

Response to Comments

EPA received comments on the National Pollutant Discharge Elimination System (NPDES) permit for Usibelli Coal Mine, Inc., AK-004038-0, from Usibelli Coal Mine, Inc. (UCM), the Alaska Department of Natural Resources (ADNR), the Division of Mining and Water Management and the Alaska Department of Environmental Conservation (ADEC).

EPA received a letter, dated August 28, 1998, from the U.S. Fish and Wildlife Service (USFWS) regarding endangered species in the project area. The letter states that USFWS feels that the discharge will have no adverse impacts on listed species and that further consultation under section 7 of the Endangered Species Act is not necessary at this time.

On September 28, 1998, the Alaska Department of Environmental Conservation (ADEC) issued a Certificate of Reasonable Assurance for proposed discharges from Usibelli Coal Mine, Inc.

- Comment:** UCM requests that the site numbers found in Permit Part I.B. Water Quality Monitoring Program Requirements, Table 2, be changed from nine (9) and ten (10) to seven (7) and eight (8).

Response: This change to the permit has been made.

- Comment:** UCM requests that, if the permit becomes effective prior to October 31, 1998, the first discharge sampling under the new permit occur after breakup in 1999 rather than start in October. The new permit allows 90 days to develop a Quality Assurance Plan and to sample before this is in place would not yield quality data.

ADEC requests that since Year 1 states a July-October timeframe, that if the permit is effective during October, a sample should be taken rather than waiting until October of 1999.

In the alternative, ADNR requests that the October sampling be dropped altogether because the intent of the sampling regime is to gather water information from the Spring/Summer/Fall months of May through September and not the early winter months. There are also safety concerns and the record of precipitation shows that discharge at this time of year is unlikely.

Response: The sampling schedule has been changed, deleting October, to reflect the recommendation of ADNR.

- Comment:** UCM states that the Best Management Practices (BMP) Plan will

reference the Surface Mining Control and Restoration Act (SMCRA) and Spill Prevention and Control Countermeasure (SPCC) plans for redundant requirements.

Response: This is allowed under Permit Part I.D.1.b.

4. **Comment:** UCM asks under what authority did EPA raise the civil penalty from \$25,000 to \$27,500 (Permit Part III.B.1.) and when was the effective date of this change.

Response: The Debt Collection Improvement Act of 1996 mandated an adjustment of EPA's civil monetary penalties. The final rule was published in the Federal Register [61 FR 69360] on December 31, 1996, and was effective on January 30, 1997.

5. **Comment:** Usibelli states that there are Acts of God and human error beyond the control of UCM and while they will make every effort to report these incidents and mitigate their effects, they will not be able to stop mining coal during an incident. UCM asks under what authority EPA may include this requirement in the permit.

Response: EPA believes UCM is asking about Permit Part III.C., **Need to Halt or Reduce Activity not a Defense**, which states "It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with this permit." This requirement is included based on 40 CFR § 122.41(c). The permitted action, in this case, would be the discharge of wastewater and not specifically mining except in how it might relate to the discharge. This permit part does not say that any activity would need to be halted but only that UCM could not use their need to continue a discharge as a defense to a violation of the requirements of the permit.

6. **Comment:** UCM asks by what authority and circumstances may EPA reopen, revoke or reissue the permit.

Response: EPA's authority and circumstances can be found in regulation in 40 CFR § 122. Reopening a permit is addressed at 40 CFR § 122.44(c) and revoking/reissuing a permit is addressed at 40 CFR § 122.62(b).

7. **Comment:** UCM asks under what authority may EPA require Whole Effluent Toxicity (WET) Testing.

Response: The Alaska Water Quality Standards (WQS) contain provisions for a WET limit [18 AAC 70.030] as required by 40 CFR § 131.11(b)(2) to supplement numerical criteria and 40 CFR § 122.44(d)(1)(ii). EPA has included WET testing to determine whether a permit limitation may be required in future permitting actions.

8. **Comment:** ADNR notes that a more recent edition of the book “Standard Methods for the Examination of Water and Wastewater” has been published since the 18th Edition that is referenced in the footnote on page 5 of the Draft permit and suggests this be updated to the 19th Edition published in 1995 with referenced page numbers changed as necessary.

Response: Unfortunately, EPA permits must reference what is in the regulations even if it is not the most current document. The regulation containing the 18th Edition can be found at 40 CFR § 136.3.

9. **Comment:** ADNR requests clarification of when a sample for WET testing be taken since the draft permit only specifies once per year.

Response: The permit now requires that the facility begin sampling concurrently with the sampling required within 24 hours under a medium or heavy precipitation event or whenever it may be possible to collect the required 24 hour composite sample during a dry weather discharge. This will give the permittee the flexibility to sample different events during the life of the permit. The reporting requirement has been changed so the full report is due on December 31 of each year starting in 1999 and by the expiration date of the permit for the final year.

10. **Comment:** ADNR notes that Permit Parts I.C.4.d. and I.E.6.g. contain typographical errors.

Response: The word “accedence” in Permit Part I.C.4.d. has been corrected to “exceedence” and the word “eights” in Permit Part I.E.6.g. has been changed to “weights.”

11. **Comment:** ADEC requests a change in the language of Permit Part I.B.1. so that the permit will read “. . . to verify that Alaska Water Quality Standards are met” instead of “. . . to verify adequate mixing.”

Response: ADEC’s recommendation better reflects the intent of the statement so this change has been made.

