereafter, the owner may submit additional best management practices for the Division of Water Resources approval.

(g) No later than 30 days from enactment of this act, the owner shall submit to the Division of Water Resources a plan for identifying new seeps on the dike areas of the ash ponds that arise after the submission of the maps described in subsections (b) and (c) of this section. The plan shall include, at a minimum, the following elements:

(1) A procedure for routine inspection of the coal combustion products impoundment areas to identify indicators of potential new seeps.

(2) A decision flow chart (including criteria and procedures) for determining whether a new seep is actually present.

(3) A procedure for notifying the Division of Water Resources after a new seep is confirmed.

No later than 30 days from receipt of the plan, the Division of Water Resources will provide the owner with review comments noting any deficiencies.

(h) No later than 12 months from the enactment of this act, the owner shall submit any information, forms, and fees necessary to request that the Division of Water Resources incorporate the process described in subsections (b) through (g) of this section into the owner's NPDES permit."

PART IV. AMEND S.L. 2009-390 (SB 1004)

SECTION 4. Section 3.(b) of S.L. 2009-390 is repealed.

PART V. EMERGENCY ACTION PLANS

SECTION 5. G.S. 143-215.31 is amended by adding two subsections to read:

"**§ 143-215.31. Supervision over maintenance and operation of dams.**

…

(f) Develop Emergency Action Plan. – Owners of high and intermediate hazard dams shall develop at their cost an Emergency Action Plan for their dam in document format in triplicate copy to be submitted to the Department by January 1, 2015. The emergency action plan at minimum shall:

(1) Identify potential emergency conditions that can occur at the dam.

(2) List preplanned actions to be taken during an emergency condition at the dam.

(3) Document emergency notification procedures to aid in warning and evacuations during an emergency condition at the dam.

(4) Provide a downstream inundation map depicting areas affected by a dam failure and sudden release of the impoundment.

If a dam owner fails to provide the Department with an Emergency Action Plan in triplicate copy by January 1, 2015, it shall be subject to Enforcement Procedures under G.S. 143-215.36. Dam owners shall update their emergency action plans annually and submit the updated plans in triplicate copy to the Department each year subsequent to January 1, 2015. The Department shall provide the appropriate local Emergency Management Agency and the Regional Office of the Department with the triplicate copy.

(g) Confidentiality of Sensitive Public Security Information – To the extent that any documents included in the Emergency Action Plan developed under this section contain sensitive public security information, those portions of documents shall not be subject to disclosure under the North Carolina Public Records Act."

PART VI. NOTIFICATION OF EMERGENCY REPAIR OF A DAM

SECTION 6. G.S. 143-215.27 reads as rewritten:

"**§143-215.27. Repair, alteration, or removal of dam.**

(a) Before commencing the repair, alteration or removal of a dam, application shall be made for written approval by the Department, except as otherwise provided by this Part. The application shall state the name and address of the applicant, shall adequately detail the changes it proposes to effect and shall be accompanied by maps, plans and specifications setting forth such details and dimensions as the Department requires. The Department may waive any such requirements. The application shall give such other information concerning the dam and reservoir required by the Department, such information concerning the safety of any change as it may require, and shall state the proposed time of commencement and completion of the work. When an application has been completed it may be referred by the Department for agency review and report, as provided by subsection (b) of G.S. 143-215.26 in the case of original construction.

(b) When repairs are necessary to safeguard life and property they may be started immediately but the Department shall be notified ~~forthwith~~ of the proposed repairs and of the work under ~~way,~~way as soon as possible but not later than 24 hours after first knowledge of the necessity for emergency repairs, and ~~they~~ such repairs shall be made to conform to its orders."

PART VII. INSPECTION OF IMPOUNDMENTS

SECTION 7. G.S. 143-215.32 is amended by adding two sections to read:

"(e) Investor-owned public utilities shall inspect each coal combustion products impoundment weekly and after storms to detect evidence of any of the following:

(1) Deterioration, malfunctions, or improper operation of spillway control systems.

(2) Sudden drops in the level of the impoundment's contents.

(3) Severe erosion or other signs of deterioration in dikes or other containment devices.

(4) New or enlarged seeps along the downstream slope or toe of the dike or other containment devices.

(5) Any other abnormal conditions at the impoundment that may pose a health or safety risk.

If any abnormalities in subdivisions (1) through (5) of this subsection are observed, documentation shall be provided to a registered professional engineer for further investigation and appropriate action.

