

1 15A NCAC 13C .0301 is proposed for readoption with substantive changes as follows:

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3 **SECTION .0300 - VOLUNTARY REMEDIAL ACTION OVERSIGHT BY REGISTERED**  
4 **ENVIRONMENTAL CONSULTANTS**

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8 **15A NCAC 13C .0301 DEFINITIONS**

9 ~~Any word or phrase~~Words or phrases used in the rules in this Section ~~which is that are~~ defined in G.S. 130A, Article  
10 9 shall have the meaning provided therein. The following words and phrases shall have the following meanings:

- 11 (1) "Applicant" means an environmental consulting or engineering firm seeking Department approval  
12 to act as a Registered Environmental Consultant.
- 13 (2) "Applicant RSM" means an individual proposed by an applicant to fill the role of Registered Site  
14 Manager.
- 15 (3) "Registered Environmental Consultant" or "REC" means an environmental consulting or  
16 engineering firm approved to implement and oversee voluntary remedial actions pursuant to G.S.  
17 130A-310.9(c).
- 18 (4) "Registered Site Manager" or "RSM" means the ~~key~~ person or persons approved by the Department  
19 to manage all site activities and make certifications on behalf of the Registered Environmental  
20 Consultant in its role as consultant to ~~responsible-remediating~~ parties for implementation and  
21 oversight of a voluntary remedial action pursuant to G.S. 130A-310.9(c).
- 22 (5) "Remediating Party" means ~~any~~ site owner, operator, or responsible party engaging in a voluntary  
23 remedial action pursuant to G.S. 130A-310.9(c).
- 24 (6) "Request for Approval" means the application and qualifications documentation package ~~which that~~  
25 must be submitted by an environmental consulting or engineering firm to the Department so that the  
26 Department may determine an applicant's eligibility to operate as a Registered Environmental  
27 Consultant. The Department shall make available a format for submission of such information.
- 28 ~~(7)~~ "Sensitive Environments" means state or federal designated park, monument, wilderness area,  
29 preserve, wildlife refuge, or wetland; state or federal lands designated for game management, or the  
30 protection of natural ecosystems; or habitat for state or federally designated endangered species.
- 31 ~~(8)~~ "Sensitive Populations or Property Uses" means residential property, schools, day care facilities,  
32 geriatric centers, ~~or~~ state or federally designated historical sites, or parks owned or maintained by a  
33 unit of local government.
- 34 ~~(7)(9)~~ "Source Area" means any area of sludge, soil, sediment, or other solid medium contaminated by a  
35 release of one or more hazardous substances.
- 36 ~~(8)(10)~~ "Voluntary Remedial Action" is a remedial action as defined in G.S. ~~130A-310(7)-130A-310(7),~~  
37 conducted voluntarily by ~~an owner, operator, or responsible party~~ a remediating party, and  
38 undertaken with the approval of the Department pursuant to G.S. 130A-310.9(c).

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2 *History Note: Authority G.S. 130A-310.12(b);*  
3 *Eff. April 1, 1997.*  
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1 15A NCAC 13C .0302 is proposed for readoption with substantive changes as follows:

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3 **15A NCAC 13C .0302 GENERAL PROVISIONS**

4 (a) The rules in this Section ~~are the rules required by G.S. 130A-310.12(b) to shall~~ govern the selection and use of  
5 private environmental consulting and engineering firms to implement and oversee voluntary remedial actions by  
6 ~~owners, operators, or other responsible~~ remediating parties ~~under pursuant to~~ G.S. 130A-310.9(c).

7 (b) ~~No provision of the rules in this Section shall be construed to relieve any person of the necessity of complying All~~  
8 remedial actions conducted pursuant to these rules shall comply with applicable federal, state or local laws.

9 (c) ~~Any person who violates any provision of this Section, or any other requirement in connection with the voluntary~~  
10 remedial action program, including making any false statement, representation or certification, or knowingly rendering  
11 inaccurate any recording or monitoring device or method, shall be subject to enforcement including disqualification  
12 as an REC or RSM. A person who violates a provision of this Section or another requirement in connection with the  
13 voluntary remedial action program, including making a false statement, representation, or certification or knowingly  
14 rendering inaccurate a recording or monitoring device or method, shall be subject to enforcement, including  
15 disqualification as an REC or RSM.

16 (d) A party wishing to conduct a Department-approved voluntary remedial action shall enter into a written agreement  
17 with the Department pursuant to G.S. 130A-310.9(c).

18 (e) For the purpose of administration and enforcement of the voluntary remedial action program and for protection of  
19 human health or the environment, employees, ~~agents-agents,~~ and contractors of the Department may enter any site,  
20 ~~vessel-vessel,~~ or other location undergoing a voluntary remedial action pursuant to this Section, at reasonable times  
21 and upon reasonable notice, to investigate, ~~sample-sample,~~ or inspect any documents, conditions, equipment, ~~practice~~  
22 practice, or property. In the event that the Department ~~reasonably~~ determines as a result of an investigation, ~~sampling~~  
23 sampling, or inspection that there has been a release or that there exists a threat of release of a hazardous substance,  
24 the Department may enter a site, ~~vessel-vessel,~~ or location, and areas proximate thereto, and perform or arrange for  
25 the performance of ~~such-response actions as it reasonably deems necessary-actions.~~

26 (f) Remedial Actions conducted pursuant to this Section shall be overseen by an REC. All work performed by an  
27 REC shall be under the supervision and direction of an RSM representing the REC. ~~Rule .0306 of this Section specifies~~  
28 ~~requirements relating to certifications by RSMs.~~

29 (g) The Department shall have authority ~~have complete discretion~~ to effect cleanup itself, or directly oversee a  
30 remediating party's ~~cleanup, if the Department determines that the site poses an imminent hazard, if there is significant~~  
31 ~~public concern, if the Department has initiated an enforcement action, if the Department is concerned about material~~  
32 ~~misrepresentations or environmental non-compliance on the part of a party seeking to effect or effecting remedial~~  
33 ~~action at a site pursuant to this Section, if hazardous substances have migrated to adjoining property, or if other~~  
34 ~~conditions, such as the presence of sensitive environments or mixed wastes (commingled radioactive and chemical~~  
35 ~~wastes), so warrant cleanup if:~~

36 (1) the Department determines that the site poses an imminent hazard;

37 (2) there is significant public concern;

- (3) the Department has initiated an enforcement action;
- (4) the party seeking to effect or effecting remedial action at a site pursuant to this Section has made material misrepresentations or has not complied with environmental laws or regulations;
- (5) hazardous substances have migrated to adjoining property; or
- (6) other conditions, such as the presence sensitive environments, sensitive populations or property uses, or radioactive wastes, so warrant.

(h) The remedial investigation shall be completed within three years of the effective date of the agreement to conduct a voluntary remedial action. Non-groundwater remedial action shall be completed within eight years of the effective date of that agreement. Groundwater remedial action shall be initiated within two years of completion of the remedial investigation. ~~All document and work phase certifications pursuant to Rule .0306(b) of this Section shall be made and all documents received by the Department prior to these deadlines. Responsible parties failing to meet these deadlines shall be subject to enforcement and loss of approved voluntary remedial action status. The affected sites shall no longer be eligible for exemption from the Inactive Hazardous Waste Sites Priority List pursuant to G.S. 130A-340.9(b).~~ The Department may approve a remediating party's written request for extension of these deadlines if one or more of the following conditions exists and the remediating party or the REC provides documentation to support the request and a schedule with timelines commensurate with the activities to be performed:

- (1) documented access delays outside of the remediating party's control;
- (2) the REC learns of previously unconsidered facts, data, or other information as described in Rule .0305(b)(6) or (7) of this Section, including changes to standards or risk targets;
- (3) the proposed remedy includes a pilot study to be implemented prior to full-scale remedial action implementation;
- (4) there has been a change in REC and the new REC does not have sufficient time to meet a deadline;  
or
- (5) during and after initiating of a remedial action, a demonstration is made that cleanup standards cannot be achieved by the required deadline due to technical impracticability.

(i) Any information, document, or particular part thereof obtained by the Department or its contractors upon request pursuant to this Section shall be confidential, and shall not be considered to be a public record, ~~when it is determined by the Department that~~ if such information, if made public, would divulge a trade secret.

(j) The Department shall be under no obligation to act ~~upon~~ on any request for confidentiality in relation to this Section that is not made and substantiated in accordance with G.S. 66, Article 24, and such information may be made available to the public by the Department without further notice to the remediating party.

