



North Carolina Department of Environment and Natural Resources

Pat McCrory
Governor

John E. Skvarla, III
Secretary

November 19, 2014

MEMORANDUM

TO: THE ENVIRONMENTAL REVIEW COMMISSION
The Honorable Mike Hager, Co-Chair
The Honorable Ruth Samuelson, Co-Chair
The Honorable Brent Jackson, Co-Chair

FROM: Neal Robbins, Director of Legislative Affairs

SUBJECT: Review of the Environmental Management Commission's Corrective Action and Compliance Boundary Rules for Clarity and Consistency Report

DATE: November 19, 2014

Pursuant to S.L. 2014-122, the Environmental Management Commission has conducted a review of its rules in 15A NCAC 2L for corrective action and compliance boundaries. Please consider the attached as the formal submission this report on behalf of the EMC.

If you have any questions or need additional information, please contact me by phone at (919) 707-8618 or via e-mail at neal.robbs@ncdenr.gov.

cc: Mitch Gillespie, Assistant Secretary for Environment, NCDENR
Kevin Martin, Acting Chair of the Environmental Management Commission
Tom Reeder, Director of Water Resources, NCDENR
Linda Culpepper, Director of Waste Management, NCDENR

Review of the Environmental Management Commission's Corrective Action and Compliance Boundary Rules for Clarity and Consistency

Report of the Environmental Management Commission to the Environmental Review Commission under Part VII of S.L. 2014-122

November 13, 2014

Executive Summary

In accordance with Session Law 2014-122, the Environmental Management Commission has conducted a review of its rules in 15A NCAC 2L for corrective action and compliance boundaries. From this review, the EMC has concluded that there are several issues in these rules that need clarification:

- Use of the terminology “non-permitted” in 15A NCAC 2L .0106 to refer to some activities that in fact have permits;
- Disagreement between the EMC and a recent court ruling over the interpretation of “immediate action to eliminate the source or sources of contamination;”
- Whether, in the context of the corrective action rule, a compliance boundary is applicable to facilities that are truly permitted, but are considered “non-permitted” under 15A NCAC 2L .0106(e)
- The omission of permits issued under Chapter 130A of North Carolina General Statutes from the definition of “permitted” activities under the corrective action rule (15A NCAC 2L .0106), even though such permits are given compliance boundaries under the compliance boundary rule (15A NCAC 2L .0107); and
- Various technical corrections and updates to reflect the current organizational structure of DENR.

Revised rule text is suggested in this report to clarify these issues in the corrective action rule (15A NCAC 2L .0106).

The fastest options for clarifying these issues are either legislative clarifications or temporary rulemaking. However, there is a risk of unintended consequences if sweeping changes to the rules are undertaken without stakeholder involvement in a permanent rulemaking process. For this reason, it is recommended that the most pressing clarity issues identified in this report be addressed through permanent rulemaking by the EMC, unless the General Assembly directs the EMC to undertake temporary rulemaking. The EMC has directed staff in the Department of Environment and Natural Resources to present proposed rule revision language for permanent rulemaking at the EMC's January meeting.

Introduction

Session Law 2014-122 (the Coal Ash Management Act of 2014) directed the Environmental Management Commission (EMC) to review its compliance boundary and corrective action rules in 15A NCAC 2L for clarity and consistency, and to report the results of its review to the Environmental Review Commission (ERC) by December 1, 2014.

The chair of the EMC appointed five EMC members to an *ad hoc* committee to conduct this review and make recommendations to the EMC to report to the ERC. The committee met with staff in the Department of Environment and Natural Resources and has prepared this report to summarize the committee's findings and recommendations to the EMC.

Background

Compliance Boundary Rule

Rule 15A NCAC 2L .0107 establishes a boundary around permitted disposal systems at and beyond which groundwater quality standards may not be exceeded. This compliance boundary only applies to facilities which have received a permit issued under the authority of G.S. 143-215.1 (e.g., wastewater and wastewater treatment residuals disposal sites) or G.S. 130A (e.g., septic systems and solid waste disposal sites). Depending on the date the facility was permitted, two categories of compliance boundary are established by 15A NCAC 2L .0107:

- For disposal systems individually permitted prior to December 30, 1983, the compliance boundary is established at a horizontal distance of 500 feet from the waste boundary or at the property boundary, whichever is closer to the source.
- For disposal systems individually permitted on or after December 30, 1983, a compliance boundary is established 250 feet from the waste boundary, or 50 feet within the property boundary, whichever point is closer to the source.