(f) Each coal combustion products impoundment located at investor-owned public utilities shall be inspected annually by an independent registered professional engineer to assure structural integrity and that the design, operation, and maintenance of the surface

impoundment are in accordance with generally accepted engineering standards. The owner or operator must notify the Department by way of a certification by the independent registered professional engineer that the dam is structurally sound and the design, operation, and maintenance of the surface impoundment is in accordance with generally accepted engineering standards. The inspection report shall be submitted to the Department within 30 days of the completion of the inspection and shall be placed on a publicly accessible internet site."

PART VIII. DEFINITION OF SOLID WASTE

SECTION 8.(a) G.S. 130A-290(a)(35) reads as rewritten:

"(35) "Solid waste" means any hazardous or nonhazardous garbage, refuse or sludge from a waste treatment plant, water supply treatment plant or air pollution control facility, domestic sewage and sludges generated by the treatment thereof in sanitary sewage collection, treatment and disposal systems, and other material that is either discarded or is being accumulated, stored or treated prior to being discarded, or has served its original intended use and is generally discarded, including solid, liquid, semisolid or contained gaseous material resulting from industrial, institutional, commercial and agricultural operations, and from community activities. The term does not include:

a. Fecal waste from fowls and animals other than humans.

b. Solid or dissolved material in:

1. Domestic sewage and sludges generated by treatment thereof in sanitary sewage collection, treatment and disposal systems which are designed to discharge effluents to the surface waters.

2. Irrigation return flows.

3. Wastewater discharges and the sludges incidental to and generated by treatment which are point sources subject to permits granted under Section 402 of the Water Pollution Control Act, as amended (P.L. 92-500), and permits granted under G.S. 143-215.1 by the Environmental Management Commission. However, ~~any~~ combustion products removed from impoundments subject to permits under Section 402 of the Water Pollution Control Act, as amended (P.L. 92-500), and permits granted under G.S. 143-215.1 by the Environmental Management Commission shall be a solid waste. Any sludges that meet the criteria for hazardous waste under RCRA shall also be a solid waste for the purposes of this Article.

c. Oils and other liquid hydrocarbons controlled under Article 21A of Chapter 143 of the General Statutes. However, any oils or other liquid hydrocarbons that meet the criteria for hazardous waste under RCRA shall also be a solid waste for the purposes of this Article.

d. Any source, special nuclear or byproduct material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. § 2011).

e. Mining refuse covered by the North Carolina Mining Act, G.S. 74-46 through 74-68 and regulated by the North Carolina Mining and Energy Commission (as defined under G.S. 143B-293.1). However, any specific mining waste that meets the criteria for hazardous waste under RCRA shall also be a solid waste for the purposes of this Article.

f. Recovered material."

SECTION 8.(b) G.S. 143-213(18) reads as rewritten:

"(18) "Waste" shall mean and include the ~~following:~~following with the exception of solid waste as defined by G.S. 130A-290(a)(35):

a. "Sewage," which shall mean water-carried human waste discharged, transmitted, and collected from residences, buildings, industrial establishments, or other places into a unified sewerage system or an arrangement for sewage disposal or a group of such sewerage arrangements or systems, together with such ground, surface, storm, or other water as may be present.

b. "Industrial waste" shall mean any liquid, solid, gaseous, or other waste substance or a combination thereof resulting from any process of industry, manufacture, trade or business, or from the development of any natural resource.

c. "Other waste" means sawdust, shavings, lime, refuse, offal, oil, tar chemicals, dissolved and suspended solids, sediment, and all other substances, except industrial waste, sewage, and toxic chemicals which may be discharged into or placed in such proximity to the water that drainage therefrom may reach the water.

d. "Toxic waste" means that waste, or combinations of wastes, including disease-causing agents, which after discharge and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will cause death, disease, behavioral abnormalities, cancer, genetic mutations, physiological malfunctions (including malfunctions in reproduction) or physical deformities, in such organisms or their offspring."

PART IX. TEMPORARY MORATORIUM ON STRUCTURAL FILL

SECTION 9.(a) Moratorium Established. – Notwithstanding rules adopted by the Commission for Public Health there is hereby established a moratorium on the use of coal combustion products as a structural fill unless the fill is used under an airport runway or base or sub-base of a concrete or asphalt paved road, constructed under the authority of a public entity. The moratorium established by this section shall be in effect until rules are amended by the Commission for Public Health for the management of coal combustion products.