(k) The rules in this Section ~~may~~ shall not serve as grounds for refusal to disclose ~~any~~ information necessary for an enforcement or cost recovery action or to comply with ~~any~~ a provision of law.

(l) The REC shall preserve and maintain all documents submitted to the REC on behalf of or by the remediating party, prepared by the REC, or within the REC's possession, ~~custody~~ custody, or control, that in any way relate to work performed pursuant to the rules in this ~~Section~~ Section, including, but not limited to, documents of sufficient detail to substantiate the facts, data, ~~conclusions~~ conclusions, and other information set forth in any REC opinion or

1 certification. Such documents shall be kept at one or more locations ~~reasonably~~-accessible to the Department and in  
2 such a form as to enable the Department to ascertain whether the response actions ~~which-that~~ are the subject of the  
3 REC opinion or certification have been performed in compliance with the provisions of the rules in this Section until  
4 such time as the record is provided to the Department for the public file. The REC shall submit to the Department for  
5 the public file all work plans and reports ~~within 30 days of their completion. The REC shall submit to the Department~~  
6 ~~for the public file and~~ all other site documents at the following milestones:

- 7 ~~(1) — completion of each phase of the remedial investigation;~~
- 8 ~~(2)(1) at the completion of the remedial investigation;~~
- 9 ~~(3)(2) at the close of the 30-day public comment period which-that follows notice of the-every proposed~~  
10 ~~remedial action plan; plan, including an interim remedial action plan;~~
- 11 ~~(4) — completion of remedial design and construction; and~~
- 12 ~~(3) at the initiation of all groundwater remedial action as demonstrated by the first field event associated~~  
13 ~~with implementation of the groundwater remedy;~~
- 14 ~~(4) at the completion of all non-groundwater contamination remedial action as demonstrated by a~~  
15 ~~confirmatory sampling event and REC certification of a written report pursuant to .0306(q) of this~~  
16 ~~Section summarizing the data; and~~
- 17 (5) at the completion of all remedial action activities.

18 (m) ~~Any person required by~~In accordance with Paragraph (l) of this ~~Rule- Rule, the REC to preserve and maintain~~  
19 ~~any documents~~ shall preserve and maintain those documents ~~for six years after termination of the remediating party's~~  
20 ~~agreement with the Department to perform a voluntary remedial action pursuant to the rules in this Section. With the~~  
21 ~~Department's written approval based on the likelihood of future need for enforcement or review purposes, documents~~  
22 ~~required to be maintained need no longer be maintained, until the REC confirms that the Department has received the~~  
23 ~~records.~~

24 (n) ~~Failure to~~REC's shall comply with Department site-related requests for information according to deadlines  
25 ~~established by or agreed to by the Department. information shall cause revocation of an REC's approval to perform~~  
26 ~~work and disapproval of any work product in question. Remediating parties shall lose their eligibility for the voluntary~~  
27 ~~remedial action program unless, within 60 days of notice by the Department of revocation of the REC's approval, the~~  
28 ~~name of a successor REC is submitted to the Department.~~

29 (o) Within 60 days of notice from the Department of revocation of an REC's approval, remediating parties shall  
30 submit the name of a successor REC. Program ineligibility shall also result from failure by a ~~A~~ remediating party to  
31 shall provide written notice to the Department within 60 days of a change in ~~RECs-REC~~ REC for any other reason.

32 ~~(e) Nothing in this Section shall be construed to limit the Department's authority to take or arrange, or to require a~~  
33 ~~responsible party to perform, any response action which the Department deems necessary to protect public health,~~  
34 ~~safety or welfare or the environment.~~

35 (p) Nothing in this Section shall be construed to imply authorization by the Department to any person other than the  
36 ~~Department, Department~~ or the Department's employees, ~~agents-agents,~~ agents, or ~~contractors, contractor~~ to enter any property  
37 not owned by him or her to carry out a response ~~action, action~~ or otherwise to injure or interfere with any other person's

1 rights or interests in real or personal ~~property, property~~ without that person's consent. After making reasonable efforts  
2 to obtain reasonable access to any site or other location to be investigated as a possible site not owned by the  
3 remediating party, an REC or remediating party who is unable to obtain such access may request, in writing, that the  
4 Department authorize him or ~~her, her~~ or his or her employees, agents, ~~representatives, representatives,~~ or ~~contractors,~~  
5 ~~contractors~~ to enter such site or location for the purpose of performing one or more necessary response actions. Each  
6 such request for authorization shall include all of the following information:

- 7 (1) the identity of the person making the request and his or her relationship to the site or location;
- 8 (2) the nature and location of the ~~actions(s)-actions~~ that he or she intends to undertake, the anticipated  
9 duration of the ~~action(s)actions~~ and the ~~reasons(s)reasons~~ such access is (are) necessary to perform  
10 the ~~action(s);actions;~~
- 11 (3) the identity of each person who owns or operates the site or location to which access is sought;
- 12 (4) the results of any and all attempts to obtain such access; and
- 13 (5) certification that a copy of the request has been sent to each person who owns or operates such sites  
14 or locations.

15  
16 *History Note:* Authority G.S. 130A-310.1(c); 130A-310.1(e); 130A -310.3(c); 130A-310.5(a); 130A-310.6;  
17 130A-310.12(b); 132-1; 132-1.2; 132-6;  
18 *Eff. April 1, 1997.*

1 15A NCAC 13C .0303 is proposed for reoption with substantive changes as follows:

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3 **15A NCAC 13C .0303 APPROVAL OF REGISTERED ENVIRONMENTAL CONSULTANTS**

4 (a) To qualify for Department approval as an REC, an applicant shall complete and submit a ~~sworn-notarized~~ Request  
5 for Approval form, available from the Department, demonstrating that the applicant meets the requirements contained  
6 in this Section. The Request for Approval form shall set forth the qualifications of all persons the applicant wishes to  
7 qualify as RSMs.

8 (b) Applicants shall supply the names and telephone numbers of previous government and industry clients and copies  
9 of actual work products to verify experience, if requested by the Department. The Department may require applicants  
10 to supply additional information if necessary to clarify that provided on the Request for Approval form. Those  
11 applicants not complying with such requests shall not be approved to perform work pursuant to the rules in this  
12 Section.

13 (c) An REC shall ~~promptly~~ notify the Department if the nature of its business changes, if it no longer meets the  
14 requirements for approval under this Section ~~due to change in personnel, or for any other reason,~~ or if it discovers that  
15 any information it submitted in any Request for Approval is or was ~~incorrect,~~ incorrect no later than 30 days  
16 subsequent to the occurrence.

17 (d) Should a Department-approved RSM leave the employment of an REC or change employment within an REC, an  
18 REC shall, no later than 30 days prior to the change, submit the name and qualifications of another person to perform  
19 the role of the RSM. If an REC does not receive ~~30-~~days' notice by an RSM of the RSM's intended change in  
20 employment, the REC shall notify the Department within 24 hours of the RSM providing such notice and shall within  
21 30 days of the RSM's notice to the REC, submit to the Department the name and qualifications of another person to  
22 perform the role of the RSM. The Department shall determine whether the proposed replacement qualifies as an RSM.  
23 An REC may propose amendments to its approval as an REC to add or delete RSMs. An RSM that changes  
24 employment from an approved REC shall require a new approval by the Department before working as an RSM with  
25 another REC.

26 (e) The Department shall notify applicants in writing whether they are approved to conduct business as an ~~REC,~~ REC  
27 or RSM. No applicant may represent itself, or work, as an REC or RSM without written Department approval.

28 (f) An REC's approval shall be valid for five years unless revoked earlier by the Department.

29 (g) The Department shall make available to the general public a list of all approved RECs.

30  
31 *History Note: Authority G.S. 130A-310.12(b);*  
32 *Eff. April 1, 1997.*

1 15A NCAC 13C .0304 is proposed for readoption with substantive changes

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3 **15A NCAC 13C .0304 MINIMUM QUALIFICATIONS FOR REGISTERED ENVIRONMENTAL**  
4 **CONSULTANTS**

5 In order to be approved to perform work as an REC, an environmental consulting or engineering firm shall meet the  
6 following requirements.

