

From: "Nightengale, Alice - Environmental Health" <Alice.Nightengale@denvergov.org>
To: "WALTER Avramenko" <wavramen@cdphe.state.co.us>
Date: 10/6/2010 4:04 PM
Subject: Draft comments on NFA determination for groundwater

Hi Walter, below are some comments that we've bounced around internally. I can formalize this for you but wanted to get our initial thoughts out since I'm already late with our input.

Denver's Department of Environmental Health (DEH) doesn't find specific concerns with the CDPHE guidance that introduces another pathway for achieving cleanup; however, we don't see the immediate benefit or purpose of using this approach versus staying within a site's original CDPHE-led cleanup program. Several overall comments are listed below.

* The NFA guidance reads as if it is guidance for determining "Technical Infeasibility" of groundwater remediation. CDPHE may wish to consider another category for sites found to be "Economically Infeasible" - i.e. sites where the owner/operator has no funds for cleanup or the responsible party is unknown. This additional category could be called Groundwater Management Zone or Impaired Groundwater Area and used to classify sites that have no unacceptable risk to human health but are orphaned due to an absence of cleanup funds and cannot meet the stringent criteria outlined for an NFA.

* The level of effort needed to meet the list of required information under 'characterization', especially with a guidance reference to having QAPPs and or DQOs in place, is more extensive and detailed than what is typically collected for site characterizations, especially for smaller sites (and limited budgets) such as dry cleaners. The characterization needed by CDPHE could easily be cost prohibitive, especially for the smaller sites. Similarly, the level of effort to evaluate exposures and to demonstrate natural attenuation could also be cost prohibitive. It seems that CDPHE is establishing more criteria for this new pathway/program than what is typically applied at its current VCUP program.

* The new program requires complete remediation of the primary and secondary sources along with documentation that remaining groundwater contamination will naturally attenuate within a given timeframe. Under some circumstances (as determined by CDPHE), CDPHE may allow variable concentrations in soil. The program's goal is to meet Colorado's groundwater standards, or other applicable groundwater standard. DEH does not understand this to be different than the existing CDPHE programs, other than with much data plus modeling a site may be able to justify terminating active remediation sooner as long as

groundwater monitoring and an environmental covenant / restrictive notice are in place. It should be noted that several years of groundwater monitoring will likely be needed before CDPHE can be petitioned to remove the environmental covenant / restrictive notice.

* Additionally, timeframes for attaining cleanup with natural attenuation with detailed backup documentation are required, as are public notices.

A few specific comments:

* First bullet of checklist - delete "and is no longer acting as a source". If the other criteria in the checklist are met the "no longer acting as a source" becomes moot.

* Seventh bullet of checklist - add "unacceptable" after anticipated, making this bullet consistent with the sixth bullet.

In summary, it is difficult to know how CDPHE will implement the new program, and each site is different; however, given the current draft guidance document, the new pathway/program could result in greater expense and longer overall monitoring of a site when compared to remediation under an existing CDPHE program/pathway.

Feel free to call me to discuss these draft comments. Thank you for the opportunity to provide input.

Alice Nightengale

Environmental Public Health Manager

Division of Environmental Quality

200 W. 14th Av., Ste #310

Denver, CO 80204

720-865-5431 o

720-865-5534 f