

15A NCAC 05H .2003 EXPLORATION AND PRODUCTION WASTE DISPOSAL

(a) The permittee shall test produced water and flowback fluids. The permittee shall test for the following parameters on a frequency and schedule determined by the Department, based on factors such as new sciences, the shale resource, and operator technology for the protection of public health, welfare, and the environment. At a minimum, testing shall be conducted on the produced water and flowback fluids from the first completed well on each well pad and on all fluids prior to management in accordance with Subparagraphs (c)(2), (c)(3), and (c)(4) of this Rule:

carbonaceous biochemical oxygen demand (CBOD)	ammonia-nitrogen (NH ₃ -N)
dissolved oxygen (DO)	specific conductance
pH	total suspended solids (TSS)
barium	bromide
chlorides	sulfates
sodium	divalent cations
total dissolved solids (TDS)	oil and grease
arsenic, total recoverable	cadmium, total recoverable
cobalt, total recoverable	copper, total recoverable
cyanide, total recoverable	lead, total recoverable
mercury, total recoverable	nickel, total recoverable
tin, total recoverable	zinc, total recoverable
benzene	bis(2-ethylhexyl)phthalate
butylbenzyl phthalate	carbazole
n-Decane	fluoranthene
n-Octadecane	radium-226 (Dissolved)
strontium-90 (Dissolved)	beta radiation (gross)
chronic whole effluent toxicity	total organic carbon
	volatile organic compounds
	semi-volatile organic compounds

- (1) the water samples shall be collected and analyzed in accordance with Rule .1803 of this Subchapter; and
- (2) the analytical results shall be submitted to Division within 30 calendar days of receiving the analytical results, unless a different schedule is prescribed by the Department, based on the results of the initial test.

(b) The Director, in consultation with the Director of the Division of Water Resources and the Director of the Division of Public Health within the Department of Health and Human Services, may require additional analysis and scheduling as necessary for the protection of public health, welfare, and the environment.

(c) E & P waste shall be managed as:

- (1) reuse in well stimulation operations;
- (2) onsite pretreatment for reuse or disposal;
- (3) disposal at a plant installed for the purpose of disposing of waste within the State, permitted in accordance with G.S. 143-215.1; or
- (4) disposal facility located within another state that is duly permitted to accept flowback fluid and produced water from oil or gas operations.

(d) If E & P waste is to be disposed of in accordance with Subparagraphs (c)(2), (c)(3), or (c)(4) of this Rule, the permittee shall also comply with the following requirements:

- (1) prior to transporting the waste to a publicly owned treatment works pursuant to Subparagraph (c)(3) of this Rule, the permittee shall submit a copy of the approved Industrial User Permit required by 15A NCAC 02H .0916, which is incorporated by reference, including subsequent amendments, to the Division.
- (2) the permittee shall notify the Division if any facility identified in the plan refuses to accept E & P waste. Upon such refusal, the permittee shall submit a revised E & P Waste Management Plan in accordance with Rule .2002 of this Section that identifies a new disposal facility to the Division.

(e) Any sludge or residual resulting from the reuse process authorized pursuant to Subparagraph (c)(1) of this Rule or from any onsite pretreatment that may be used in conjunction with Subparagraphs (c)(2) and (c)(3) of this Rule shall be managed and disposed of pursuant to Subparagraphs (c)(3) and (c)(4) of this Rule or with the Resource

Conservation and Recovery Act and regulations promulgated pursuant thereto, 42 USC 6901 et seq. and 40 CFR Parts 239-282, which is incorporated by reference, including subsequent amendments, which can be accessed for no charge at http://www.ecfr.gov/cgi-bin/text-idx?SID=13be85c0df8971509a2531a778d1c87f&tpl=/ecfrbrowse/Title40/40tab_02.tpl. In addition, prior to disposal of any sludge or residual resulting from the reuse process authorized pursuant to Subparagraph (c)(1) of this Rule, or from any onsite pretreatment that may be used in conjunction with Subparagraphs (c)(2) and (c)(3) of this Rule, the permittee shall demonstrate that the sludge or residual meets all applicable radioactivity standards for the disposal facility.

(f) Residuals from onsite pretreatment shall be disposed of in accordance with G.S. 143-215.1 and G.S. 130A-294, or transported to another state and disposed of in accordance with the receiving state's rules.

(g) Solid E & P waste, including drill cuttings and solidified muds, shall be characterized in accordance with EPA Method 1311, Toxicity Characteristic Leaching Procedure, which is incorporated by reference, including subsequent amendments and found at <http://www.epa.gov/epawaste/hazard/testmethods/sw846/pdfs/1311.pdf>. The solid E & P waste shall be characterized on a frequency and schedule determined by the Department, based on the permittee's drilling, completion, and stimulation practices. In addition, the Director, in consultation with the Director of the Division of Waste Management, may require additional analysis as necessary for the protection of public health, welfare, and the environment.

(h) Solid E & P waste shall be disposed of by transfer to the appropriate permitted solid waste management facility in accordance with 15A NCAC 13A or 15A NCAC 13B, which are incorporated by reference including subsequent amendments.

(i) E & P waste fluids may be transported to other drilling sites for reuse provided that such fluids are transported and stored in a manner that does not constitute a hazard to water resources, public health, safety, or the environment in accordance with 15A NCAC 13B .0105.

(j) E & P waste, when transported off-site for treatment or disposal, shall be transported to treatment facilities or to waste disposal facilities permitted to receive E & P waste by the Department in accordance with 15A NCAC 13B. When transported to facilities outside of North Carolina for treatment or disposal, E & P waste shall be transported to facilities permitted by the appropriate regulatory agency in the receiving state.

(k) When E & P waste is transported off-site, the permittee shall maintain for five years copies of each invoice, bill, or ticket and such other records to document the following requirements:

- (1) the permittee's name, address, and business telephone number;
- (2) the county, city, or town where the oil or gas well is located;
- (3) the property street address, or nearest address to the ingress and egress point leading from a public road to the well pad;
- (4) the API number, the lease name, and the oil or gas well name and number;
- (5) the date and time of the transport;
- (6) the company name and contact information of the E & P waste transporter;
- (7) the location of the E & P waste pickup site if different than a pit or tank located onsite;
- (8) the type and volume of E & P waste;
- (9) the name and location of the treatment or disposal site; and
- (10) a chronological record showing the date and time of waste collection and the transfer of waste from one person to another during final delivery to a disposal facility. These documents shall be signed and dated by all appropriate parties, and shall include the generator, transporter, and receiving facility representative.

(l) All records shall be maintained in accordance with the Rule .0202 of this Subchapter.

*History Note: Authority G.S. 113-391(a)(3); 113-391(a)(4); 113-391(a)(5)f;
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