- 7 (1) REC applicants shall demonstrate that one or more persons in their employ individually meet all of  
8 the following standards and requirements and therefore qualify to perform the role of RSM for the  
9 REC. To qualify as an RSM, an individual shall:

10 (aA) Have the following ~~minimum~~-relevant professional experience:

11 (i) five ~~years experience~~years' experience in investigation and remediation of  
12 hazardous substance or waste disposal sites;

13 (ii) three ~~years direct experience~~years' experience in supervising site investigation  
14 and remedial action projects; and

15 (iii) eight years of total relevant professional experience, which shall be work of a  
16 professional grade and character performed for at least a minimum average of  
17 20 or more hours per week that indicates the applicant is competent to render  
18 waste site cleanup activity opinions. Total relevant professional experience  
19 performed for less than a minimum average of 20 hours per week shall be  
20 applied toward the satisfaction of these requirements on a pro rata basis. If an  
21 individual works more than 40 hours in a week, even if having multiple jobs, that  
22 individual ~~may shall~~ get credit only for one week's worth of work. The  
23 Department shall consider the following criteria in evaluating whether an  
24 applicant RSM's waste site cleanup decision-making experience and practical  
25 experience constitute sufficient relevant experience: the nature of work activities;  
26 the field of work activities; the types of reports, ~~studies~~studies, and documents  
27 prepared; the range of methods evaluated and selected; the number of individuals  
28 and disciplines of other professionals supervised or coordinated; the extent of  
29 review of conclusions, ~~recommendations~~recommendations, and opinions by  
30 supervisors; and the duration of ~~employment; and any other factors the~~  
31 Department deems pertinent employment.

32 (bB) Have sufficient training to meet the hazardous waste operations and emergency response  
33 training ~~standard, standard set forth in~~ 29 CFR 1910.120.

34 (cC) Have a four-year or graduate degree from a college or university accredited by a regional  
35 accrediting agency in one of the following fields or a field ~~which the Department~~  
36 ~~determines would provide~~that provides the educational background necessary to oversee a  
37 remedial action:



- 1 (i) Biochemistry;
- 2 (ii) Biology;
- 3 (iii) Chemical Engineering;
- 4 (iv) Chemistry;
- 5 (v) Civil Engineering;
- 6 (vi) Earth Science;
- 7 (vii) Environmental Engineering;
- 8 (viii) Environmental Science;
- 9 (ix) Epidemiology;
- 10 (x) Geochemistry;
- 11 (xi) Geological Engineering;
- 12 (xii) Geology;
- 13 (xiii) Geophysics;
- 14 (xiv) Geotechnical Engineering;
- 15 (xv) Hydrogeology;
- 16 (xvi) Hydrology;
- 17 (xvii) Industrial Hygiene;
- 18 (xviii) Mechanical Engineering;
- 19 (xix) Physics;
- 20 (xx) Soil Science; and
- 21 (xxi) Toxicology.

22 (d) Have a record of professionalism and integrity, demonstrated by the absence of:

- 23 (i) conviction of a felony;
- 24 (ii) conviction of a misdemeanor involving fraud, deceit, ~~misrepresentation~~
- 25 misrepresentation, or forgery;
- 26 (iii) an adverse civil judgment in an action involving fraud, deceit, misrepresentation,
- 27 or forgery;
- 28 (iv) disbarment or disciplinary action relating to any professional license; and
- 29 (v) disqualification from government contracts for negligent acts or failure to perform
- 30 required work.

31 (2) The applicant shall demonstrate that it has an established environmental consulting practice.

32  
33 *History Note: Authority G.S. 130A-310.12(b);*  
34 *Eff. April 1, 1997.*  
35  
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1 15A NCAC 13C .0305 is proposed for readoption with substantive changes as follows:

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3 **15A NCAC 13C .0305 STANDARDS OF CONDUCT FOR REGISTERED ENVIRONMENTAL**  
4 **CONSULTANTS**

5 (a) The REC and its RSMs shall comply with the following standards of professional competence. ~~RECs failing to~~  
6 ~~do so shall be disqualified from performing work as an REC pursuant to this Section and shall be subject to any other~~  
7 ~~applicable form of enforcement.~~

8 (1) An RSM shall render a waste site cleanup activity opinion only ~~when-if~~ he or she has directly  
9 reviewed the work to ascertain whether the completed work complies with this Section.

10 (2) The RSM shall perform his or her services only in areas of his or her competence and shall not  
11 render a decision on any ~~assessment or~~assessment, cleanup ~~plan-plan,~~ or document dealing with  
12 subject matter for which he or she lacks competence by virtue of education or experience. If a site  
13 assessment or cleanup activity opinion requires expertise outside the RSM's field of expertise, the  
14 RSM shall render such an opinion relying in part upon the advice of one or more professionals  
15 having relevant competence.

16 (b) The REC and its RSMs shall recognize its primary obligation is to protect public health, safety, and welfare and  
17 the environment in the performance of professional services as an REC and comply with the following standards of  
18 professional ~~responsibility-responsibility:~~ ~~RECs failing to do so shall be disqualified from performing work as an~~  
19 ~~REC pursuant to this Section and shall be subject to any other applicable form of enforcement.~~

20 ~~(1) An REC shall at all times recognize its primary obligation is to protect public health, safety and~~  
21 ~~welfare and the environment in the performance of professional services as an REC.~~

22 ~~(2)~~(1) If an REC acting pursuant to this Section identifies an imminent hazard as defined under G.S. 130A-  
23 2 (3) at a site at which it is providing professional services pursuant to the rules in this Section it  
24 shall, unless the REC ~~is-certain~~has documentation the remediating party has provided such notice,  
25 within 24 hours of discovery, notify the Department:

26 (A) of the ~~hazard;~~ imminent hazard, including exposures to contaminated vapor, drinking  
27 water, and other contaminated media;

28 (B) whether the remediating party has agreed to take corrective action; ~~and~~

29 (C) what ~~action,~~immediate action to reduce exposure of the imminent hazard, if any, has been  
30 taken. Such actions include providing alternate water and treatment systems for  
31 contaminated drinking water sources, decommissioning of vessels and containers with  
32 explosive conditions, modifications to indoor ventilation systems or installation of air  
33 purification units, stopping the on-going discharge of bulk wastes or unpermitted piped  
34 wastes entering surface water, abatement of exposed wastes on residential or school  
35 property, removal of discovered above ground vessels storing wastes, and containment of  
36 any hazardous substance spills occurring after execution of the agreement; and

1 (D) that, if in the opinion of the REC or as directed by the Department, more extensive interim  
2 measures are necessary to abate an imminent hazard prior to development of a remedial  
3 action plan pursuant to Rule .0306(n) of this Section the REC shall prepare, certify, and  
4 submit an interim abatement plan that includes the following:

5 (i) a brief statement of objectives for the interim abatement action;

6 (ii) a description of the requirements for complying with applicable federal, State, and  
7 local regulations;

8 (iii) a description and conceptual design of the proposed interim abatement, including  
9 process flow diagrams and pre-design drawings of all major components of any  
10 treatment train;

11 (iv) a description of all activities necessary to implement the proposed methods of  
12 interim abatement in compliance with applicable laws and regulations. These  
13 activities include well installation and abandonment, sampling of environmental  
14 media, run-on/run-off control, discharge of treated waste streams, management of  
15 investigation and remedial action derived wastes, installation of monitoring data  
16 points such as sentinel groundwater monitoring wells to monitor the migration of  
17 contaminants toward a water source, sensitive environment, or sensitive  
18 population or property use, installation of water lines or vapor mitigation systems,  
19 and measures taken to protect other receptors from contaminant exposures;

20 (v) a description of measures that assure the health and safety of nearby residential  
21 and business communities by demonstrating that they will not be adversely  
22 affected by activities related to the interim abatement;

23 (vi) equipment and personnel decontamination procedures; and

24 (vii) a schedule of implementation.

25 ~~(3)~~(2) If an REC acting pursuant to this Section determines through data evaluation, including review of  
26 laboratory analyses, performing fate and transport calculations, or conducting computer modeling  
27 that hazardous substances at or above applicable standards have migrated from the property  
28 containing a source area to other property~~determines hazardous substances have migrated to~~  
29 property adjoining property containing a source area, or determines there are sensitive environments  
30 or ~~mixed wastes (commingled radioactive and chemical wastes)~~radioactive wastes on the site, it  
31 shall, unless the REC ~~is certain~~has documentation the remediating party has provided such notice,  
32 within 24 hours of ~~discovery,~~ the REC's determination, notify the Department.

