15A NCAC 13C .0301 DEFINITIONS
Any word or phrase used in the rules in this Section which is defined in G.S. 130A, Article 9 shall have the meaning provided therein. The following words and phrases shall have the following meanings:

1. "Applicant" means an environmental consulting or engineering firm seeking Department approval to act as a Registered Environmental Consultant.
2. "Applicant RSM" means an individual proposed by an applicant to fill the role of Registered Site Manager.
3. "Registered Environmental Consultant" or "REC" means an environmental consulting or engineering firm approved to implement and oversee voluntary remedial actions pursuant to G.S. 130A-310.9(c).
4. "Registered Site Manager" or "RSM" means the key person or persons approved by the Department to manage all site activities and make certifications on behalf of the Registered Environmental Consultant in its role as consultant to responsible parties for implementation and oversight of a voluntary remedial action pursuant to G.S. 130A-310.9(c).
5. "Remediating Party" means any site owner, operator, or responsible party engaging in a voluntary remedial action pursuant to G.S. 130A-310.9(c).
6. "Request for Approval" means the application and qualifications documentation package which must be submitted by an environmental consulting or engineering firm to the Department so that the Department may determine an applicant's eligibility to operate as a Registered Environmental Consultant. The Department shall make available a format for submission of such information.
7. "Source Area" means any area of sludge, soil, sediment, or other solid medium contaminated by a release of one or more hazardous substances.
8. "Voluntary Remedial Action" is a remedial action as defined in G.S. 130A-310(7) conducted voluntarily by an owner, operator, or responsible party and undertaken with the approval of the Department pursuant to G.S. 130A-310.9(c).

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

15A NCAC 13C .0302 GENERAL PROVISIONS
(a) The rules in this Section are the rules required by G.S. 130A-310.12(b) to govern the selection and use of private environmental consulting and engineering firms to implement and oversee voluntary remedial actions by owners, operators, or other responsible parties under G.S. 130A-310.9(c).
(b) No provision of the rules in this Section shall be construed to relieve any person of the necessity of complying with applicable federal, state or local laws.
(c) Any person who violates any provision of this Section, or any other requirement in connection with the voluntary remedial action program, including making any false statement, representation or certification, or knowingly rendering inaccurate any recording or monitoring device or method, shall be subject to enforcement including disqualification as an REC or RSM.
(d) A party wishing to conduct a voluntary remedial action shall enter into a written agreement with the Department pursuant to G.S. 130A-310.9(c).
(e) For the purpose of administration and enforcement of the voluntary remedial action program and for protection of human health or the environment, employees, agents and contractors of the Department may enter any site, vessel or other location undergoing a voluntary remedial action pursuant to this Section, at reasonable times and upon reasonable notice, to investigate, sample or inspect any documents, conditions, equipment, practice or property. In the event that the Department reasonably determines as a result of an investigation, sampling or inspection that there has been a release or that there exists a threat of release of a hazardous substance, the Department may enter a site, vessel or location, and areas proximate thereto, and perform or arrange for the performance of such response actions as it reasonably deems necessary.
(f) Remedial Actions conducted pursuant to this Section shall be overseen by an REC. All work performed by an REC shall be under the supervision and direction of an RSM representing the REC. Rule .0306 of this Section specifies requirements relating to certifications by RSMs.
(g) The Department shall have complete discretion to effect cleanup itself, or directly oversee a remediating party's cleanup, if the Department determines that the site poses an imminent hazard, if there is significant public concern, if the Department has initiated an enforcement action, if the Department is concerned about material misrepresentations or environmental non-compliance on the part of a party seeking to effect or effecting remedial action at a site pursuant to this Section, if hazardous substances have migrated to adjoining property, or if other conditions, such as the presence of sensitive environments or mixed wastes (commingled radioactive and chemical 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. 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-310.9(b).

(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 such information, if made public, would divulge a trade secret.

