



Chickaloon Village

Traditional Council

(Nay'dini'aa Na')

April 14, 2014

Gary Harrison,
*Traditional Chief
and Chairman*

Aaron Simpson

Alaska Department of Environmental Conservation

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Penny Westing,
Secretary/Elder

Submitted via electronic mail

Albert Harrison,
Treasurer/Elder

Re: Preliminary decision to approve Usibelli Coal Mine, Inc.'s application for Air Quality Control Minor Permit AQ1227MSS04 for the Wishbone Hill Coal Mining and Processing Operation

Doug Wade,
Elder Member

Shawna Larson,
Member

Dear Mr. Simpson:

Lisa Wade,
Member

These comments, prepared with counsel from Earthjustice, are submitted by the Chickaloon Village Traditional Council (hereinafter CVTC, "the Village," "the Tribe," or "Chickaloon"), the governing body of the federally-recognized Chickaloon Native Village (CNV), with all of the inherent powers of a sovereign Athabascan Nation. CVTC objects to the Alaska Department of Environmental Conservation's (ADEC or "the Department") preliminary decision to approve Usibelli Coal Mine, Inc.'s ("Usibelli") application for Air Quality Control Minor Permit AQ1227MSS04 for the Wishbone Hill Coal Mining and Processing Operation ("the Proposed Operation") as well as the Department's decision-making process.

As discussed in detail below, Draft Minor Permit AQ1227MSS04 ("the Draft Permit") fails to meet Clean Air Act and state regulatory requirements necessary to protect air quality and public health. For this reason, CVTC respectfully requests that the Department withdraw its preliminary approval.

CVTC further objects to ADEC's decision-making process and analysis because the Department failed to cooperate and consult with CVTC on a government-to-government basis, even though the Proposed Operation unlawfully would burden the Tribe's health, welfare, and spiritual and cultural practices, including subsistence practices and ceremonies within and in close proximity to the permit area. Clean air and water are absolutely required for the Tribe's spiritual, physical, and mental well-being and survival. In fact, air and water are so indispensable to CNV's way of life and spiritual practices that there is a family clan named for each one.

Our people historically lived, traveled, hunted, and traded in the Wishbone Hill area and certain locations continue to hold great spiritual significance. For example, the ridge at the head of Moose Creek is called Tsida K'ae Dghilaaye' in Ahtna, where a trail used by the Larson family led up the creek and over the mountains to the upper Kashwitna River.¹ The Wade and Larson families lived, hunted, and gathered berries throughout Tsadaka Canyon (Tsidek'e Dyii) on Moose Creek, southwest of the mining area.² Just southwest of that canyon is C'ek'aali Cene', a well known bluff that was the site of a village.³ There is a trail leading from the Moose Creek homestead of the Shaginoff and Wade families up to Wishbone Lake, which was a popular fishing spot.⁴

Moose Creek (Tsidek'etna') itself is of particular importance to our people—"there are burials on both sides of the mouth" of the creek, which runs along the northwest boundary of the Proposed Operation, and "[s]everal people died here during the 1918 flu epidemic."⁵ An early American explorer, Joseph C. Castner, reported an Ahtna camping place near Moose Creek.⁶ Our Tribal ancestors fished for salmon in the creek,⁷ and we have worked hard to restore Moose Creek from the extraordinary damage incurred by coal mining in the past. For example, in 2003, the U.S. Fish and Wildlife Service and CNV entered into cooperative agreements to restore salmon runs. To date, we and our other partners have spent more than \$1,200,000 and thousands of hours restoring Moose Creek fish habitats and salmon populations, including a national award-winning Moose Creek Fish Passage Restoration Project.

ADEC's failure to meaningfully consult with CVTC regarding the impacts of the Proposed Operation constitutes an ongoing violation of the fundamental human rights of members of the Tribe, including the right to free, prior, and informed consent under the United Nation's Declaration on the Rights of Indigenous Peoples.⁸ ADEC approval for the Draft Permit must therefore be withheld unless or until the Department—working in direct, government-to-government consultation with CVTC—determines that the Proposed Operation will comply with all legal requirements and not otherwise unreasonably interfere with Tribal citizens' enjoyment of life and cultural and spiritual practices.

¹ Shem Pete's Alaska: The Territory of the Upper Cook Inlet Dena'ina at 297 § 14.79 (James Kari & James A. Fall, eds., 2d ed. 2003).

² *Id.* at 297 § 14.78.

³ *Id.* at 296-97 § 14.13.

⁴ *Id.* at 297 § 14.15.

⁵ *Id.* at 297 § 14.14.

⁶ *Id.*

⁷ *Id.*

⁸ These issues are discussed in greater detail in, and CVTC incorporates by reference, our comments on the Proposed Operation previously submitted on September 19, 2011, which are attached as Exhibit 1.

**THE DRAFT PERMIT VIOLATES THE CLEAN AIR ACT AND
APPLICABLE REGULATORY REQUIREMENTS.**

As detailed below, the Draft Permit and the underlying air impact analysis undertaken by Usibelli in support of the company’s application for an air quality control minor permit for the Proposed Operation fail to meet the requirements of the Clean Air Act and applicable federal and state regulatory requirements.

A. The Draft Permit authorizes dangerous and unlawful levels of NO₂ pollution.

1. The Proposed Operation’s NO₂ impacts violate 18 AAC 50.110.

A bedrock requirement of Alaska’s air quality regulations, set forth at 18 AAC 50.110, states: “[n]o person may permit any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.” Since 1972, 18 AAC 50.110 has been part of Alaska’s federally-approved state implementation plan.⁹ The Draft Permit, however, allows emissions of nitrogen oxides (NO_x) from the Proposed Operation that would violate this requirement by causing exceedances of the recently promulgated 1-hour National Ambient Air Quality Standards (NAAQS) for nitrogen dioxide (NO₂). Pursuant to 18 AAC 50.110, ADEC cannot lawfully issue a permit from the Proposed Operation unless Usibelli demonstrates that emissions will not cause any exceedances of the health-based pollution limit established in the 1-hour NO₂ NAAQS.