33 ~~(4)~~(3) In providing professional services all RSMs shall:

34 (A) exercise independent professional judgement;

35 (B) follow the requirements and procedures set forth in applicable provisions of this Section;

36 and

1 (C) act with reasonable care and ~~diligence,~~ diligence and apply the knowledge and skill  
2 ordinarily required of RSMs in good standing in the State at the time the services are  
3 performed.

4 ~~(5)~~(4) If, subsequent to the date an REC renders a waste site cleanup activity opinion, anyone employed  
5 by the REC that rendered the opinion learns that previously unconsidered facts, ~~data~~ data, or other  
6 information ~~may~~ support or lead to a different opinion, the REC shall promptly notify, in writing,  
7 the remediating party and the Department.

8 ~~(6)~~(5) If, subsequent to the date of its engagement, a successor REC learns of material facts, ~~data~~ data, or  
9 other information that existed as of the date of any predecessor REC's waste site cleanup activity  
10 opinion but was not disclosed in that opinion, the successor REC shall promptly notify, in writing,  
11 the remediating party and the Department.

12 ~~(7)~~(6) An REC shall not allow the use of its name or the names of its RSMs by, or associate in a business  
13 venture with, any person or firm ~~which~~ that an REC knows or should know is engaging in fraudulent  
14 or dishonest business or professional practices relating to the professional responsibilities of the  
15 REC.

16 ~~(8)~~(7) The REC shall be objective and truthful in all professional reports, public ~~statements~~ statements, or  
17 ~~testimony~~ testimony and shall include all relevant and pertinent information in the reports,  
18 statements, or testimony ~~when~~ if the result of an omission would or reasonably could lead to a  
19 ~~fallacious~~ false conclusion.

20 ~~(9)~~(8) An REC shall not falsify or permit misrepresentation of an RSM's academic or professional  
21 ~~qualifications~~ qualifications and shall not misrepresent or exaggerate an RSM's degree of  
22 responsibility ~~in, or for,~~ in or for the subject matter of prior assignments.

23 ~~(10)~~(9) RECs shall comply with all applicable provisions of law and regulation.

24 ~~(11)~~(10) All RECs shall have knowledge of this Section.

25  
26 *History Note:* Authority G.S. 130A-310.12(b);  
27 Eff. April 1, 1997.

1 15A NCAC 13C .0306 is proposed for readoption with substantive changes as follows:

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3 **15A NCAC 13C .0306 TECHNICAL STANDARDS FOR REGISTERED ENVIRONMENTAL**  
4 **CONSULTANTS**

5 (a) The REC shall ensure that ~~all documents and plans~~the documents, plans, and time taken to complete work comply  
6 with the remediating party's agreement with the Department ~~and~~ the Inactive Hazardous Sites Response Act, and  
7 ~~associated rules~~the rules under this Section.

8 (b) All work phase completion statements, schedules, ~~work~~ plans, and reports require REC certification. An REC's  
9 certification shall comply with the following:

10 (1) REC certification of any document ~~requires inclusion of~~ shall include the following statement,  
11 signed by the RSM and notarized:

12 "I certify ~~under penalty of law~~ that I am personally familiar with the information contained in this  
13 submittal, including any and all supporting documents accompanying this certification, and that  
14 the material and information contained herein is, to the best of my knowledge and belief, true,  
15 accurate, and complete and complies with the Inactive Hazardous Sites Response Act G.S. 130A-  
16 310, et seq. and the voluntary remedial action program Rules 15A NCAC 13C .0300. I am aware  
17 that there are significant penalties for willfully submitting false, ~~inaaccurate~~inaccurate, or  
18 incomplete information."

19 (2) ~~Prior to REC certification, The RSM shall certify only~~ documents ~~that shall~~ contain the following  
20 notarized declaration signed and dated by, and including the title of, the highest ranking official of  
21 the remediating party having day-to-day responsibility for the performance of the response action  
22 which is the subject of the submittal:

23 "I certify ~~under penalty of law~~ that I have personally examined and am familiar with the  
24 information contained in this submittal, including any and all documents accompanying this  
25 certification, and that, based on my inquiry of those individuals immediately responsible for  
26 obtaining the information, the material and information contained herein is, to the best of my  
27 knowledge and belief, true, accurate and complete. I am aware that there are significant penalties  
28 for willfully submitting false, ~~inaaccurate~~inaccurate, or incomplete information."

29 (3) Any work which would constitute the "practice of engineering" as defined by G.S. 89C shall be  
30 performed under the responsible charge of, and signed and sealed by, a professional engineer  
31 registered in the state of North Carolina. Any work which would constitute the "public practice of  
32 geology" as defined by G.S. 89E shall be performed under the responsible charge of, and signed and  
33 sealed by, a geologist licensed in the state of North Carolina.

34 (4) RSM certification and submittal of the following documents shall occur prior to implementation:

35 (A) remedial investigation work plans prepared in accordance with Paragraph ~~(e)~~(h) of this  
36 Rule;

1 (B) plans for additional site characterization, pilot studies, or treatability studies to be  
2 conducted in relation to the site that are prepared in compliance with Paragraph (j) of this  
3 Rule;

4 ~~(B)(C)~~ remedial action plans prepared in accordance with Paragraph ~~(n), (o) or (p)~~ of this Rule;  
5 and

6 ~~(C) remedial action preconstruction reports prepared in accordance with Paragraph (m) of this~~  
7 ~~Rule; and~~

8 (D) ~~any~~ modifications of work schedules.

9 (5) The RSM shall prepare certified completion statements for the following work phases and provide  
10 them to the Department at the times specified in Rule .0302(l) of this Section:

11 ~~(A) completion of phase I of the remedial investigation;~~

12 ~~(B)(A)~~ completion of the remedial investigation;

13 ~~(C)(B)~~ REC approval of the proposed remedial action ~~plan; plan following notice of the proposed~~  
14 remedial action plan, the close of the 30-day public comment period, submission of the  
15 comments and the REC's responses to the public comments received during the public  
16 comment period, and the Department's written acknowledgement that comments have  
17 been addressed;

18 ~~(D) completion of the remedial design and construction; and~~

19 ~~(C)~~ initiation of all groundwater remedial action as demonstrated by the first field event  
20 associated with implementation of the groundwater remedy;

21 ~~(D)~~ completion of all non-groundwater contamination remedial actions as demonstrated by a  
22 confirmatory sampling event and REC certification of a written report pursuant to  
23 Paragraph (q) of this Rule summarizing the data; and

24 (E) completion of all remedial action activities.

25 (6) RSM certification pursuant to the preceding paragraph shall include the following statement signed  
26 by the RSM and notarized:

27 "The [insert work phase] which is the subject of this certification has, to the best of my  
28 knowledge, been completed in compliance with the Inactive Hazardous Sites Response Act G.S.  
29 130A-310, et seq. and the voluntary remedial action program Rules 15A NCAC 13C.0300, and  
30 [insert name of the REC] is in compliance with Rules .0305(b)(2) and .0305(b)(3) of this Section.  
31 I am aware that there are significant penalties for willfully submitting false, ~~inaccurate~~ inaccurate,  
32 or incomplete information."

33 Certification of the completion of all remedial action activities shall also include the following  
34 statement:

35 "The approved and certified site remedial action plan has been implemented, and to the best of my  
36 knowledge and belief, cleanup levels determined pursuant to Rule .0308 of this Section have been

1 achieved, and no significant or otherwise unacceptable risk or harm to human health or the  
2 environment remains at the site."

3 (c) For a voluntary remedial action under this Part, the RSM shall certify and submit to the Department a project  
4 status update report annually on the anniversary date of the executed date of the remediating party's administrative  
5 agreement with the Department. Annual project status update reports shall be submitted until the REC submits a  
6 certified completion statement pursuant to Part (b)(5)(B) of this Rule for all contaminated media. Annual project  
7 status update reports shall include an update on meeting the deadlines in Rule .0302(h) of this Section and the  
8 remediating party's agreement with the Department.

9 ~~(e)(d)~~ The REC may approve and certify site activities and documents pursuant to the rules in this Section only ~~when~~  
10 if the following environmental sample collection and analyses criteria are met:

11 (1) The REC shall employ analytical and environmental monitoring ~~data,data~~ to support  
12 recommendations or conclusions with respect to assessment, removal, treatment, or containment  
13 ~~actions, which~~ actions that are scientifically valid and of a level of precision and accuracy  
14 commensurate with their stated or intended use.