(j) The Department shall be under no obligation to act upon 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 not serve as grounds for refusal to disclose any information necessary for an enforcement or recovery action or to comply with any 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 or control, that in any way relate to work performed pursuant to the rules in this Section including, but not limited to, documents of sufficient detail to substantiate the facts, data, conclusions and other information set forth in any REC opinion or certification. Such documents shall be kept at one or more locations reasonably accessible to the Department and in such a form as to enable the Department to ascertain whether the response actions which are the subject of the REC opinion or certification have been performed in compliance with the provisions of the rules in this Section until such time as the record is provided to the Department for the public file. The REC shall submit to the Department for the public file all work plans and reports within 30 days of their completion. The REC shall submit to the Department for the public file all other site documents at the following milestones:

1. completion of each phase of the remedial investigation;
2. completion of the remedial investigation;
3. at the close of the 30-day public comment period which follows notice of the proposed remedial action plan;
4. completion of remedial design and construction; and
5. completion of all remedial action activities.

(m) Any person required by Paragraph (l) of this Rule to preserve and maintain any documents shall preserve and maintain those documents for six years after termination of the remediating party's agreement with the Department to perform a voluntary remedial action pursuant to the rules in this Section. With the Department's written approval based on the likelihood of future need for enforcement or review purposes, documents required to be maintained need no longer be maintained.

(n) Failure to comply with Department site-related requests for information shall cause revocation of an REC's approval to perform work and disapproval of any work product in question. Remediating parties shall lose their eligibility for the voluntary remedial action program unless, within 60 days of notice by the Department of revocation of the REC's approval, the name of a successor REC is submitted to the Department. Program ineligibility shall also result from failure by a remediating party to provide written notice to the Department within 60 days of a change in RECs for any other reason.

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

(p) Nothing in this Section shall be construed to imply authorization by the Department to any person other than the Department, or the Department's employees, agents or contractors, to enter any property not owned by him or her to carry out a response action, or otherwise injure or interfere with any other person's rights or interests in real or personal property, without that person's consent. After making reasonable efforts to obtain reasonable access to any site or other location to be investigated as a possible site not owned by the remediating party, an REC or remediating party who is unable to obtain such access may request, in writing, that the Department authorize him or her, or his or her employees, agents, representatives or
contractors, to enter such site or location for the purpose of performing one or more necessary response actions. Each such request for authorization shall include all of the following information:

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

History Note: Authority G.S. 130A-310.1(c); 130A-310.1(e); 130A-310.3(c); 130A-310.5(a); 130A-310.6; 130A-310.12(b); 132-1; 132-1.2; 132-6;

15A NCAC 13C .0303 APPROVAL OF REGISTERED ENVIRONMENTAL CONSULTANTS
(a) To qualify for Department approval as an REC, an applicant shall complete and submit a sworn Request for Approval form, available from the Department, demonstrating that the applicant meets the requirements contained in this Section. The Request for Approval form shall set forth the qualifications of all persons the applicant wishes to qualify as RSMs.
(b) Applicants shall supply the names and telephone numbers of previous government and industry clients and copies of actual work products to verify experience, if requested by the Department. The Department may require applicants to supply additional information to clarify that provided on the Request for Approval form. Those applicants not complying with such requests shall not be approved to perform work pursuant to the rules in this Section.
(c) An REC shall promptly notify the Department if the nature of its business changes, if it no longer meets the requirements for approval under this Section due to change in personnel, or for any other reason, or if it discovers that any information it submitted in any Request for Approval is or was incorrect.
(d) Should a Department-approved RSM leave the employment of an REC or change employment within an REC, an REC shall, no later than 30 days prior to the change, submit the name and qualifications of another person to perform the role of the RSM. If an REC does not receive 30 days notice by an RSM of the RSM's intended change in employment, the REC shall notify the Department within 24 hours of the RSM providing such notice and within 30 days of the RSM's notice to the REC, submit to the Department the name and qualifications of another person to perform the role of the RSM. The Department shall determine whether the proposed replacement qualifies as an RSM. An REC may propose amendments to its approval as an REC to add or delete RSMs.
(e) The Department shall notify applicants in writing whether they are approved to conduct business as an REC. No applicant may represent itself, or work, as an REC without written Department approval.
(f) An REC's approval shall be valid for five years unless revoked earlier by the Department.
(g) The Department shall make available to the general public a list of all approved RECs.