The purpose of the different compliance boundary distances is to allow older facilities, which may not have been engineered or constructed to modern standards, more leeway in managing the impacts of their waste disposal practices, while still prohibiting contamination from migrating offsite.

Rule 15A NCAC 2L .0108 establishes a review boundary halfway between the waste boundary and the compliance boundary. The purpose of the review boundary is to serve as a sort of early warning monitoring point to prompt permitted facilities to take action before contamination reaches the compliance boundary.

Corrective Action Rule

Rule 15A NCAC 2L .0106 establishes requirements for corrective action for activities that result in groundwater contamination at levels in excess of the groundwater standards.

The corrective action rule makes a distinction between “permitted” and “non-permitted” activities, establishing different requirements for corrective action that persons engaged in permitted and non-

permitted activities must undertake. Paragraph (e) of the corrective action rule specifies that “an activity conducted under the authority of a permit,” and subject to being treated as permitted for the purposes of corrective action, is one for which:

- a permit has been issued pursuant to G.S. 143-215.1;
- the permit was originally issued after December 30, 1983; and
- the substance for which a standard has been exceeded outside the compliance boundary has been released to groundwater as a result of the permitted activity.

Facilities or persons not meeting the above criteria are considered to be “non-permitted” for the purposes of 15A NCAC 2L .0106(c) and 15A NCAC 2L .0106(d). This means that some facilities or persons holding active permits from DENR are considered “non-permitted” for the purposes of the corrective action rule, if their permits were issued prior to December 30, 1983 or were issued under statutes other than G.S. 143-215.1.

Paragraph (c) of the corrective action rule requires persons conducting or controlling activities that are deemed “non-permitted,” upon finding that their activities have contaminated groundwater at levels above the groundwater standards, to:

- immediately notify the Division of the activity that has resulted in the increase and the contaminant concentration levels;
- take immediate action to eliminate the source or sources of contamination;
- submit a report to the Director assessing the cause, significance and extent of the violation; and
- implement an approved corrective action plan for restoration of groundwater quality.

On the other hand, Paragraph (d) of the corrective action rule requires persons engaged in activities that are deemed “permitted” to implement corrective actions when groundwater standards are exceeded at a review boundary or compliance boundary. If the groundwater standards exceedance occurs at a review boundary, the permittee must demonstrate that natural site conditions, facility design and operational controls will prevent a violation of standards at the compliance boundary; or they must implement a plan for alteration of existing site conditions, facility design or operational controls to prevent a violation at the compliance boundary. Such actions could include reducing the amount of waste applied to the land. When a permitted activity causes an exceedance of groundwater standards at the compliance boundary, the permittee must assess the cause, significance and extent of the violation of standards at and beyond the compliance boundary and submit the results of the investigation and a plan and proposed schedule for corrective action.

Discussion

Historically, DENR and the EMC have interpreted the requirement in Paragraph (c) of the corrective action rule to take “immediate action to eliminate the source or sources of contamination” as requiring responsible parties and DENR to follow detailed procedures prescribed in the entirety of 15A NCAC 2L. The specific corrective actions required to be undertaken prior to or concurrent with assessment

activities are spelled out in 15A NCAC 2L .0106(f), which addresses actions requiring immediate action, such as prevention of fire, explosion, or the spread of noxious fumes, as well as those actions which may require a longer duration to undertake, or which may require assessment prior to action, such as removal, treatment, or control of primary and secondary sources of pollution. However, a 2014 ruling in the Wake County Superior Court determined that the EMC had erred in interpreting 15A NCAC 2L .0106(f) to provide clarification of the “immediate action” required by 15A NCAC 2L .0106(c).

In addition, the criteria used in Paragraph 15A NCAC 2L .0106(e) to distinguish “permitted” activities from “non-permitted” activities makes navigation of the rule difficult and confuses the applicability of other portions of the rule by calling some permitted facilities “non-permitted” for some purposes of 15A NCAC 2L .0106, while they remain “permitted” for purposes of other rules in 15A NCAC 2L.