12. **Comment:** ADEC requests clarification in Table 2 regarding the use of a total method to measure Chromium VI.

Response: An explanation of the method should have been placed in the Fact Sheet rather than in Table 2 of the permit. The type of analysis referenced in the permit is incorrect. EPA Method 218.4 for hexavalent chromium determines the dissolved portion of the metal, as indicated in Appendix A. Dissolved analysis is required due to speciation that occurs if total recoverable or total methods are attempted.

Table 2 has been revised to included the dissolved analysis for hexavalent chromium and to remove the explanation line from the table.

13. **Comment:** ADEC requested the following corrections to Appendix F of the Fact Sheet:

Parameter	Change from	Change to
Iron, Drinking Water	100	300
Total Dissolved Solids	1988 WQS	1998 WQS
Sulfate	1988 WQS	1998 WQS
Note 2	as of June 30, 1998	on June 30, 1998

Response: All of the changes have been made. Appendix F has been reprinted as Attachment C to this Response to Comments.

ATTACHMENT C -- ALASKA STATE WATER QUALITY STANDARDS
For Selected Parameters, ug/L* (Current on September 28, 1998)

*Metals criteria are based on a Total Recoverable Analysis

Parameter	Fresh Water Acute	Fresh Water Chronic	Drinking Water	Reference (for most restrictive Std.)
Arsenic	360	190	50	1994 AK DW Reg. 18 AAC 80
Barium	---	---	2,000	1994 AK DW Reg. 18 AAC 80
Beryllium	---	---	4	1994 AK DW Reg. 18 AAC 80
Cadmium (hardness dependent)	$e^{(1.128 [\ln (\text{hardness})] - 3.828)}$ @ 100 mg/L CaCO ₃ = 3.9	$e^{(0.7852 [\ln (\text{hardness})] - 3.490)}$ @ 100 mg/L CaCO ₃ = 1.1	5	July 29, 1985 FR
Chloride			200,000	1998 WQ Std. 18 AAC 70
Chromium (Total)	---	---	100	1994 AK DW Reg. 18 AAC 80
Chromium III (hardness dependent)	$e^{(0.8190 [\ln (\text{hardness})] + 3.688)}$ @ 100 mg/L CaCO ₃ = 1,700	$e^{(0.8190 [\ln (\text{hardness})] + 1.561)}$ @ 100 mg/L CaCO ₃ = 210	---	1985 FR
Chromium VI	16	11	100	1985 FR
Copper (hardness dependent)	$e^{(0.9422 [\ln (\text{hardness})] - 1.464)}$ @ 100 mg/L CaCO ₃ = 18	$e^{(0.8545 [\ln (\text{hardness})] - 1.465)}$ @ 100 mg/L CaCO ₃ = 12	1,000	1985 FR
Fluoride	---	---	4,000	1994 AK DW Reg. 18 AAC 80
Iron	1,000	1,000	300 (secondary)	1976 EPA Quality Criteria For Water
Lead (hardness dependent)	$e^{(1.273 [\ln (\text{hardness})] - 1.460)}$ @ 100 mg/L CaCO ₃ = 82	$e^{(1.273 [\ln (\text{hardness})] - 4.705)}$ @ 100 mg/L CaCO ₃ = 3.2	50 (1976 RedBook)	1985 FR

Parameter	Fresh Water Acute	Fresh Water Chronic	Drinking Water	Reference (for most restrictive Std.)
Magnesium and Total Dissolved Solids (TDS)	---	---	(Magnesium is related to TDS) 500,000	1998 WQ Std. 18 AAC 70
Mercury	2.4	0.012	2	1985 FR
Nickel (hardness dependent)	$e^{(0.76[\ln(\text{hardness})] + 4.02)}$ @ 100 mg/L CaCO ₃ = 1,800	$e^{(0.76[\ln(\text{hardness})] + 1.06)}$ @ 100 mg/L CaCO ₃ = 96	100	1980 FR
Nitrate	---	---	10,000 as N	1994 AK DW Reg.18 AAC 80
Nitrite	---	---	1,000 as N	1994 AK DW Reg. 18 AAC 80
Nitrate plus Nitrite	---	---	10,000 as N	1994 AK DW Reg. 18 AAC 80
Selenium	20	5	50	EPA 1980 Ambient WQ Criteria for Selenium
Silver (Acute is hardness dependent)	$e^{(1.72[\ln(\text{hardness})] - 6.52)}$ @ 100 mg/L CaCO ₃ = 0.12 (LOEL)	---	100 (Secondary)	EPA 1980 Ambient WQ Criteria for Silver
Sulfate	---	---	200,000	1998 WQ Std. 18 AAC 70
Thallium	1,400 (LOEL)	40 (LOEL)	2	1994 AK DW Reg. 18 AAC 80
Zinc (Acute is hardness dependent)	$e^{(0.83[\ln(\text{hardness})] + 1.95)}$ @ 100 mg/L CaCO ₃ = 320	47	5,000 (Secondary)	EPA 1980 Ambient WQ Criteria for Zinc

1. Because the Alaska Water Quality Standards are revised and updated regularly, these criteria are valid only on the above date for the purposes of this permit. The local ADEC Water Quality Section office should be contacted for any changes.
2. Bold -- Indicates probable most restrictive state water quality standard on September 28, 1998.
3. Red Book -- 1976 EPA Quality Criteria for Water.
4. LOEL -- Lowest Observed Effect Level.