



ADMINISTRATIVE RULES OF MONTANA

17.53.1004 BACKGROUND AND PERIODIC TESTING OF SOILS, SURFACE WATERS AND AQUIFERS

- (1) The owners and operators of boilers and industrial furnaces burning hazardous waste shall perform background and periodic testing of soils, surface waters and aquifers.
- (2) Soils must be sampled and analyzed for total metals and pH, or other constituents as determined by the department, from surface locations that are predominantly downwind of the stack or facility. The number of samples and locations is determined during the permit application or permit review process. Background samples must be tested prior to burning hazardous waste. Soil samples must be taken on an annual basis. The results of the annual sampling must be compared to the background results.
- (3) Surface waters must be sampled and analyzed for total metals and pH, or other constituents as determined by the department, from surface locations that are predominantly downstream from the stack or facility. This requirement does not apply if there are no streams, rivers, lakes or wetlands within 1 mile of the boiler or industrial furnace. The number of samples and locations is determined during the permit application or permit review process. Background samples must be tested prior to burning hazardous waste. Surface water samples must be taken on an annual basis. The results of the annual sampling must be compared to the background results.
- (4) Groundwater from the uppermost aquifer underlying the property must be sampled and analyzed for total metals and pH, or other constituents as determined by the department, if it is determined during the permit application or permit review process that aquifer testing is warranted. This determination must be made by the department based, in part, on review of the Part B application regarding known geologic and hydrogeologic conditions underlying the site, including use of the aquifer. If required, the number of samples and locations is determined during the permit review process. Background samples must be tested prior to burning hazardous waste. Groundwater must be sampled on an annual basis. The results of the annual sampling must be compared to the background results.
- (5) Sampling and analysis must be in conformance with procedures described in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods. The statistical methodology is the same employed for Bevill residue determinations as described in 40 CFR 266, Appendix IX. That is, the annual samples (taken after hazardous wastes are burned) must be compared to background samples for the constituents of concern. The 95% confidence interval in relation to the mean of the background levels must be used in the comparison of the annual and background samples. The concentration of a constituent in the annual sample is not considered to be significantly higher than in the background sample if the concentration does not exceed the upper limit of the 95% confidence interval in relation to the mean that was established for the background level.

- (6) The results of the sampling and analysis program for soils, surface waters and aquifers are evaluated at the time of permit application or permit review. The department shall use the results to evaluate the possibility of interference from sources other than the boiler or industrial furnace. If the department determines that statistically increased contamination from the facility is apparent, then the department may require additional testing, restrict the feed rates of certain hazardous wastes, deny reissuance of the permit or revoke the permit.

Authorizing statute(s): 75-10-405, MCA

Implementing statute(s): 75-10-405, MCA

History: NEW, 2001 MAR p. 169, Eff. 1/26/01.