History Note: Authority G.S. 130A-310.12(b);

15A NCAC 13C .0304 MINIMUM QUALIFICATIONS FOR REGISTERED ENVIRONMENTAL CONSULTANTS
In order to be approved to perform work as an REC, an environmental consulting or engineering firm shall meet the following requirements.

1. REC applicants shall demonstrate that one or more persons in their employ individually meet all of the following standards and requirements and therefore qualify to perform the role of RSM for the REC. To qualify as an RSM, an individual shall:
   a. Have the following minimum relevant professional experience:
      i. five years experience in investigation and remediation of hazardous substance or waste disposal sites;
      ii. three years direct experience in supervising site investigation and remedial action projects; and
      iii. eight years of total relevant professional experience, which shall be work of a professional grade and character performed for a minimum average of 20 hours per week that indicates the applicant is competent to render waste site cleanup activity...
opinions. Total relevant professional experience performed for less than a minimum average of 20 hours per week shall be applied toward the satisfaction of these requirements on a pro rata basis. If an individual works more than 40 hours in a week, even if having multiple jobs, that individual may get credit only for one week's worth of work. The Department shall consider the following criteria in evaluating whether an applicant's waste site cleanup decision-making experience and practical experience constitute sufficient relevant experience: the nature of work activities; the field of work activities; the types of reports, studies and documents prepared; the range of methods evaluated and selected; the number of individuals and disciplines of other professionals supervised or coordinated; the extent of review of conclusions, recommendations and opinions by supervisors; the duration of employment; and any other factors the Department deems pertinent.

(b) Have sufficient training to meet the hazardous waste operations and emergency response training standard, 29 CFR 1910.120.

(c) Have a four-year or graduate degree from a college or university accredited by a regional accrediting agency in one of the following fields or a field which the Department determines would provide the educational background necessary to oversee a remedial action:
   (i) Biochemistry;
   (ii) Biology;
   (iii) Chemical Engineering;
   (iv) Chemistry;
   (v) Civil Engineering;
   (vi) Earth Science;
   (vii) Environmental Engineering;
   (viii) Environmental Science;
   (ix) Epidemiology;
   (x) Geochemistry;
   (xi) Geological Engineering;
   (xii) Geology;
   (xiii) Geophysics;
   (xiv) Geotechnical Engineering;
   (xv) Hydrogeology;
   (xvi) Hydrology;
   (xvii) Industrial Hygiene;
   (xviii) Mechanical Engineering;
   (xix) Physics;
   (xx) Soil Science; and
   (xxi) Toxicology.

(d) Have a record of professionalism and integrity, demonstrated by the absence of:
   (i) conviction of a felony;
   (ii) conviction of a misdemeanor involving fraud, deceit, misrepresentation or forgery;
   (iii) an adverse civil judgment in an action involving fraud, deceit, misrepresentation, or forgery;
   (iv) disbarment or disciplinary action relating to any professional license; and
   (v) disqualification from government contracts for negligent acts or failure to perform required work.

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

History Note: Authority G.S. 130A-310.12(b); Eff. April 1, 1997.
(1) An RSM shall render a waste site cleanup activity opinion only when he or she has directly reviewed the
work to ascertain whether the completed work complies with this Section.

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

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

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

(2) If an REC acting pursuant to this Section identifies an imminent hazard at a site at which it is providing
professional services pursuant to the rules in this Section it shall, unless the REC is certain the remediating
party has provided such notice, within 24 hours of discovery, notify the Department:
(A) of the hazard;
(B) whether the remediating party has agreed to take corrective action; and
(C) what action, if any, has been taken.

(3) If an REC acting pursuant to this Section determines hazardous substances have migrated to property
adjoining property containing a source area, or determines there are sensitive environments or mixed
wastes (commingled radioactive and chemical wastes) on the site, it shall, unless the REC is certain the
remediating party has provided such notice, within 24 hours of discovery, notify the Department.