With regard to the compliance boundary rule, it has been argued, in a request for declaratory ruling before the EMC and in a subsequent judicial review of that declaratory ruling, that compliance boundaries are only relevant for facilities or activities that are considered “permitted” in the context of 15A NCAC 2L .0106, and that compliance boundaries are not applicable to the corrective action requirements for facilities permitted prior to December 30, 1983. However, rule 15A NCAC 2L .0107 clearly establishes a compliance boundary around these older permitted facilities. In 2013, the General Assembly clarified this fact in the S.L. 2013-413 by limiting the EMC’s authority to require corrective action within the compliance boundary to particular circumstances. However, this limitation on the EMC’s corrective action authority was repealed by S.L. 2014-122.

The corrective action rule and compliance boundary rule have a potential conflict with regard to their respective applicability to permits issued by DENR. Both rules differentiate between permits issued before and after December 30, 1983. However, the compliance boundary rule establishes compliance boundaries around permits issued under G.S. 143-215.1 and those issued under G.S. Chapter 130A, while the corrective action rule includes only permits issued under G.S. 143-215.1 in its definition of “permitted” activities. The reason for this omission is not immediately clear and warrants further investigation.

In addition to the substantial issues, the rules throughout 15A NCAC 2L do not reflect the current organizational structure of the Department of Environment and Natural Resources. For example, the rules still refer to the Division of Environmental Management and its Director, though this division was eliminated, and its responsibilities distributed to various other divisions of DENR, in 1997.

Findings

The Compliance Boundary *ad hoc* Committee has identified the following issues as needing clarification in the 15A NCAC 2L rules:

- Use of the terminology “non-permitted” in 15A NCAC 2L .0106 to refer to some activities that in fact have permits;

- Disagreement between the EMC and a recent court ruling over the interpretation of “immediate action to eliminate the source or sources of contamination,” and the relevance of 15A NCAC 2L .0106(f) to such action;
- Whether, in the context of the corrective action rule, a compliance boundary is applicable to facilities that are truly permitted, but are considered “non-permitted” under 15A NCAC 2L .0106(e)
- The omission of permits issued under Chapter 130A of North Carolina General Statutes from the definition of “permitted” activities under the corrective action rule (15A NCAC 2L .0106), even though such permits are given compliance boundaries under the compliance boundary rule (15A NCAC 2L .0107); and
- Various technical corrections and updates to reflect the current organizational structure of DENR.

Suggested text for clarifying these issues is provided in the Appendix.

Options for Clarifying the Rules

Four options for modifying the corrective action rule have been identified:

- Rule revisions by legislative action;
- Temporary rulemaking;
- Permanent rulemaking initiated by the EMC; or
- Permanent rulemaking under the rules review requirements of House Bill 74

Rule Revisions by Legislative Action

The General Assembly could, through legislation, set aside any existing rule of the EMC in favor of alternative requirements, or direct the EMC as to the implementation of a rule. This process could be efficient, but could circumvent the involvement of a broad array of stakeholders whose input might be valuable to crafting detailed requirements and avoiding unintended consequences.

Temporary Rulemaking

The Administrative Procedures Act allows an agency to adopt a temporary rule when it finds that adherence to the notice and hearing requirements of G.S. 150B-21.2 would be contrary to the public interest and that the immediate adoption of the rule is required by any of several criteria in G.S. 150B-21.1(a), including:

- A serious and unforeseen threat to the public health, safety, or welfare.
- The effective date of a recent act of the General Assembly or the United States Congress.
- A recent change in federal or State budgetary policy.
- A recent federal regulation.
- A recent court order.

At present, it does not appear that any of these criteria are met for the rules in question.

When an agency adopts a temporary rule it must submit the rule and the agency's written statement of its findings of the need for the rule to the RRC. The RRC determines whether the statement meets the criteria listed in G.S. 150B-21.1(a) and whether the rule meets the standards in G.S. 150B-21.9. If the RRC disagrees with the agency's determination, the rule does not take effect.

The temporary rulemaking process provides for public comment on the temporary rule, though the public comment period is abbreviated compared to that in permanent rulemaking.

A temporary rule expires within 270 days from the date the adopted temporary rule is published in the North Carolina Register. The rule can expire sooner if the agency adopting the rule specifies an earlier date, or if the RRC or General Assembly take certain actions listed in G.S. 150B-21.1(d).

Permanent Rulemaking Initiated by the EMC

Permanent rulemaking would allow for the most comprehensive solution to issues of clarity and consistency identified in this report. In addition, permanent rulemaking, by its requirements for public comment, would help identify and prevent unintended consequences of rule revisions adopted by the EMC. The permanent rulemaking process would take approximately two years to complete.