15 (2) Procedures and ~~methodologies~~ methods employed for the collection and analysis of soil, sediment,  
16 water, vapor, air, and waste samples shall be:

17 (A) methods published by the United States Environmental Protection Agency (USEPA), the  
18 American Society for Testing and Materials (ASTM), the American Public Health  
19 Association (APHA), the National Institute for Occupational Safety and Health (NIOSH),  
20 the American Water Works Association (AWWA), or other organizations with expertise  
21 in the development of standardized analytical testing methods; or

22 (B) modifications of published methods, provided that all modifications are completely  
23 documented.

24 (3) The REC may only use laboratories certified to analyze applicable ~~certifiable~~ parameters ~~under~~  
25 pursuant to 15A NCAC 2H .0800, or a contract laboratory under the United States Environmental  
26 Protection Agency Contract Laboratory Program to analyze samples collected pursuant to rules  
27 ~~under~~ in this Section.

28 (4) Laboratory and other reports of analyses of ~~aqueous~~ samples shall be reported ~~as mass per unit~~  
29 ~~volume; such reports of analyses of solid samples shall be reported as mass per unit mass.~~ in units  
30 applicable to the standards for each media analyzed.

31 (5) The REC shall only allow sample collection and analyses to be performed by persons who are  
32 qualified by education, training, and experience.

33 (6) All documents prepared pursuant to the rules in this Section that contain the results of sample  
34 collection and analyses shall include the following information:

35 (A) the date, location, and time of ~~sampling,sampling~~ and the name of the individual who  
36 collected the sample;

37 (B) specification of all sample filtration or preservation procedures used;

- 1 (C) the date of receipt of the sample at the ~~laboratory, laboratory~~ and the ~~date(s) dates~~ the sample
- 2 was extracted and analyzed;
- 3 (D) the name and address of the ~~laboratory, laboratory~~ and proof of certification ~~under received~~
- 4 ~~pursuant to~~ 15A NCAC ~~2H02H~~ .0800 or ~~approval as a contract laboratory under~~ the
- 5 USEPA Contract Laboratory Program;
- 6 (E) the sample matrix description and identification ~~number(s); numbers;~~
- 7 (F) the sample preparation and analytical method ~~name(s) names~~ and ~~number(s); numbers;~~
- 8 (G) the results of the analysis, in clearly expressed concentration units;
- 9 (H) the sample quantitation limit of each reported analyte based upon analytical conditions;
- 10 (I) details of ~~any~~-known conditions or findings ~~which-that~~ may affect the validity of analytical
- 11 data, including ~~but not limited to~~-equipment blank, trip blank, method blank, surrogate,
- 12 spiked sample, ~~or-and~~ other quality control data;
- 13 (J) the laboratory's written justification for ~~any-all~~ sample dilution, additional sample
- 14 preparation, or deviation from specified analytical methods; and
- 15 (K) a complete chain of custody documentation for each sample.

16 ~~(d)(e)~~ The REC may approve and certify site activities and documents pursuant to this Section only ~~when-if~~ procedures  
 17 to protect health, safety, public ~~welfare-welfare~~, and the environment during the performance of response actions are  
 18 being implemented. The scope and detail of health and safety procedures shall be commensurate with the degree and  
 19 nature of the risks posed to human and ecological populations by the disposal site and response actions. Standardized  
 20 health and safety plans may be appropriate for routine activities conducted during response actions. Such procedures  
 21 shall ~~include, without limitation, at least~~include the following:

- 22 (1) ~~Measures—measures~~ to protect human populations from exposure to hazardous
- 23 ~~substances-substances;~~
- 24 (2) ~~Air-air~~ monitoring activities, if necessary to protect the public from exposure to gases and air-borne
- 25 ~~particulates-particulates; and~~
- 26 (3) ~~Measures-measures~~ necessary to contain hazardous substances, including:
  - 27 (A) measures to control stormwater ~~runoff; run-off;~~
  - 28 (B) measures to control dust and other environmental ~~media (e.g., wetting soils); media, such~~
  - 29 ~~as wetting soils;~~
  - 30 (C) measures to decontaminate vehicles and equipment to minimize the spread of contaminated
  - 31 soil from the disposal site;
  - 32 (D) measures to secure on-site excavations and stockpiles of contaminated materials; and
  - 33 (E) discontinuance of response actions ~~where-if~~ necessary to protect public health and safety.

34 ~~(e)(f)~~ The REC shall ~~plan and implement the remedial investigation so that to the extent practicable the location and~~  
 35 ~~identity of all hazardous substances discharged to the environment at a site have been established. All areas known,~~  
 36 ~~suspected, or having a reasonable probability of being contaminated by hazardous substances shall be investigated. In~~



1 planning the remedial investigation, the REC shall identify each area of known or suspected hazardous substance  
2 contamination at the site, based on the following:

- 3 (1) then-existing laboratory data;
- 4 (2) readily observable conditions indicative of contamination, such as staining, odors, or visible or other  
5 evidence of damage to or leakage from a storage facility or vessel;
- 6 (3) information ascertainable from the public record, site operation records, and information provided  
7 by the remediating party; and
- 8 (4) other evidence actually known to the REC.

9 For each such area of concern, the REC shall plan, implement, and complete the remedial investigation so that, to the  
10 extent practicable, the location and identity of the hazardous substances related to each area of concern are established.  
11 For purposes of this Rule, the presence of chemical storage or other similar facilities shall not alone constitute evidence  
12 of known or suspected contamination.

13 ~~(f)(g)~~ The REC shall ~~plan and implement~~ plan, implement, and complete the remedial investigation so that the areal  
14 and vertical extent of hazardous substance contamination is delineated to unrestricted use remedial goals or natural or  
15 anthropogenic background concentrations for each area of concern. The REC shall demonstrate natural and  
16 anthropogenic background concentrations if contamination is not delineated to unrestricted use remedial goals. The  
17 REC may demonstrate, through professional judgement, that the vertical extent of contamination cannot be delineated  
18 due to technical impracticability. The technical impracticability demonstration shall include a written evaluation of  
19 the usefulness of additional data, including a conclusion that:

- 20 (1) no receptor exposure to the media not sampled will take place by not collecting the data;
- 21 (2) the success of the remedial design will not be effected by not collecting the data; and
- 22 (3) collecting the data will result in additional expense with limited or no associated benefit.

23 ~~(g)(h)~~ The REC ~~may certify~~ shall prepare, certify, and submit, prior to implementation of a remedial investigation,  
24 one or more ~~only~~ remedial investigation plans which ~~are~~ prepared in compliance with Paragraphs ~~(e), (d), (e), and (f)~~  
25 (d), (e), (f), and (g) of this Rule and ~~any~~ all other applicable requirements and ~~which that~~ contain at least the following:  
26 following or include an explanation as to why, in the professional judgement of the REC, the component is not relevant  
27 to the remedial investigation:

- 28 (1) site location information including street address, longitude and latitude, and site and surrounding  
29 property land use;
- 30 (2) a summary of all management practices employed at the site for hazardous wastes and ~~any~~ wastes  
31 that may have contained hazardous substances including:
  - 32 (A) a list of types and amounts of waste generated (with RCRA waste codes), treatment and  
33 storage methods, and ultimate disposition of wastes;
  - 34 (B) a description of the facility's past and current RCRA status;
  - 35 (C) the location and condition of all identified vessels currently or previously used to store ~~any~~  
36 chemical products, hazardous ~~substances~~ substances, or wastes; and