SECTION 9.(b) For purposes of this section, the moratorium does not apply to structural fill sites of less than 5,000 cubic yards.

SECTION 9.(c) This section is effective when this act becomes law and applies only to those coal combustion products structural fills that have not begun construction or have not received a permit to begin construction on or before that date.

PART X. COAL COMBUSTION PRODUCTS IMPOUNDMENT CLOSURE

SECTION 10.(a) Article 21 of Chapter 143 of the General Statutes is amended by adding a new Part to read:

"Part 12. Coal Combustion Products Impoundment Closure

"**§ 143-215.74Q. Closure of Coal Combustion Products Impoundments to Protect Groundwater and Surface Water**

(a) The Department shall establish the priority for closure of all active and inactive investor-owned coal combustion products impoundments. Once priorities for closure are established, the owner of the active and inactive ash ponds shall propose a schedule for beginning closure activities for each prioritized facility, and shall submit a proposed schedule

in accordance with the time frame established by the Department. Six months (180 days) before the scheduled closure activities begin, the owner must submit five (5) paper copies and one (1) electronic copy of a closure plan to the Division of Water Resources for approval. The closure plan shall include the following sections:

(1) Facility and Ash Pond Description. – A description of the operation of the facility that shall include, but not be limited to:
  a. Site and history of site operations; ash handling and storage operations.
  b. Types of flows discharging into the impoundment.
  c. Estimated volume of material contained in the impoundment.
  d. Analysis of the structural integrity of dikes or dams associated with impoundment.
  e. Composition of liner (lined or unlined pond).
  f. Summarized results of any previous environmental investigations performed at the site.

(2) Site Map**.** – Site maps that illustrate the following:
  a. All structures associated with operations of the ash ponds within the power plant property boundary.
  b. All identified current and former ash disposal and storage areas including structural fills.
  c. All property boundaries and established compliance boundaries.
  d. All potential receptors (i.e. water supply wells, surface water bodies (streams, springs, lakes, ponds and other surface drainage features, and wetlands) within 2,640 feet from the compliance boundary.
  e. Topographic contour intervals of the site shall be selected to enable an accurate representation of site features and terrain and in most cases should be less than 20 feet intervals.
  f. Locations of all on-site active and inactive Division of Waste Management permitted solid waste facilities along with their associated compliance boundaries and monitoring wells.
  g. All existing and proposed groundwater monitoring wells associated with monitoring of the active and inactive ash ponds.
  h. All existing and proposed sample collection locations associated with the operation or closure of the impoundment(s).

(3) Hydrogeologic, Geologic, and Geotechnical Investigations. – The results of a hydrogeologic, geologic, and geotechnical investigation of the facility, that shall include, but not be limited to:
  a. A description of the hydrogeology and geology of the site.
  b. A description of the stratigraphy of the geologic units underlying the ash ponds.
  c. The saturated hydraulic conductivity for the ash and liner if present.
  d. The geotechnical properties for the ash, liner if present, and the uppermost identified stratigraphic unit underlying the impoundment including the soil classification by Unified Soil Classification System, in-place moisture content, particle size distribution, Atterberg limits, specific gravity, effective friction angle, maximum dry density, optimum moisture content, and permeability.
  e. A chemical analysis of the impoundment water, ash, and ash-affected soil. Identify constituents with concentrations found to be in excess of 15A NCAC 02L. 0202 Groundwater Quality Standards including all laboratory results for these analyses.

f. Summary tables of historical records of groundwater sampling results.

g. A map that illustrates the potentiometric contours and flow directions for all identified aquifers underlying impoundments (shallow, intermediate, and deep) and the horizontal extent of areas where 15A NCAC 02L. 0202 Groundwater Quality Standards are exceeded.

h. Cross-sections that illustrate the following: vertical and horizontal extent of the ash within the impoundment; Stratigraphy of the geologic units underlying the ash pond and the vertical extent of areas where 15A NCAC 02L. 0202 Groundwater Quality Standards are exceeded.

(4) Hydrogeologic Modeling. – The results of groundwater modeling of the site that shall include, but not be limited to:

a. An account of the design of the proposed pond closure method that: is based on the site hydrogeologic conceptual model developed, includes predictions on post-closure groundwater elevations, groundwater flow directions and velocities including the effects on/from the potential receptors, and includes predictions at the compliance boundary for constituents identified in subsubdivision e. of subdivision (3) of this subsection as exceeding 15A NCAC 2L .0202 Groundwater Quality Standards.

b. Predictions that include the effects on the groundwater chemistry, and should describe migration, concentration, mobilization and fate of the constituents that exceed 15A NCAC 2L standards before and after closure activities including the effects on/from potential receptors.

c. A description of the groundwater trend analysis methods used to demonstrate compliance with 15A NCAC 02L .0202 Groundwater Quality Standards and 15A NCAC 02L .0106.