Permanent Rulemaking Under Rules Review Requirements of H74

Review of rules under H74 entails an agency determination regarding the necessity of and public interest in the rules, followed by a public comment period to solicit comments on the agency's determination, and review by Rules Review Commission (RRC) of the agency's determination. The agency's determination is scheduled for review by the RRC in February 2018. Following the public comment period and RRC review, any rules determined to be necessary would have to undergo re-adoption, which would allow for revisions to the rules to be considered. If the issues identified in this report were addressed through this process, full resolution of these issues would likely not be completed until at least 2019.

Recommendation

While it is important to correct the issues identified by this review, it is equally important to recognize that the corrective action and compliance boundary rules, and other related rules in 15A NCAC 2L have broad applicability beyond the immediate issues that prompted the passage of S.L. 2014-122. Large changes to the rules could have unintended consequences if those changes are not undertaken with the full involvement of stakeholders. For this reason, it is recommended that the most pressing clarity issues identified in this report be addressed through permanent rulemaking by the EMC, unless the General Assembly directs the EMC to undertake temporary rulemaking. The EMC has directed staff in the Department of Environment and Natural Resources to present proposed rule revision language for permanent rulemaking at the EMC's January meeting.

Appendix – Draft Text of Suggested Revisions to the Corrective Action Rule

15A NCAC 02L .0106 CORRECTIVE ACTION

(a) Where groundwater quality has been degraded, the goal of any required corrective action shall be restoration to the level of the standards, or as closely thereto as is economically and technologically feasible. In all cases involving requests to the ~~Director~~ Secretary, as defined in 15A NCAC 2C .0102, for approval of corrective action plans, or termination of corrective action, the responsibility for providing all information required by this Rule lies with the person(s) making the request.

(b) Any person conducting or controlling an activity which results in the discharge of a waste or hazardous substance or oil to the groundwaters of the State, or in proximity thereto, shall take immediate action to terminate and control the discharge, mitigate any hazards resulting from exposure to the pollutants and notify the ~~Division~~ Department, as defined in 15A NCAC 2C .0102, of the discharge.

(c) Any person conducting or controlling an activity which has not been permitted by the ~~Division~~ Department and which results in an increase in the concentration of a substance in excess of the standard, other than agricultural operations, shall:

- (1) immediately within 24 hours of discovery of the violation, notify the ~~Division~~ Department of the activity that has resulted in the increase and the contaminant concentration levels;
- ~~(2) take immediate action to eliminate the source or sources of contamination;~~
- (2) respond in accordance with Paragraph (f) of this Rule;
- (3) submit a report to the ~~Director~~ Secretary assessing the cause, significance and extent of the violation; and
- (4) implement an approved corrective action plan in accordance with a schedule established by the Secretary for restoration of groundwater quality quality;
 - (i) at or beyond a compliance boundary set forth in a permit issued pursuant to G.S. 143-215.1 or G.S. 130A-294; or
 - (ii) if no compliance boundary has been established pursuant to permit, within the area impacted by the increase in the concentration in excess of the standard.

In establishing a schedule the ~~Director, or his designee~~ Secretary shall consider any reasonable schedule proposed by the person submitting the plan. A report shall be made to the Health Director of the county or counties in which the contamination occurs in accordance with the requirements of Rule .0114(a) in this Section.

(d) Any person conducting or controlling an activity which is conducted under the authority of a permit issued by the ~~Division~~ Department and which results in an increase in concentration of a substance in excess of the standards:

- (1) at or beyond a review boundary, shall demonstrate, through predictive calculations or modeling, that natural site conditions, facility design and operational controls will prevent a violation of standards at the compliance boundary; or submit a plan for alteration of existing site conditions, facility design or operational controls that will prevent a violation at the compliance boundary, and implement that plan upon its approval by the ~~Director, or his designee~~ Secretary.
- (2) at or beyond a compliance boundary, shall assess the cause, significance and extent of the violation of standards and submit the results of the investigation, and a plan and proposed schedule for corrective action to the ~~Director, or his designee~~ Secretary. The permittee shall implement the plan as approved by and in accordance with a schedule established by the ~~Director, or his designee~~ Secretary. In establishing a

schedule the ~~Director, or his designee~~ Secretary shall consider any reasonable schedule proposed by the permittee.