(4) In providing professional services all RSMs shall:
(A) exercise independent professional judgement;
(B) follow the requirements and procedures set forth in applicable provisions of this Section; and
(C) act with reasonable care and diligence, and apply the knowledge and skill ordinarily required of
RSMs in good standing in the State at the time the services are performed.

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

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

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

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

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

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

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

History Note: Authority G.S. 130A-310.12(b);

15A NCAC 13C .0306 TECHNICAL STANDARDS FOR REGISTERED ENVIRONMENTAL CONSULTANTS
(a) The REC shall ensure that all documents and plans comply with the remediating party's agreement with the Department
and the Inactive Hazardous Sites Response Act and associated rules.
(b) All work phase completion statements, schedules, work plans, and reports require REC certification. An REC's
certification shall comply with the following:
REC certification of any document requires inclusion of the following statement, signed by the RSM and notarized:

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

The RSM shall certify only documents that contain the following notarized declaration signed and dated by, and including the title of, the highest ranking official of the remediating party having day-to-day responsibility for the performance of the response action which is the subject of the submittal:

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

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

RSM certification of the following documents shall occur prior to implementation:
(A) remedial investigation work plans prepared in accordance with Paragraph (g) of this Rule;
(B) remedial action plans prepared in accordance with Paragraph (l) of this Rule;
(C) remedial action preconstruction reports prepared in accordance with Paragraph (m) of this Rule; and
(D) any modifications of work schedules.

The RSM shall prepare certified completion statements for the following work phases and provide them to the Department at the times specified in Rule .0302(l) of this Section:
(A) completion of phase I of the remedial investigation;
(B) completion of the remedial investigation;
(C) REC approval of the proposed remedial action plan;
(D) completion of the remedial design and construction; and
(E) completion of all remedial action activities.

RSM certification pursuant to the preceding paragraph shall include the following statement signed by the RSM and notarized:

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

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

"The approved and certified site remedial action plan has been implemented, and to the best of my knowledge and belief, cleanup levels determined pursuant to Rule .0308 of this Section have been achieved, and no significant or otherwise unacceptable risk or harm to human health or the environment remains at the site."

The REC may approve and certify site activities and documents pursuant to the rules in this Section only when the following environmental sample collection and analyses criteria are met:

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

2. Procedures and methodologies employed for the collection and analysis of soil, sediment, water, vapor, air, and waste samples shall be:
(A) methods published by the United States Environmental Protection Agency (USEPA), the American Society for Testing and Materials (ASTM), the American Public Health Association (APHA), the National Institute for Occupational Safety and Health (NIOSH), the American Water Works Association (AWWA), or other organizations with expertise in the development of standardized analytical testing methods; or

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

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

(4) Laboratory and other reports of analyses of aqueous samples shall be reported as mass per unit volume; such reports of analyses of solid samples shall be reported as mass per unit mass.

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

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

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

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

(C) the date of receipt of the sample at the laboratory, and the date(s) the sample was extracted and analyzed;

(D) the name and address of the laboratory, and proof of certification under 15A NCAC 2H.0800 or the USEPA Contract Laboratory Program;

(E) the sample matrix description and identification number(s);

(F) the sample preparation and analytical method name(s) and number(s);

(G) the results of the analysis, in clearly expressed concentration units;

(H) the sample quantitation limit of each reported analyte based upon analytical conditions;

(I) details of any known conditions or findings which may affect the validity of analytical data, including but not limited to equipment blank, trip blank, method blank, surrogate, spiked sample, or other quality control data;

(J) the laboratory's written justification for any sample dilution, additional sample preparation, or deviation from specified analytical methods; and

(K) complete chain of custody documentation for each sample.

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

(1) Measures to protect human populations from exposure to hazardous substances.

(2) Air monitoring activities, if necessary to protect the public from exposure to gases and air-borne particulates.