(5) Closure Method. – The owner shall provide a proposed closure method. The proposed closure method must demonstrate that where groundwater quality is degraded, restoration to the level of the groundwater standards will be obtained as is economically and technically feasible. The selected proposed closure method shall be from one of the following alternatives, and shall include, but not be limited to:

a. A description of the closure method identified for each ash pond. Closure methods include:

i. Closure-in-Place. – This alternative entails placing an engineered cover system such as a composite geomembrane, impermeable clay, and/or a soil cover over the ash pond. No ash or ash-affected soil would leave the ash pond area.

ii. Clean Closure. – This alternative assumes that all coal ash can be excavated and the ash pond area will be returned to a non-erosive and stable condition.

iii. Hybrid Closure. – This alternative entails consolidating ash and ash-affected soil into as small area as feasible within the ash pond footprint. An engineered cover system (e.g. composite geomembrane, impermeable clay, and/or a soil cover) would be installed over the consolidated ash and ash-affected soil. The remaining ash pond area will be returned to a non-erosive and stable condition.

iv. Other. – Must be equally or more effective at protecting water quality than the other closure options.

b. A description concerning any plans for beneficial reuse of the coal ash under 15A NCAC 02T .1200 (if applicable).

c. All engineering drawings, schematics, and specifications for the proposed closure method. If required by G.S. 89C, engineering design documents should be prepared, signed, and sealed by a professional engineer. Describe the construction quality assurance and quality control program including the responsibilities and authorities; monitoring and testing activities; sampling strategies; and reporting requirements.

d. A description of the provisions for disposal of wastewater through an NPDES permit or any other relevant permit.

e. A description of the provisions for the final disposition of the ash. If the ash is to be removed, the owner must identify the site location and the permit number for ash sent to a permitted disposal site. If the ash is left in place, the owner must provide a description of how the ash will be stabilized during closure and post closure and an estimate of the volume of ash left in place.

f. A list of all permits that will need to be acquired or modified to complete closure activities.

(6) Post-Closure Plan. – The owner shall provide post-closure plans for a minimum of 30 years. If required by G.S. 89C, these plans should be signed and sealed by a professional engineer. These plans shall include, but not be limited to:

a. A description of the post-closure care and maintenance activities.

b. A demonstration of the long-term control of all leachate, affected groundwater, and stormwater.

c. A description of a groundwater monitoring program that includes:

i. Post closure groundwater monitoring, including parameters to be sampled and sampling schedules.

ii. Any additional monitoring well installations, including a map with the proposed location/s and well construction details.

iii. A description of the actions proposed to mitigate statistically significant increasing groundwater quality trends.

d. The length of the post-closure care period. This period may be proposed to be decreased or the frequency and parameter list modified if the owner demonstrates that the reduced period or modifications are sufficient to protect human health and the environment and this demonstration is approved by the Department. The length of the post-closure care period may be increased by the Department at the end of the post-closure period if there are statistically significant increasing groundwater quality trends or contaminant concentrations have not decreased to a level protective of human health and the environment. If the owner determines that the post-closure care period is no longer needed and the Department agrees, the owner shall provide a certification, signed by a registered professional engineer, verifying that post-closure care has been completed in accordance with the post-closure plan.

(7) Schedules. – The owner shall provide an estimate of the milestone dates for all activities related to closure and post-closure.

(8) Future Site Use. – The owner shall describe the anticipated future use of the site and the necessity for deed restrictions following closure.

(9) Final Submittal Determination and Approval**.** – Within 90 days of receipt of a completed closure plan, the Department will send a letter either approving the closure plan or requesting additional information. Upon approval, the owner must begin closure activities within 30 days."