- 1 ~~(D)~~ —a summary of the nature of all identified on-site hazardous substance releases, including  
2 disposal or spills;
- 3 (3) United States Geological Survey topographic maps sufficient to display topography within a one-  
4 mile radius of the site;
- 5 (4) ~~a site survey plat including: scale; benchmarks; north arrow; a map, drawn to scale, that includes:~~  
6 ~~(A) a north arrow;~~  
7 ~~(B) a scale;~~  
8 ~~(C) the~~ locations of property boundaries, buildings, structures, all perennial and non-perennial  
9 surface water features, drainage ditches, dense vegetation, known and suspected spill or disposal  
10 areas ~~identified pursuant to Paragraph (e) of this Rule~~, underground utilities, storage vessels,  
11 existing on-site wells; ~~and~~  
12 ~~(D) an~~ identification of all adjacent property owners and land ~~uses; usage. As provided in G.S.~~  
13 ~~89C-2, it is unlawful for any person to practice land surveying in North Carolina, as defined in G.S.~~  
14 ~~89C, unless such person has been duly registered as a registered land surveyor;~~
- 15 (5) a description of local geologic and hydrogeologic conditions;
- 16 (6) ~~an~~ inventory and map of all identifiable wells, springs, and surface-water intakes used as sources of  
17 potable water within a ~~one-half mile~~ 1,500 foot radius of each source area ~~or within a 1,500 foot~~  
18 ~~radius of the contaminant perimeter~~, or, if the source area is unknown, within a ~~one-half mile~~ 1,500  
19 foot radius of each point where contamination has been identified at the site;
- 20 (7) an evaluation of the site and all adjacent property for the existence ~~of any environmentally sensitive~~  
21 ~~areas; of the following areas if they may have been affected by the contamination from the Site:~~  
22 ~~(A) sensitive environments;~~  
23 ~~(B) sensitive populations or property uses, and;~~  
24 ~~(C) above and below ground structures and utilities.~~
- 25 ~~(8) — a copy of the current owner's(s') deed(s) to the property;~~  
26 ~~(9)(8)~~ a chronological listing of all previous owners and each period of ownership since the property was  
27 originally developed ~~from pristine land;~~  
28 ~~(10)(9)~~ operational ~~history~~ history, including ~~with~~ aerial photographs and Sanborne Fire Insurance maps ~~if~~  
29 used to support land-use history;
- 30 ~~(11)(10)~~ a list of all hazardous substances ~~which—that~~ have been used or stored at the ~~site,site~~ and ~~the~~  
31 approximate amounts and dates of use or ~~storage—storage~~, as revealed by available written  
32 documentation and interviews with a representative number of former and current employees or  
33 occupants possessing relevant information;
- 34 ~~(12)(11)~~ the site environmental permit history, including copies of all federal, state, and local environmental  
35 permits, past and present, issued to the remediating party or within its custody or control;
- 36 ~~(13)(12)~~ a summary of all previous and ongoing environmental investigations and environmental regulatory  
37 involvement with the ~~site,site~~ and copies of all associated reports and laboratory data in public

~~records, records~~ or within the custody or control of the REC or remediating ~~party; party unless the~~  
~~REC confirms that the documents are already present in the Department's electronic document~~  
~~system for REC site records;~~

(13) ~~plans to evaluate the risk of contaminant migration in any media to:~~

(A) ~~wells, springs, and surface-water intakes identified in Subparagraph (g)(6) of this Rule;~~  
~~and~~

(B) ~~sensitive environments, sensitive populations or property uses, or above and below ground~~  
~~structures or utilities identified in Subparagraph (g)(7) of this Rule;~~

(14) intended procedures for characterizing site geologic and hydrogeologic conditions and identifying  
and delineating each contamination source as to each affected environmental medium, including  
any ~~plan-plans~~ for special assessment such as a geophysical survey;

(15) intended methods, locations, depths of, and justification ~~for, for~~ all sample collection points for all  
media sampled, including monitoring well locations and anticipated screened intervals;

(16) proposed field and laboratory procedures for quality assurance/quality control;

(17) proposed analytical parameters and analytical methods for all samples;

(18) equipment and personnel decontamination procedures; and

(19) a ~~description of measures health and safety plan that conforms to the federal Occupational Safety~~  
~~and Health Act, 29 U.S.C. ' 651, et seq. and Title 29 of the Code of Federal Regulations, and that~~  
~~assures assure that~~ the health and safety of nearby residential and business communities ~~by~~  
~~demonstrating that they~~ will not be adversely affected by activities related to the remedial  
investigation.

~~(h)(i)~~ The REC ~~may certify shall prepare, certify, and submit only~~ remedial investigation reports ~~which are~~ prepared  
in compliance with Paragraph ~~(e)(d)~~ of this Rule and ~~any-all~~ other applicable requirements and ~~which that~~ contain ~~at~~  
~~least~~ the following:

(1) ~~an update on meeting the deadlines required by Rule .0302(h) of this Section and by the remediating~~  
~~party's agreement with the Department;~~

~~(2)~~ a narrative description of how the investigation was conducted, including a discussion of ~~any-all~~  
variances from the approved work plan;

~~(2)(3)~~ a description of groundwater monitoring well design and installation procedures, including drilling  
methods used, completed drilling logs, "as built" drawings of all monitoring wells, well construction  
techniques and materials, geologic logs, and copies of all well installation permits;

~~(3)(4)~~ a map, drawn to scale, showing all ~~soil sample and monitoring well locations environmental media~~  
~~sample locations, test pits, surficial soil samples, soil borings, soil vapor samples, surface water~~  
~~samples, sediment samples, and monitoring wells~~ in relation to ~~known~~ disposal areas or other  
sources of contamination ~~identified pursuant to Paragraph (f) of this Rule. Monitoring wells shall~~  
~~be surveyed to a known benchmark and groundwater elevations to a known datum. Soil sample All~~  
~~sample~~ locations shall be surveyed to a known benchmark ~~or flagged with a secure marker until~~

1 after the remedial action is completed. Groundwater elevations shall be surveyed to a known datum.  
2 ~~—As provided in G.S. 89C-2, it is unlawful for any person to practice land surveying in North~~  
3 ~~Carolina, as defined in G.S. 89C, unless such person has been duly registered as a registered land~~  
4 ~~surveyor. Any survey performed pursuant to this paragraph must be performed by a registered land~~  
5 ~~surveyor duly authorized under North Carolina law to conduct such activities;~~

6 ~~(4)(5)~~ a description of all field and laboratory quality control and quality assurance procedures followed  
7 during the remedial investigation;

8 ~~(5)(6)~~ a description of procedures used to manage drill cuttings, purge ~~water-water,~~ and decontamination  
9 water;

10 ~~(6)(7)~~ a summary of site geologic conditions, including a description of soils and vadose zone  
11 characteristics;

12 ~~(7)(8)~~ a description of site hydrogeologic conditions ~~(if~~ groundwater assessment is determined to be  
13 ~~necessary), necessary~~ including current uses of groundwater, notable aquifer characteristics, a water  
14 table elevation contour map with groundwater flow patterns depicted, and tabulated well  
15 construction details and groundwater elevation data;

16 ~~(8)(9)~~ tabulation of analytical results for all sampling ~~(including including~~ sampling dates and soil  
17 sampling ~~depths)depths~~ and copies of all laboratory ~~reports—reports,~~ including quality  
18 assurance/quality control documentation;

19 ~~(9)(10)~~ ~~soil, groundwater, surface water and sediment contaminant delineation maps and cross sections,~~  
20 ~~including scale and sampling points with contaminant concentrations;~~ if contaminants exceed  
21 cleanup levels pursuant to Rule .0308 of this Section, soil, groundwater, surface water, and sediment  
22 contaminant delineation maps for each primary constituent of concern, including scale and sampling  
23 points with contaminant concentrations;

24 (11) if contaminants exceed cleanup levels pursuant to Rule .0308 of this Section, cross sections,  
25 including scale and sampling points with contaminant concentrations;

26 (12) a description of the risk of contaminant migration in any media to:

27 (A) wells, springs, and surface-water intakes identified in Subparagraph (h)(6) of this Rule;  
28 and

29 (B) sensitive environments, sensitive populations or property uses, or above and below ground  
30 structures and utilities identified in Subparagraph (h)(7) of this Rule.;

31 ~~(10)(13)~~ a description of procedures and the results of ~~any~~ special assessments such as geophysical surveys,  
32 immunoassay testing, soil gas surveys, or test pit excavations; and

33 ~~(11)(14)~~ color copies of site ~~photographs.~~ photographs if used to provide documentation of the investigation  
34 results.

35 (j) To support a proposed remedy, the REC shall prepare, certify, and submit, prior to implementation, a work plan  
36 prepared in compliance with Paragraphs (d) and (e) of this Rule and other applicable requirements and that contains a

1 description of additional site characterization, pilot studies, and treatability studies to be conducted in relation to the  
2 site.

3 ~~(i)(k)~~ Any-A proposed remedy ~~which-that~~ would:

- 4 (1) be conducted entirely on site and for which a permit waiver is desired under G.S. 130A-310.3(e);
- 5 (2) ~~involve on site containment or capping; include institutional controls for restricted use of~~  
6 ~~contaminated areas or media; or~~
- 7 (3) exceed the ~~three million dollars (\$3,000,000) cost~~ maximum contained-set forth in G.S. 130A-  
8 310.9(a) ~~without a waiver;~~

9 shall require Department concurrence prior to implementation. To request Department concurrence, The-the REC  
10 shall submit to the Department a brief summary of available remedies, their projected costs, and ~~in each case the~~  
11 reasons why a remedy was accepted or rejected.