(e) For the purposes of Paragraphs (c) and (d) of this Rule, an activity conducted under the authority of a permit issued by the ~~Division~~ Department, and subject to Paragraph (d) of this Rule, is one for which:

- (1) a permit has been issued pursuant to ~~G.S. 143-215.1;~~ G.S. 143-215.1 or G.S. 130A-294;
- (2) the permit was originally issued after December 30, 1983;
- (3) the substance for which a standard has been exceeded outside the compliance boundary has been released to groundwater as a result of the permitted activity;
- ~~(4) all other activities shall for the purpose of this Rule be deemed not permitted by the Division and subject to the provisions of Paragraph (c) of this Rule.~~

All other activities shall for the purpose of this Rule be deemed not permitted by the Division Department and subject to the provisions of Paragraph (c) of this Rule.

(f) ~~Corrective action~~ Initial response required following discovery of the unauthorized release of a contaminant to the surface or subsurface of the land, and prior to or concurrent with the assessment required in Paragraphs (c) and (d) of this Rule, shall include, but is not limited to:

- (1) Prevention of fire, explosion or the spread of noxious fumes;
- (2) Abatement, containment or control of the migration of contaminants;
- (3) Removal, or ~~treatment~~ treatment, or and control of any primary pollution source such as buried waste, waste stockpiles or surficial accumulations of free products;
- (4) Removal, ~~treatment~~ or treatment, or control of secondary pollution sources which would be potential continuing sources of pollutants to the groundwaters such as contaminated soils and non-aqueous phase liquids. Contaminated soils which threaten the quality of groundwaters must be treated, contained or disposed of in accordance with applicable rules. The treatment or disposal of contaminated soils shall be conducted in a manner that will not result in a violation of standards or North Carolina Hazardous Waste Management rules.

(g) The site assessment conducted pursuant to the requirements of Paragraph (c) of this Rule, shall include:

- (1) The source and cause of contamination;
- (2) Any imminent hazards to public health and safety and actions taken to mitigate them in accordance with Paragraph (f) of this Rule;
- (3) All receptors and significant exposure pathways;
- (4) The horizontal and vertical extent of soil and groundwater contamination and all significant factors affecting contaminant transport; and
- (5) Geological and hydrogeological features influencing the movement, chemical, and physical character of the contaminants.

Reports of site assessments shall be submitted to the ~~Division~~ Department as soon as practicable or in accordance with a schedule established by the ~~Director, or his designee~~ Secretary. In establishing a schedule the ~~Director, or his designee~~ Secretary shall consider any reasonable proposal by the person submitting the report.

(h) Corrective action plans for restoration of groundwater quality, submitted pursuant to Paragraphs (c) and (d) of this Rule shall include:

- (1) A description of the proposed corrective action and reasons for its selection.

- (2) Specific plans, including engineering details where applicable, for restoring groundwater quality.
 - (3) A schedule for the implementation and operation of the proposed plan.
 - (4) A monitoring plan for evaluating the effectiveness of the proposed corrective action and the movement of the contaminant plume.
- (i) In the evaluation of corrective action plans, the ~~Director, or his designee~~ Secretary shall consider the extent of any violations, the extent of any threat to human health or safety, the extent of damage or potential adverse impact to the environment, technology available to accomplish restoration, the potential for degradation of the contaminants in the environment, the time and costs estimated to achieve groundwater quality restoration, and the public and economic benefits to be derived from groundwater quality restoration.
- (j) A corrective action plan prepared pursuant to Paragraph (c) or (d) of this Rule must be implemented using the best available technology for restoration of groundwater quality to the level of the standards, except as provided in Paragraphs (k), (l), (m), (r) and (s) of this Rule.
- (k) Any person required to implement an approved corrective action plan for a non-permitted site pursuant to this Rule may request that the ~~Director~~ Secretary approve such a plan without requiring groundwater remediation to the standards. A request submitted to the ~~Director~~ Secretary under this Paragraph shall include a description of site specific conditions, including information on the availability of public water supplies for the affected area; the technical basis for the request; and any other information requested by the ~~Director~~ Secretary to thoroughly evaluate the request. In addition, the person making the request must demonstrate to the satisfaction of the ~~Director~~:
Secretary:
- (1) that all sources of contamination and free product have been removed or controlled pursuant to Paragraph (f) of this Rule;
 - (2) that the time and direction of contaminant travel can be predicted with reasonable certainty;
 - (3) that contaminants have not and will not migrate onto adjacent properties, or that:
 - (A) such properties are served by an existing public water supply system dependent on surface waters or hydraulically isolated groundwater, or
 - (B) the owners of such properties have consented in writing to the request;
 - (4) that the standards specified in Rule .0202 of this Subchapter will be met at a location no closer than one year time of travel upgradient of an existing or foreseeable receptor, based on travel time and the natural attenuation capacity of subsurface materials or on a physical barrier to groundwater migration that exists or will be installed by the person making the request;
 - (5) that, if the contaminant plume is expected to intercept surface waters, the groundwater discharge will not possess contaminant concentrations that would result in violations of standards for surface waters contained in 15A NCAC 2B .0200;
 - (6) that public notice of the request has been provided in accordance with Rule .0114(b) of this Section;
 - (7) that the proposed corrective action plan would be consistent with all other environmental laws.
- (l) Any person required to implement an approved corrective action plan for a non-permitted site pursuant to this Rule may request that the ~~Director~~ Secretary approve such a plan based upon natural processes of degradation and attenuation of contaminants. A request submitted to the ~~Director~~ Secretary under this Paragraph shall include a description of site specific conditions, including