(3) Measures necessary to contain hazardous substances, including:

(A) measures to control stormwater runoff;

(B) measures to control dust and other environmental media (e.g., wetting soils);

(C) measures to decontaminate vehicles and equipment to minimize the spread of contaminated soil from the disposal site;

(D) measures to secure on-site excavations and stockpiles of contaminated materials; and

(E) discontinuance of response actions where necessary to protect public health and safety.

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

(f) The REC shall plan and implement the remedial investigation so that the areal and vertical extent of hazardous substance contamination is delineated for each area of concern.

(g) The REC may certify only remedial investigation plans which are prepared in compliance with Paragraphs (c), (d), (e), and (f) of this Rule and any other applicable requirements and which contain at least the following:
site location information including street address, longitude and latitude, and site and surrounding property land use;

a summary of all management practices employed at the site for hazardous wastes and any wastes that may have contained hazardous substances including: a list of types and amounts of waste generated (with RCRA waste codes), treatment and storage methods, and ultimate disposition of wastes; a description of the facility's past and current RCRA status; the location and condition of all identified vessels currently or previously used to store any chemical products, hazardous substances or wastes; and a summary of the nature of all identified on-site hazardous substance releases, including disposal or spills;

United States Geological Survey topographic maps sufficient to display topography within a one-mile radius of the site;

a site survey plat including: scale; benchmarks; north arrow; locations of property boundaries, buildings, structures, all perennial and non-perennial surface water features, drainage ditches, dense vegetation, known and suspected spill or disposal areas, underground utilities, storage vessels, existing on-site wells; and identification of all adjacent property owners and land usage. As provided in G.S. 89C-2, it is unlawful for any person to practice land surveying in North Carolina, as defined in G.S. 89C, unless such person has been duly registered as a registered land surveyor;

description of local geologic and hydrogeologic conditions;

inventory and map of all identifiable wells, springs, and surface-water intakes used as sources of potable water within a one-half mile radius of each source area, or, if the source area is unknown, within a one-half mile radius of each point where contamination has been identified at the site;

an evaluation of the site and all adjacent property for the existence of any environmentally sensitive areas;

copy of the current owner's(s') deed(s) to the property;

a chronological listing of all previous owners and each period of ownership since the property was originally developed from pristine land;

operational history with aerial photographs and Sanborn Fire Insurance maps to support land-use history;

a list of all hazardous substances which have been used or stored at the site, and approximate amounts and dates of use or storage as revealed by available written documentation and interviews with a representative number of former and current employees or occupants possessing relevant information;

site environmental permit history, including copies of all federal, state, and local environmental permits, past and present, issued to the remediating party or within its custody or control;

a summary of all previous and ongoing environmental investigations and environmental regulatory involvement with the site, and copies of all associated reports and laboratory data in public records, or within the custody or control of the REC or remediating party;

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 for special assessment such as a geophysical survey;

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

proposed field and laboratory procedures for quality assurance/quality control;

proposed analytical parameters and analytical methods for all samples;

equipment and personnel decontamination procedures; and

a 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 assures that the health and safety of nearby residential and business communities will not be adversely affected by activities related to the remedial investigation.

The REC may certify only remedial investigation reports which are prepared in compliance with Paragraph (c) of this Rule and any other applicable requirements and which contain at least the following:

a narrative description of how the investigation was conducted, including a discussion of any variances from the approved work plan;

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;

a map, drawn to scale, showing all soil sample and monitoring well locations in relation to known disposal areas or other sources of contamination. Monitoring wells shall be surveyed to a known benchmark and groundwater elevations to a known datum. Soil sample locations shall be surveyed to a known benchmark
or flagged with a secure marker until after the remedial action is completed. As provided in G.S. 89C-2, it is unlawful for any person to practice land surveying in North Carolina, as defined in G.S. 89C, unless such person has been duly registered as a registered land surveyor;

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

(5) a description of procedures used to manage drill cuttings, purge water and decontamination water;

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

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

(8) tabulation of analytical results for all sampling (including sampling dates and soil sampling depths) and copies of all laboratory reports including quality assurance/quality control documentation;

(9) soil, groundwater, surface water and sediment contaminant delineation maps and cross sections, including scale and sampling points with contaminant concentrations;

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

(11) color copies of site photographs.