12 ~~(j)(l)~~ Thirty days prior to approving any-a remedial action plan, the REC shall provide notice of the proposed remedial  
13 action plan to those who have requested notice that such plans have been developed, as provided in G.S. 130A-  
14 310.4(c)(2). The REC shall provide proof of such notice and any-of resulting comments from the public to the  
15 Department prior to approval of the remedial action plan.

16 ~~(k)(m)~~ Remedial actions that involve the emission or discharge of hazardous substances to the atmosphere shall be  
17 conducted in a manner that provides for the protection of human health and the environment, in conformance with  
18 this Section and any-all applicable permits, approvals, ~~laws-laws,~~ or other rules or regulations.

19 ~~(l)(n)~~ The REC ~~may certify shall prepare, certify, and submit, prior to implementation of a contaminant remedy, only~~  
20 remedial action plans ~~which are~~ prepared in compliance with Paragraphs ~~(e), (d), (i), (j), and (k), (d), (e), (k), (l), and~~  
21 (m) of this Rule and any-all other applicable requirements and ~~which-that~~ contain ~~at least~~ the following:

- 22 (1) ~~A-a~~ discussion of the results of the remedial ~~investigation-investigation,~~ including media  
23 contaminated, contaminants of concern, ~~and~~ the areal and vertical extent of ~~contamination-~~  
24 ~~contamination, and the risk of contaminant migration in any media to any wells, springs, and~~  
25 ~~surface-water intakes, sensitive environments, sensitive populations or property uses, and above and~~  
26 ~~below ground structures or utilities identified in Subparagraph (i)(13) of this Rule;~~
- 27 (2) ~~A-a~~ brief statement of objectives for the remedial ~~action-action;~~
- 28 (3) ~~An-an~~ evaluation of available remedial alternatives using the following feasibility study criteria:
  - 29 (A) protection of human health and the environment, including attainment of cleanup levels;
  - 30 (B) compliance with applicable federal, ~~state-State~~ and local regulations;
  - 31 (C) long-term effectiveness and permanence;
  - 32 (D) reduction of toxicity, mobility and volume;
  - 33 (E) short-term effectiveness, ~~i.e., such as,~~ effectiveness at minimizing the impact of the site  
34 remedial action on the environment and the local community;
  - 35 (F) implementability, ~~i.e., such as,~~ technical and logistical ~~feasibility, feasibility and including~~  
36 an estimate of time required for completion;
  - 37 (G) cost; and

1 (H) community ~~acceptance~~acceptance;

2 ~~(4)~~ a description of the results of site characterization, pilot studies, or treatability studies that support  
3 the design and a description of the procedures and schedule for construction, operation and  
4 maintenance, system monitoring and performance evaluation, and progress reporting for the chosen  
5 remedial alternative;

6 ~~(4)(5)~~ A ~~a~~ detailed description and conceptual design of the proposed remedy, including process flow  
7 diagrams and pre-design drawings of all major components of ~~the~~all treatment ~~train~~-trains;

8 ~~(5)(6)~~ A ~~a~~ demonstration that the proposed remedy is supported by the remedial alternative feasibility  
9 study conducted pursuant to Subparagraph ~~(4)(3)(n)(3)~~ of this ~~Rule~~-Rule;

10 ~~(6)(7)~~ A ~~a~~ description of all activities necessary to implement the proposed ~~method(s)~~methods of remedial  
11 action in compliance with applicable laws and regulations and in ~~such~~ a manner ~~such~~ that cleanup  
12 standards are met. These activities ~~shall~~ include, ~~but are not limited to,~~ well installation and  
13 abandonment, sampling, run-on/run-off control, discharge of treated waste streams, and  
14 management of investigation and remedial action derived ~~wastes~~-wastes;

15 ~~(7)~~ ~~A description of any proposed treatability studies and additional site characterization needed to~~  
16 ~~support the final design.~~

17 ~~(8)~~ ~~A description of procedures and a schedule for additional site characterization, treatability studies,~~  
18 ~~final design, construction, operation and maintenance, system monitoring and performance~~  
19 ~~evaluation, and progress reporting.~~(9)(8) A ~~a~~ description of the criteria for remedial action

20 completion, including procedures for ~~post remedial and~~ confirmatory ~~sampling~~-sampling;

21 ~~(10)(9)~~ A ~~a~~ ~~health and safety plan~~description of measures that ~~conforms to the federal Occupational Safety~~  
22 ~~and Health Act, 29 U.S.C. '651, et seq. and Title 29 of the Code of Federal Regulations, and assures~~  
23 ~~assure~~ ~~that~~ the health and safety of nearby residential and business communities ~~by demonstrating~~  
24 ~~they~~ will not be adversely affected by activities related to the remedial ~~action~~-action; and

25 ~~(11)(10)~~ Equipment-equipment and personnel decontamination procedures.

26 (o) If, in the opinion of the REC or as directed by the Department, interim remedial action is necessary for removal  
27 of waste or chemical sources to protect public health, safety, and welfare and the environment from hazardous  
28 substances migrating toward receptors or other properties prior to development of a remedial action plan pursuant to  
29 Paragraph (n) of this Rule, the REC shall prepare, certify, and submit, prior to implementation, an interim remedial  
30 action plan prepared in compliance with Paragraphs (d), (e), (k), (l), and (m), of this Rule and other applicable  
31 requirements that contains the following:

32 (1) a discussion of the remedial investigation data collected to date, including media contaminated,  
33 contaminants of concern, the known areal and vertical extent of contamination, and the risk of  
34 contaminant migration in media to any wells, springs, and surface-water intakes, sensitive  
35 environments, sensitive populations or property uses, and above and below ground structures or  
36 utilities identified during the remedial investigation;

37 (2) a brief statement of objectives for the interim remedial action;

1 (3) a description and conceptual design of the proposed interim remedial action, including process flow  
2 diagrams and pre-design drawings of all major components of all treatment trains;

3 (4) a description of all activities necessary to implement the proposed methods of interim abatement in  
4 compliance with applicable laws and regulations. These activities shall include well installation and  
5 abandonment, sampling, run-on/run-off control, discharge of treated waste streams, and  
6 management of investigation and remedial action derived wastes;

7 (5) a description of measures that assure the health and safety of nearby residential and business  
8 communities by demonstrating they will not be adversely affected by activities related to the interim  
9 remedial action; and

10 (6) equipment and personnel decontamination procedures.

11 Such interim remedial actions shall include removal of discovered buried vessels and containers with waste products  
12 or contaminants, installation of recovery systems designed to extract subsurface liquid-phase chemicals, and other  
13 actions designed to prevent exposures to hazardous substances or off-property migration of contaminants.

14 (p) The REC may change an approved remedy. In such cases, the REC shall prepare a revised remedial action plan  
15 in compliance with Paragraph (n) of this Rule.

16 ~~(m) Prior to beginning construction, the REC shall certify remedial action preconstruction reports which contain at~~  
17 ~~least the following:~~

18 ~~(1) the results of all treatability studies and additional site characterization work completed since~~  
19 ~~the remedial investigation;~~

20 ~~(2) final engineering design report, including a narrative description of process design, final plans~~  
21 ~~and specifications, and an updated project schedule; and~~

22 ~~(3) copies of final registrations, permits and approvals.~~

23 ~~(n) The REC may certify only remedial action construction completion reports which contain at least:~~

24 ~~(1) "as built" plans and specifications;~~

25 ~~(2) a summary of major variances from the final design plans; and~~

26 ~~(3) a summary of any problems encountered during construction.~~ (o) ~~The REC shall prepare and~~

27 ~~certify quarterly remedial action progress reports for remedial actions of greater than three months duration.~~

28 ~~Groundwater remedial action progress reports may be prepared on an annual basis after the first full year of remedial~~

29 ~~action and the completion of four quarterly monitoring events. The REC may certify only remedial action progress~~  
30 ~~reports which are prepared in compliance with Paragraph (c) of this Rule and any other applicable requirements and~~  
31 ~~which contain at least the following:~~

32 ~~(1) operation and maintenance results, i.e., summaries of remedial action operating and~~  
33 ~~maintenance requirements and a discussion of major problems encountered;~~

