

**Comments on DRAFT Guidance for the Closure of Low-Threat Sites with Residual Ground Water Contamination, Hazardous Materials and Waste Management Division, First Edition, August 13, 2010 (“NFA Guidance”),**

and

**POLICY FOR A “NO FURTHER ACTION” DETERMINATION WHEN CONTAMINATION REMAINS ABOVE THE COLORADO GROUND WATER STANDARDS, August 13, 2010 Version (“NFA Policy”)**

In general these two documents appear protective of Colorado’s groundwater resources and provide a very good framework for providing NFA status to sites that have not attained CGWS and pose minimal threat to human health or the environment. Several areas could be modified to improve the guidance document’s direction and improve ability of CDPHE reviewers and Stakeholders to perform accurate, thorough and timely reviews of application materials. Below are suggested revisions to the concepts and specific language of the documents. Where suggested, revisions to specific language are provided in bold text within quotes.

### **NFA Policy:**

Checklist:

Items in the NFA Checklist should be cross-referenced to respective items in the Guidance document.

### **NFA Guidance:**

LINE OF EVIDENCE 1: ADEQUATE CHARACTERIZATION OF THE SITE, Site uses: Owners of adjacent or nearby properties should be contacted to investigate the presence of unregistered domestic, lawn and garden, or other purpose wells.

LINE OF EVIDENCE 1: ADEQUATE CHARACTERIZATION OF THE SITE, last paragraph:

CDPHE reviewers should be provided with clear and easily understandable application materials to facilitate timely and thorough review. Please revise 5<sup>th</sup> sentence to read (revisions in bold text): “The conceptual model ~~may~~**should** include a narrative **with supporting references**, ~~a~~ diagrams, and ~~or~~ ~~a~~ charts **as applicable to clearly inform reviewers of site conditions and processes relevant to site contaminants.**”

LINE OF EVIDENCE 2: REMEDIATION OF SOURCE AREAS

In the event remediation of source areas is not practical or is not confirmed, this fact should be provided in any public notice and on the checklist. Rationale for allowing NFA without confirmed remediation should be provided in the application document.

LINE OF EVIDENCE 4: DEMONSTRATION OF NATURAL ATTENUATION PROCESSES,

A. Is the plume decreasing in size and magnitude?

Paragraph 1: While the lack of prescribed monitoring periods and methods is understandable, two years of quarterly monitoring for major relevant constituents (contaminants of concern and major daughter products), and at least two sampling events about one year apart for indicator and secondary constituents (MNA parameters, general water chemistry, soil vapor, etc), should be consider as a minimum quantity of data necessary for determination of plume attenuation.

Paragraph 3, 2<sup>nd</sup> sentence: This should be changed to (revisions in bold text), **At a minimum, standard presentation methods may will include, as applicable:**

C. Are there natural attenuation processes at work?

Bullet #1, please revise to: "Spatial and temporal trends in contaminant **and breakdown product** concentrations..."

Bullet #3, please revise to: "Data from **site specific** field or microcosm studies..."

Bullet #4, please revise first sentence to: "Results of **site specific** fate and transport modeling."

LINE OF EVIDENCE 6: ABILITY TO ENACT, IMPLEMENT AND MAINTAIN INSTITUTIONAL CONTROLS OVER TIME

Please revise 4<sup>th</sup> paragraph, 4<sup>th</sup> sentence to specifically include notification of adjacent landowners by means more direct than published public notice.

PUBLIC NOTICE

Please revise first sentence to read: "Prior to formalizing a site closure decision, the property owner must notify building tenants and residents within the footprint of the ground water plume **and landowners adjacent to properties overlying the groundwater plume**, in accordance with each State program's statutory and/or regulatory requirements."

DOCUMENTATION

Please revise last sentence in third paragraph to: "The more complete and convincing the data provided, the greater the chance of having the Board approve **a satisfactory** request."