(i) Any proposed remedy which would:

(1) be conducted entirely on site and for which a permit waiver is desired under G.S. 130A-310.3(e);

(2) involve on-site containment or capping; or

(3) exceed the three million dollars ($3,000,000) cost maximum contained in G.S. 130A-310.9(a) without a waiver, shall require Department concurrence prior to implementation. The REC shall submit to the Department a brief summary of available remedies, their projected costs, and in each case reasons why a remedy was accepted or rejected.

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

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

(l) The REC may certify only remedial action plans which are prepared in compliance with Paragraphs (c), (d), (i), (j), and (k), of this Rule and any other applicable requirements and which contain at least the following:

(1) A discussion of the results of the remedial investigation including media contaminated, contaminants of concern, and the areal and vertical extent of contamination.

(2) A brief statement of objectives for the remedial action.

(3) An evaluation of available remedial alternatives using the following feasibility study criteria:

(A) protection of human health and the environment, including attainment of cleanup levels;

(B) compliance with applicable federal, state and local regulations;

(C) long-term effectiveness and permanence;

(D) reduction of toxicity, mobility and volume;

(E) short-term effectiveness, i.e., effectiveness at minimizing the impact of the site remedial action on the environment and the local community;

(F) implementability, i.e., technical and logistical feasibility, including an estimate of time required for completion;

(G) cost; and

(H) community acceptance.

(4) A detailed description and conceptual design of the proposed remedy, including process flow diagrams and pre-design drawings of all major components of the treatment train.

(5) A demonstration that the proposed remedy is supported by the remedial alternative feasibility study conducted pursuant to Subparagraph (l)(3) of this Rule.

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

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

(8) A description of procedures and a schedule for additional site characterization, treatability studies, final design, construction, operation and maintenance, system monitoring and performance evaluation, and progress reporting.

(9) A description of the criteria for remedial action completion, including procedures for post-remedial and confirmatory sampling.

(10) A 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 assures that the health and safety of nearby residential and business communities will not be adversely affected by activities related to the remedial action.

(11) Equipment and personnel decontamination procedures.

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

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

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

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

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

(1) "as built" plans and specifications;

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

(3) a summary of any problems encountered during construction.

(o) The REC shall prepare and certify quarterly remedial action progress reports for remedial actions of greater than three months duration. Groundwater remedial action progress reports may be prepared on an annual basis after the first full year of remedial action and the completion of four quarterly monitoring events. The REC may certify only remedial action progress reports which are prepared in compliance with Paragraph (c) of this Rule and any other applicable requirements and which contain at least the following:

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

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

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

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

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

(p) The REC may certify only final remedial action completion reports which contain at least the following:

(1) a final progress report which includes all the information required under Paragraph (o) of this Rule;

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

(3) a discussion of criteria for remedial action completion, and a demonstration, supported by confirmatory sampling data, that such criteria have been satisfied; and

(4) a summary of total project costs.

(q) In the performance of its role pursuant to the rules in this Section, the REC shall manage investigation or remedial action derived wastes in a manner that provides for the protection of human health and the environment and that complies with all applicable federal, state, and local laws, rules, and regulations.

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

15A NCAC 13C .0307 DEPARTMENTAL AUDITS AND INSPECTIONS
(a) The Department may conduct random or targeted audits of any REC, remediating party, response action or site which is subject to this Section.

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

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

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

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

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

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

(c) Remediating parties shall provide financial assurance, by paying an annual administration cost, to participate in the voluntary remedial action program under this Section. This payment shall be set by the Department based on the expected cost of auditing voluntary remedial actions and shall be used to offset that cost. Remediating parties providing such monies shall pay any shortfall, or be reimbursed any remainder not expended by the Department, annually.

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

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

15A NCAC 13C .0308  CLEANUP LEVELS

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

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

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