written documentation of projected groundwater use in the contaminated area based on current state or local government planning efforts; the technical basis for the request; and any other information requested by the ~~Director~~ Secretary to thoroughly evaluate the request. In addition, the person making the request must demonstrate to the satisfaction of the ~~Director~~ Secretary:

- (1) that all sources of contamination and free product have been removed or controlled pursuant to Paragraph (f) of this Rule;
 - (2) that the contaminant has the capacity to degrade or attenuate under the site-specific conditions;
 - (3) that the time and direction of contaminant travel can be predicted with reasonable certainty;
 - (4) that contaminant migration will not result in any violation of applicable groundwater standards at any existing or foreseeable receptor;
 - (5) that contaminants have not and will not migrate onto adjacent properties, or that:
 - (A) such properties are served by an existing public water supply system dependent on surface waters or hydraulically isolated groundwater, or
 - (B) the owners of such properties have consented in writing to the request;
 - (6) that, if the contaminant plume is expected to intercept surface waters, the groundwater discharge will not possess contaminant concentrations that would result in violations of standards for surface waters contained in 15A NCAC 2B .0200;
 - (7) that the person making the request will put in place a groundwater monitoring program sufficient to track the degradation and attenuation of contaminants and contaminant by-products within and down gradient of the plume and to detect contaminants and contaminant by-products prior to their reaching any existing or foreseeable receptor at least one year's time of travel upgradient of the receptor and no greater than the distance the groundwater at the contaminated site is predicted to travel in five years;
 - (8) that all necessary access agreements needed to monitor groundwater quality pursuant to SubParagraph (7) of this Paragraph have been or can be obtained;
 - (9) that public notice of the request has been provided in accordance with Rule .0114(b) of this Section; and
 - (10) that the proposed corrective action plan would be consistent with all other environmental laws.
- (m) The ~~Division~~ Department or any person required to implement an approved corrective action plan for a non-permitted site pursuant to this Rule may request that the ~~Director~~ Secretary approve termination of corrective action.
- (1) A request submitted to the ~~Director~~ Secretary under this Paragraph shall include:
 - (A) a discussion of the duration of the corrective action, the total project's cost, projected annual cost for continuance and evaluation of the success of the corrective action;
 - (B) an evaluation of alternate treatment technologies which could result in further reduction of contaminant levels projected capital and annual operating costs for each technology;
 - (C) effects, including health and safety impacts, on groundwater users if contaminant levels remain at levels existing at the time corrective action is terminated; and