34 ~~(2) performance evaluation results, i.e., tabulated and graphical presentations of monitoring data~~  
35 ~~and a comparison of remedial action performance to design goals;~~

36 ~~(3) a description of all field and laboratory quality control and quality assurance procedures~~  
37 ~~followed during any sampling and analysis;~~



1 ~~(4) tabulation of analytical results for all sampling and copies of all laboratory reports including~~  
2 ~~quality assurance/quality control documentation; and~~

3 ~~(5) a map, drawn to scale, showing all soil sample and monitoring well locations.~~

4 ~~(q) The REC shall prepare, certify, and submit remedial action progress reports in compliance with Paragraph (d) of~~  
5 ~~this Rule and all other applicable requirements beginning after the REC has certified approval of the remedial action~~  
6 ~~plan pursuant to Rule .0306(b)(5)(B) of this Section. Remedial action progress reporting shall continue until remedial~~  
7 ~~action is complete. Remedial action progress reports shall be submitted quarterly until one year after the construction~~  
8 ~~of the remedy is complete. After the first year of progress reporting or if a remedy that includes no construction~~  
9 ~~component is being implemented, remedial action progress reports shall be submitted annually until remedial action~~  
10 ~~is complete. Remedial action progress reports shall include, for the reporting period, an update on meeting the~~  
11 ~~deadlines in Rule .0302(h) of this Section and the remediating party's agreement with the Department and the~~  
12 ~~following:~~

13 ~~(1) a description of the results of all site characterization, pilot studies, or treatability studies completed~~  
14 ~~since certification of the remedial action plan;~~

15 ~~(2) the final engineering design report, including a narrative description of process design, final plans~~  
16 ~~and specifications, and an updated project schedule;~~

17 ~~(3) copies of any final registrations, permits, and approvals;~~

18 ~~(4) any "as built" plans and specifications;~~

19 ~~(5) a summary of all major variances from the original design plans;~~

20 ~~(6) a summary of all problems encountered during construction;~~

21 ~~(7) operation and maintenance results of the treatment technology utilized, such as summaries of~~  
22 ~~remedial action operating and maintenance requirements and a discussion of major problems~~  
23 ~~encountered;~~

24 ~~(8) performance evaluation results, including tabulated and graphical presentations of monitoring data~~  
25 ~~and a comparison of remedial action performance to design goals;~~

26 ~~(9) a description of all field and laboratory quality control and quality assurance procedures followed~~  
27 ~~during all sampling and analysis;~~

28 ~~(10) tabulation of analytical results for all sampling and copies of all laboratory reports including quality~~  
29 ~~assurance/quality control documentation;~~

30 ~~(11) a map, drawn to scale, showing all soil sample and monitoring well locations;~~

31 ~~(12) if contaminants exceed cleanup levels pursuant to Rule .0308 of this Section, current soil,~~  
32 ~~groundwater, surface water, and sediment contaminant delineation maps for each primary~~  
33 ~~contaminant of concern, including scale and sampling points with contaminant concentrations;~~

34 ~~(13) if groundwater contamination exists at the site in excess of cleanup levels established pursuant to~~  
35 ~~Rule .0308 of this Section, upon construction completion certification by the REC and at least every~~  
36 ~~5 years thereafter until remedial action is complete, an update of the information required pursuant~~  
37 ~~to Subparagraph (h)(6) and Subparagraph (h)(7) of this Rule shall be included. The update shall~~



1 also include an evaluation of the necessity to implement additional remedial action, and a remedial  
2 action plan if the REC determines a need exists, to address a risk of contaminant migration in any  
3 environmental media to any of the following:

4 (A) identified wells, springs, and surface-water intakes;

5 (B) identified sensitive environments, sensitive populations or property uses; and

6 (C) above and below ground structures or utilities; and

7 (14) sampling and analytical results that demonstrate progress toward achieving remedial goals.

8 ~~(p)(r)~~ The REC ~~may certify shall prepare, certify, and submit only~~ final remedial action completion reports ~~which~~  
9 ~~that~~ contain ~~at least the following: following, unless provided in a previous progress report:~~

10 (1) a final progress report ~~which that~~ includes all the information required ~~under pursuant to~~ Paragraph  
11 ~~(o)(q)~~ of this Rule;

12 (2) a summary of remedial action operating experience and effectiveness in meeting design goals, based  
13 on all performance monitoring data and progress reporting to date; and

14 (3) a discussion of criteria for ~~remedial action completion, completing the remedial action~~ and a  
15 demonstration, supported by confirmatory sampling data, that such criteria have been ~~satisfied;~~  
16 satisfied.~~and~~

17 ~~(4) a summary of total project costs.~~~~(q)(s)~~ In the performance of its role pursuant to the rules in  
18 this Section, the REC shall manage investigation ~~or and~~ remedial action derived wastes in a manner that provides for  
19 the protection of human health and the environment and that complies with all applicable federal, ~~state, State,~~ and local  
20 laws, rules, and regulations.

21 *History Note: Authority G.S. 130A-310.12(b);*  
22 *Eff. April 1, 1997.*

1 15A NCAC 13C .0307 is proposed for re adoption with substantive changes:

2  
3 **15A NCAC 13C .0307 DEPARTMENTAL AUDITS AND INSPECTIONS**

4 (a) The Department may conduct random or targeted audits of any REC, remediating party, response action or site  
5 ~~which that~~ is subject to this Section.

6 (b) During Departmental audits of voluntary remedial actions, the Department may:

7 (1) request that the person who has performed the response action provide a written  
8 ~~explanation, explanation~~ or other supporting evidence, to demonstrate compliance with this Section  
9 and other applicable requirements;

10 (2) request that the person who has performed the response action or who is the subject of the audit  
11 appear at one of the Department's offices for an interview to provide an oral ~~explanation, explanation~~  
12 or other ~~evidence, evidence~~ to demonstrate compliance with this Section and other applicable  
13 ~~requirements requirements.~~ ~~(anyAny~~ person requested to appear for an interview may be  
14 accompanied by an attorney or other ~~representative); representative;~~

15 (3) visit a site or other location to determine whether an REC, remediating party, response ~~action action,~~  
16 or site is in compliance with this Section and other applicable requirements;

17 (4) investigate, take samples at a ~~site site,~~ and inspect records, conditions, ~~equipment equipment,~~ or  
18 practices material to the response ~~action, action~~ or property related to the site; or

19 (5) take any other action ~~the Department deems~~ necessary to determine whether response actions have  
20 been performed in compliance with this Section and other applicable requirements.

21 ~~(c) Remediating parties shall provide financial assurance, by paying an annual administration cost, to participate in~~  
22 ~~the voluntary remedial action program under this Section. This payment shall be set by the Department based on the~~  
23 ~~expected cost of auditing voluntary remedial actions and shall be used to offset that cost. Remediating parties~~  
24 ~~providing such monies shall pay any shortfall, or be reimbursed any remainder not expended by the Department,~~  
25 ~~annually. In order to participate in the voluntary remedial action program governed by this Section, remediating parties~~  
26 ~~shall provide financial assurance by paying an annual administrative fee. The fee shall be set by the Department based~~  
27 ~~on the expected cost of auditing voluntary remedial actions and shall be used to offset that cost. Remediating parties~~  
28 ~~who pay this fee shall also annually pay any shortfall or be reimbursed any remainder not expended by the Department.~~

29 (d) Based on audit findings, the Department may terminate a site's eligibility for the voluntary remedial action  
30 program, disqualify an RSM or REC from work on a site or from the ~~program, and take any program or take~~ other  
31 applicable enforcement action.

32  
33 *History Note: Authority G.S. 130A-310.9(b); 130A-310.12(b);*  
34 *Eff. April 1, 1997.*

1 15A NCAC 13C .0308 is proposed for readoption with substantive changes as follows:

2

3 **15A NCAC 13C .0308 CLEANUP LEVELS**

4 (a) RECs shall ~~ensure-demonstrate~~ that the Department's ascertainment of the most nearly applicable cleanup  
5 standards as would be applied ~~under-pursuant to~~ CERCLA/SARA are met.

6 (b) Characterization of risks to health, safety, public welfare, and the environment is not required ~~under-pursuant to~~  
7 this Section for a disposal site, environmental medium, or chemical for which response actions have successfully  
8 reduced concentrations of hazardous substances to on-site natural background levels.

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10 *History Note:* Authority G.S. 130A-310.3(d); 130A-310.12(b);  
11 *Eff. April 1, 1997.*

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