

§ 130A-310.69. Remedial investigation report; remedial action plans.

(a) A person who proposes to conduct remediation pursuant to this Part shall submit a remedial investigation report to the Department prior to submitting a remedial action plan. The remedial investigation report shall include, but is not limited to, a legal description of the location of the site; a map showing the location of the site; a description of the contaminants involved and their concentration in the media of the site; a narrative description of the methodology used in the investigation; a description of all on-site releases of contamination; a site map, drawn to scale, showing benchmarks, directional arrow, location of property boundaries, buildings, structures, all perennial and nonperennial surface water features, drainage ditches, dense vegetation, contaminant spill or disposal areas, underground utilities, storage vessels, and existing on-site wells; identification of adjacent property owners and adjacent land uses; description of local geologic and hydrologic conditions; an evaluation of the site and adjacent properties for the existence of environmentally sensitive areas; a description of groundwater monitoring well design and installation procedures; a map, drawn to scale, that shows all groundwater sample locations; a description of field and laboratory quality control and quality assurance procedures followed during the remedial investigation; a description of methods used to manage investigation-derived wastes; tabulation of analytical results for all sampling; copies of all laboratory reports; a description of procedures and the results of any special assessments; and any other information required by the Department or considered relevant by the investigator. The remedial investigation shall assess all contaminated areas of the site, including types and levels of contamination, and the risk that the contamination poses to public health, safety, and welfare and to the environment.

(b) A person who proposes to conduct remediation pursuant to this Part shall develop and submit a proposed remedial action plan to the Department. A remedial action plan shall provide for the protection of public health, safety, and welfare and the environment. A remedial action plan shall do all of the following:

- (1) Identify actions required to remove, treat, or otherwise appropriately mitigate or isolate the source of contamination to ensure that the source will not cause unrestricted use standards to be exceeded in any medium.
- (2) Address contamination that moves from one medium to another in order to prevent a violation of the remediation standards established under G.S. 130A-310.68. A more stringent remediation standard may be required for a particular medium to control impact on other media.
- (3) Identify the current and anticipated future uses of property comprising the contaminated site and address any concerns raised in public comment on the proposed remedial action plan as to the proposed future uses of the property.
- (4) Identify the current and anticipated future uses of groundwater in the contaminated site and address any concerns raised in public comment on the proposed remedial action plan as to the future uses of groundwater.
- (5) Determine the appropriate method of remediation to achieve the site-specific remediation standards.
- (6) Specify any measures that may be necessary to prevent adverse effects to the environment that may occur at levels of contamination that are lower than the standard necessary to protect human health.
- (7) Specify any measures that may be necessary to prevent any discharge into surface waters during implementation of the remedial action plan that violates applicable surface water quality standards adopted by the Commission.

- (8) Specify any measures that may be necessary to prevent any air emission during implementation of the remedial action plan that violates applicable air quality standards adopted by the Commission.
- (9) Provide for attainment and maintenance of the remediation standards established under G.S. 130A-310.68.
- (10) Provide for methods and procedures to verify that the quantity, concentration, range, or other measure of each contaminant remaining at the contaminated site at the conclusion of the contaminant-reduction phase of remediation meets the remediation standards established for the site, that an acceptable level of risk has been achieved, and that no further remediation is required.
- (11) Provide for the imposition and recordation of land-use restrictions as provided in G.S. 143B-279.9, 143B-279.10, 130A-310.3(f), 130A-310.8, 130A-310.35, 143-215.84(f), and 143-215.85A if the remedial action plan allows contamination in excess of the greater of unrestricted use standards or background standards to remain on any real property or in groundwater that underlies any real property.
- (12) Provide for submission of an annual certification to the Department by the property owner that land use at the site is in compliance with land-use restrictions recorded pursuant to this Part and that the land-use restrictions are still properly recorded in the chain of title for the property.
- (13) Provide a detailed description of the proposed remedial action to be taken; the results of any treatability studies and additional site characterization needed to support the proposed remedial action; plans for postremedial and confirmatory sampling; a project schedule; a schedule for progress reports to the Department; and any other information required by the Department or considered relevant by the person who submits the proposed remedial action plan.
- (14) Provide a description of measures that will be employed to ensure that the safety and health of persons on properties in the vicinity of the site and persons visiting or doing business on the site will not be adversely affected by any remediation activity.
- (15) Provide a reasonable estimate of the probable cost of the remedial action sufficient for the Department to determine an acceptable level of financial assurance.
- (16) Provide proof of financial assurance as required by G.S. 130A-310.72.

(c) A remedial action plan shall also include an analysis of each of the following factors:

- (1) Long-term risks and effectiveness of the proposed remediation, including an evaluation of all of the following:
 - a. The magnitude of risks remaining after completion of the remediation.
 - b. The type, degree, frequency, and duration of any postremediation activity that may be required, including, but not limited to, operation and maintenance, monitoring, inspection, reports, and other activities necessary to protect public health, safety, and welfare and the environment.
 - c. Potential for exposure of human and environmental receptors to contaminants remaining at the site.

- d. Long-term reliability of any engineering and voluntary institutional controls, including repair, maintenance, or replacement of components.
 - e. Time required to achieve remediation standards.
- (2) Toxicity, mobility, and volume of contaminants, including the amount of contaminants that will be removed, contained, treated, or destroyed; the degree of expected reduction in toxicity, mobility, and volume; and the type, quantity, toxicity, and mobility of contaminants that will remain after implementation of the remedial action plan.
 - (3) Short-term risks and effectiveness of the remediation, including the short-term risks that may be posed to the community, workers, or the environment during implementation of the remedial action plan, and the effectiveness and reliability of protective measures to address short-term risks.
 - (4) The ease or difficulty of implementing the remedial action plan, including commercially available remedial measures; expected operational reliability; available capacity and location of needed treatment, storage, and disposal services for wastes; time to initiate remediation; and approvals necessary to implement the remediation.
- (d) The development of a remedial action plan may require supplemental submissions and revisions based on Department review, remedial action pilot studies, and public comment from local government and citizens. (2011-186, s. 2.)