SECTION 10.(b) Part 3 of Article 21 of Chapter 143 of the General Statutes is amended by adding a new section to read:

"**§ 143-215.37A. Closure of coal combustion products impoundments to render such facilities exempt from the North Carolina Dam Safety Law of 1967.**

(a) Decommissioning Request Submittal. – Any party seeking to decommission a coal combustion products impoundment facility shall submit a document from the ownership entity requesting that the facility be decommissioned to the Division of Energy, Mineral, and Land Resources. The document shall include as a minimum the following:

(1) A proposed geotechnical investigation plan scope of work. Upon preliminary plan approval as described below, the owner shall proceed with necessary field work and submit a geotechnical report with site specific field data indicating that the containment dam and material impounded by the containment dam are stable, and that the impounded material is not subject to liquid flow behavior under expected static and dynamic loading conditions. Material testing should be performed along the full extent of the containment dam and in a pattern throughout the area of impounded material.

(2) A topographic map depicting existing conditions of the containment dam and impoundment area at two foot contour intervals or less.

(3) If the facility contains areas capable of impounding by topography, a breach plan must be included which ensures that there shall be no place within the facility capable of impounding. The breach plan shall include at minimum proposed grading contours superimposed on the existing topographic map as well as necessary engineering calculations, construction details and construction specifications.

(4) A permanent vegetation and stabilization or capping plan by synthetic liner or other means if needed. These plans shall include at minimum, proposed grading contours superimposed on the existing topographic map where applicable as well as necessary engineering calculations, construction details, construction specifications and all details for the establishment of surface area stabilization.

(5) A statement indicating that the impoundment facility has not received sluiced coal ash material for at least three years and there are no future plans to place coal ash in the facility by sluicing methods.

(b) Preliminary Submittal Determination and Approval. – The submitted document shall undergo a preliminary review by the Division of Energy, Mineral, and Land Resources for completeness and approval of the proposed geotechnical investigation plan scope of work.

(1) The owner shall be notified by letter with results of the preliminary review including approval or revision request relative to the proposed scope of work included in the geotechnical investigation plan.

(2) Upon receipt of a letter issued by the Division approving the preliminary geotechnical plan scope of work, the owner may proceed with field work and development of the geotechnical report.

(c) Final Submittal Determination and Approval. – Upon receipt of the geotechnical report, the Division of Energy, Mineral, and Land Resources shall complete the submittal review.

(1) If it is determined that sufficient evidence has been presented to clearly show that the facility no longer functions as a dam in its current state, a letter decommissioning the facility shall be issued by the Division of Energy, Mineral, and Land Resources and the facility shall no longer be under jurisdiction of the Dam Safety Law of 1967, G.S. 143-215.23.

(2) If modifications such as breach construction and/or implementation of a permanent vegetation or surface lining plan are needed, such plans shall be reviewed per standard procedures for consideration of letter of approval to modify and/or breach.

(3) If approved, such plans shall follow standard procedure for construction including: construction supervision by a North Carolina registered professional engineer, as-built submittal by a North Carolina registered professional engineer, and follow up final inspection by Division of Energy, Mineral, and Land Resources staff.

(4) Final approval shall be issued by the Division of Energy, Mineral, and Land Resources in the form of a letter decommissioning the facility and the facility shall no longer be under jurisdiction of the Dam Safety Law of 1967, G.S. 143-215.23."

PART XI. CLOSURE PLANS SCHEDULE

SECTION 11. Notwithstanding G.S. 143-215.74Q and G.S. 143-215.37A as enacted by Sections 10.(a) and 10.(b) of this act:

(a) The closure plan for Riverbend shall be submitted to the Department no later than 60 days after the Act is ratified and shall include detailed provisions that ensure all ash in the impoundments will be moved to a lined structural fill, a lined landfill, or an alternative disposition approved by Department.

(b) The closure plan for Asheville shall be submitted to the Department no later than 60 days after the Act is ratified and include detailed provisions that ensure all ash in the impoundments will be moved to a lined structural fill, a lined landfill, or an alternative disposition approved by the Department.

(c) The closure plan for Dan River shall be submitted to the Department no later than 90 days after the Act is ratified and include detailed provisions that ensure all ash in the impoundments will be moved to a lined structural fill, a lined landfill, or an alternative disposition approved by the Department.

(d) The closure plan for Sutton shall be submitted to the Department no later than 90 days after the Act is ratified, and include detailed provisions that ensure all ash in the impoundments will be moved to a lined structural fill, a lined landfill, or an alternative disposition approved by Department.

PART XII. APPROPRIATION

SECTION 12. There is appropriated from the General Fund to the Department of Environment and Natural Resources the sum of one million four hundred thousand dollars ($1,400,000) for the 2013-2014 Fiscal Year to establish nineteen permanent positions and associated operating costs to implement this act."

PART XIII. EFFECTIVE DATE

SECTION 13. This act is effective when it becomes law.