- (D) any other information requested by the ~~Director~~ Secretary to thoroughly evaluate the request.
- (2) In addition, the person making the request must demonstrate to the satisfaction of the ~~Director~~ Secretary:
 - (A) that continuation of corrective action would not result in a significant reduction in the concentration of contaminants (At a minimum this demonstration must show the duration and degree of success of existing remedial efforts to attain standards and include a showing that the asymptotic slope of the contaminants curve of decontamination is less than a ratio of 1:40 over a term of one year based on quarterly sampling);
 - (B) that contaminants have not and will not migrate onto adjacent properties, or that:
 - (i) such properties are served by an existing public water supply system dependent on surface waters or hydraulically isolated groundwater, or
 - (ii) the owners of such properties have consented in writing to the request;
 - (C) that, if the contaminant plumes expected to intercept surface waters, the groundwater discharge will not possess contaminant concentrations that would result in violations of standards for surface waters contained in 15A NCAC 2B .0200;
 - (D) that public notice of the request has been provided in accordance with Rule .0114(b) of this Section; and
 - (E) that the proposed termination would be consistent with all other environmental laws.
- (3) The ~~Director~~ Secretary shall not authorize termination of corrective action for any area that, at the time the request is made, has been identified by a state or local groundwater use planning process for resource development.
- (4) The ~~Director~~ Secretary may authorize the termination of corrective action, or amend the corrective action plan after considering all the information in the request. Upon termination of corrective action, the ~~Director~~ Secretary shall require implementation of a groundwater monitoring program sufficient to track the degradation and attenuation of contaminants at a location of at least one year's predicted time of travel upgradient of any existing or foreseeable receptor. The monitoring program shall remain in effect until there is sufficient evidence that the contaminant concentrations have been reduced to the level of the standards.
- (n) Upon a determination by the ~~Director~~ Secretary that continued corrective action would result in no significant reduction in contaminant concentrations, and the contaminated groundwaters can be rendered potable by treatment using readily available and economically reasonable technologies, the ~~Director~~ Secretary may designate the remaining area of degraded groundwater RS. Where the remaining degraded groundwaters cannot be made potable by such treatment, the ~~Director~~ Secretary may consider a request for reclassification of the groundwater to a GC classification as outlined in Rule .0201 of this Subchapter.
- (o) If at any time the ~~Director~~ Secretary determines that a new technology is available that would remediate the contaminated groundwater to the standards specified in Rule .0202 of this Subchapter, the ~~Director~~ Secretary may require the responsible party to evaluate the economic and technological feasibility of implementing the new technology in an active groundwater corrective action plan in accordance with a schedule established by the ~~Director~~ Secretary. The ~~Director's~~ Secretary's

determination to utilize new technology at any site or for any particular constituent shall include a consideration of the factors in Paragraph (h) of this Rule.

(p) Where standards are exceeded as a result of the application of pesticides or other agricultural chemicals, the ~~Director~~ Secretary shall request the Pesticide Board or the Department of Agriculture to assist the ~~Division of Environmental Management~~ Department in determining the cause of the violation. If the violation is determined to have resulted from the use of pesticides, the ~~Director~~ Secretary shall request the Pesticide Board to take appropriate regulatory action to control the use of the chemical or chemicals responsible for, or contributing to, such violations, or to discontinue their use.

(q) The approval pursuant to this Rule of any corrective action plan, or modification or termination thereof, which permits the migration of a contaminant onto adjacent property, shall not affect any private right of action by any party which may be effected by that contamination.

(r) If a discharge or release is not governed by 15A NCAC 2L .0115 and the increase in the concentration of a substance in excess of the standard resulted in whole or in part from a release from a commercial or noncommercial underground storage tank as defined in G.S. 143-215.94A, any person required to implement an approved corrective action plan pursuant to this Rule and seeking reimbursement for the Commercial or Noncommercial Leaking Petroleum Underground Storage Tank Cleanup Funds shall implement a corrective action plan meeting the requirements of Paragraph (k) or (l) of this Rule unless such a person demonstrates to the ~~Director~~ Secretary that:

- (1) contamination resulting from the discharge cannot qualify for approval of a plan based on the requirements of the Paragraphs; or
- (2) the cost of making such a demonstration would exceed the cost of implementing a corrective action plan submitted pursuant to Paragraph (c) of this Rule.

(s) If a discharge or release is not governed by 15A NCAC 2L .0115 and the increase in the concentration of a substance in excess of the standard resulted in whole or in part from a release from a commercial or noncommercial underground storage tank as defined in G.S. 143-215.94A, the ~~Director~~ Secretary may require any person implementing or operating a previously approved corrective action plan pursuant to this Rule to:

- (1) develop and implement a corrective action plan meeting the requirements of Paragraphs (k) and (l) of this Rule; or
- (2) seek discontinuance of corrective action pursuant to Paragraph (m) of this Rule.

*History Note: Authority G.S. 143-215.2; 143-215.3(a)(1); 143-215.94A; 143-215.94T; 143-215.94V; 143B-282;
1995 (Reg. Sess. 1996) c. 648, s. 1;
Eff. August 1, 1989;
Amended Eff. October 1, 1993; September 1, 1992;
Temporary Amendment Eff. January 2, 1998; January 2, 1996;
Amended Eff. October 29, 1998.*