

US EPA ARCHIVE DOCUMENT

Interstate Mining Compact Commission
CCW Meeting in Williamsburg, Virginia
October 29-30,2002

This document was prepared by the work group of the IMCC-CCW Committee for the October 29-30, 2002 meeting to discuss the "DRAFT" CCW matrix and is not intended to reflect final comment or decision by the committee.

Detailed description of the document.

The matrix is designed to address EPA's concerns as they relate to the competency of the existing regulatory permitting framework for the disposal and use of coal combustion materials. It itemizes perceived regulatory deficiencies and matches them up with existing State and/or Federal regulations through SMCRA, RCRA and other promulgated law to show that these issues are covered and are currently being addressed.

What does the document intend to capture or articulate?

The matrix identifies issues of concern as related to coal combustion waste. Through the matrix, we intend to show that the current regulatory programs under SMCRA and/or RCRA charged with the regulation of coal combustion materials has historically and continues to manage these materials in a safe, environmentally friendly manner. Additionally, we want to illustrate that these perceived deficiencies are just that, perceived. SMCRA, RCRA and other existing State and Federal laws adequately address the disposal and use of these materials.

Why did we prepared the matrix in the first place?

The matrix was prepared to provide a quick cross-reference of CCW issues with citations from SMCRA and RCRA that are applicable to the regulation of CCW. This cross-referencing illustrates the belief that many of the CCW issues of concern to EPA are adequately being address through existing State and/or Federal laws.

How does the matrix relate to EPA's and OSM's documents regarding minefill regulatory concerns?

The matrix draws information from EPA and OSM documents that identified specific CCW issues. Additionally a number of the citations provided in SMCRA regulation and Part 258 of RCRA are included in the matrix.

How should the matrix be used to further our discussions and to inform the decision making process?

The matrix should be used to develop a further understanding of how coal combustion materials have been and are currently being handled. Selected states should provide: 1) applicable citations to state statute(s) and regulations that regulate CCW in their state; 2) indicate state agency(s) that enforce the applicable regulations; and, 3) if multiple agencies regulate CCW, provide a brief description how the agencies coordinate their regulatory activities.

What are the next steps in the process of developing the draft?

We should allow all States to review and comment on the completeness of the matrix prior to finalizing. After review and comment, identify the deficiencies in the regulation of CCW.

Does SMCRA provide for or require groundwater standards?

SMCRA is intended to allow existing State and Federal water quality laws to apply to mine sites. As a result, laws promulgated as a part of the Federal Clean Water Act and the State's water quality laws would apply to these sites.

If so, where are they in the regulations and/or statute?

SMCRA allows for states water quality laws to apply, which are typically under the regulatory authority of the states EPA.

30 CFR 816.42 "Discharges of water from areas disturbed by surface mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR part 434."

30 CFR 817.42 "Discharges of water from areas disturbed by underground mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR part 434."

Pursuant to the Federal Clean Water Act Illinois promulgated 35 Illinois Administrative Code 620's – Groundwater Quality Standards.

What, in fact, are they?

Most State's groundwater quality standards are MCL based. For those constituents that do not have Federally based MCL's, the Illinois EPA did a comparison of a network of statewide community wells and groundwater quality standards were established whereby 95% of the samples met or lower than the standard.

How do they line up with MCLs (as opposed to effluent limits for surface water)?

In most cases the state Environmental Protection Agency is responsible for issuing the NPDES permit that defines the constituents and effluent limits for surface water that is discharged from mine sites. Typically, constituents that are monitored are flow, pH, total suspended solids, total iron, acidity, alkalinity, sulfates, and chlorides. In cases where CCW is approved for disposal the Illinois EPA may require additional constituents to be monitored at those outfalls that receive drainage from the disposal area. Constituents are added based on the leachate of the CCW. The effluent limits for the additional constituents are based on Subpart B; General Use Water Quality Standards of 35 Illinois Administrative Code 302.208. Those limits are provided in the table below.

Illinois Water Quality Standards

Constituent	MCL	Groundwater		Surface Water ⁽¹⁾	
		IL Class I	IL Class II	Acute	Chronic
Antimony	0.006	0.006	0.024	(2)	
Arsenic	0.01	0.05	0.2	0.36	0.19
Barium	2.0	2.0	2.0	5.0	
Beryllium	0.004	0.004	0.5	(2)	
Cadmium	0.005	0.005	0.05	0.05 ⁽³⁾	(4)
Chromium	0.1	0.1	1.0	0.016	0.011
Copper	1.3	0.65	0.65	(5)	(6)
Cyanide	0.2	0.2	0.6	0.022	0.0052
Fluoride	4.0	4.0	4.0	1.4	
Lead	0.015	0.0075	0.1	0.1	N/A
Mercury	0.002	0.002	0.01	0.0005	N/A
Selenium	0.05	0.05	0.05	1.0	
Thallium	0.002	0.002	0.02	(2)	

All standards are in mg/L

- (1) See attached Subpart B; General Use Water Quality Standards of 35 Illinois Administrative Code 302.208.
- (2) Standard does not exist; IEPA will calculate on a case-by-case basis.
- (3) Acute standard is calculated by: $\exp[A + B \ln(H)]$, but not to exceed 0.05 mg/L, where $A = -2.918$ and $B = 1.128$.
- (4) Chronic standard is calculated by: $\exp[A + B \ln(H)]$, where $A = -3.490$ and $B = 0.7852$.
- (5) Acute standard is calculated by: $\exp[A + B \ln(H)]$, where $A = -1.464$ and $B = 0.9422$.
- (6) Chronic standard is calculated by: $\exp[A + B \ln(H)]$, where $A = -1.465$ and $B = 0.8545$.