Under section 109 of the Clean Air Act, the Environmental Protection Agency (EPA) is required to promulgate NAAQS for NO₂ and other pollutants to protect public health and welfare.¹⁰ Section 109 specifies that the NAAQS must be set at the level “requisite to protect the public health,” “allowing an adequate margin of safety.”¹¹ Each NAAQS is promulgated on the basis of years of research and extensive notice and comment.

EPA initially promulgated primary and secondary NAAQS for NO₂ in 1971.¹² On February 9, 2010, EPA announced a new short-term NAAQS for NO₂, establishing a 1-hour standard at a level of 100 parts per billion (ppb).¹³ EPA set the level of this standard based upon scientific evidence demonstrating that the previous annual standard for NO₂ was insufficient to protect human health.¹⁴ Short-term spikes in NO₂ concentrations—like those expected to be caused by the Proposed Operation—are associated with a range of negative human health effects, including

⁹ EPA Region 10, Alaska SIP – Federally Approved Rules (Dec. 10, 2013), Ex. 2 at 2.

¹⁰ 42 U.S.C. § 7409.

¹¹ 42 U.S.C. § 7409(b)(1).

¹² EPA originally set the primary and secondary standards for NO₂ at 0.05 ppm, annual average. 36 Fed. Reg. 8186, 8187 (Apr. 30, 1971).

¹³ See Primary National Ambient Air Quality Standards for Nitrogen Dioxide, 75 Fed. Reg. 6,474 (Feb. 9, 2010); 40 C.F.R § 50.11(b).

¹⁴ 75 Fed. Reg. at 6,479-81.

breathing problems that may necessitate hospital admission and even lead to death.¹⁵ The hourly NO₂ standard of 100 ppb, “reflect[ing] the maximum allowable NO₂ concentration anywhere in an area,”¹⁶ is intended to prevent these dangerous health consequences.

Given the Clean Air Act’s statutory requirements for development and institution of the NAAQS, the specific concentration limit established in the 1-hour NO₂ NAAQS of 100 ppb is dispositive authority that NO₂ concentrations at or above that level would be “injurious to human health or welfare” and “would unreasonably interfere with the enjoyment of life or property.” Since 18 AAC 50.110 prohibits air pollution that would result in such harms, approval of a permit that allows the Proposed Operation to cause or contribute to ambient concentrations of NO₂ above 100 ppb—also expressed as 188 micrograms per cubic meter (µg/m³)—necessarily would violate 18 AAC 50.110.

Under the current terms of the Draft Permit, pollution levels caused by the Proposed Operation are projected to exceed the 1-hour NO₂ “maximum allowable concentration” of 100 ppb / 188 µg/m³. Modeling files submitted by Usibelli and reviewed by air modeling expert Khanh Tran indicate that the highest projected 1-hour NO₂ concentration predicted as a consequence of the Proposed Operation is 210.9 µg/m³ (operation impacts only).¹⁷ Accounting for background concentrations, the maximum predicted concentration is an even higher and more dangerous 249 µg/m³.¹⁸ These levels both exceed the limit of 188 µg/m³, posing a risk of “adverse health effects associated with short-term exposure to NO₂.”¹⁹ Pollution at such levels plainly would be “injurious to human health or welfare” and “would unreasonably interfere with the enjoyment of life or property,” meaning the Draft Permit violates the prohibition against such emissions established in 18 AAC 50.110. Until such time as Usibelli can demonstrate that the Proposed Operations will not cause any exceedances of the 100 ppb / 188 µg/m³ level of the 1-hour NAAQS for NO₂, ADEC must withhold approval.

2. The Draft Permit authorizes emissions that will violate the Alaska Ambient Air Quality Standard for NO₂.

ADEC issued a preliminary approval of Usibelli’s application on the grounds that emissions from the Proposed Operation will not exceed the Alaska Ambient Air Quality Standard (AAAQS) for NO₂,²⁰ which bases compliance on “the three-year average of the annual, 98th

¹⁵ *Id.* at 6,480-81; *see also* EPA, Fact Sheet, Final Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide (undated) (1-hour NO₂ Fact Sheet), Ex. 3 at 1 (stating that the 1-hour standard of 100 ppb was set to “protect against adverse health effects associated with short-term exposure to NO₂, including respiratory effects that can result in admission to a hospital.”).

¹⁶ 75 Fed. Reg. at 6,493.

¹⁷ Khanh Tran, Comments on the Air Quality Impact Analysis of the Minor Permit Application for the Usibelli Wishbone Hill Coal Mining and Processing Project (Mar. 31, 2014) (“Tran Expert Report”), Ex. 4 at 7.

¹⁸ *Id.*

¹⁹ 1-hour NO₂ Fact Sheet, Ex. 3 at 1.

²⁰ ADEC, Preliminary Technical Analysis Report for Air Quality Control Minor Permit AQ1227MSS04 (Mar. 4, 2014) (Draft TAR) at 11; *id.*, Appendix B at 19.

percentile, daily maximum, one-hour nitrogen dioxide concentration.”²¹ Since Usibelli only modeled one year of NO₂ air quality impacts,²² the application fails to demonstrate compliance with the 1-hour NO₂ AAAQS, which addresses a three-year average. Even more fundamentally, this modeling cannot be credited because it departs from ADEC requirements addressing receptor density and, in numerous other respects, underestimates the impacts of the Proposed Operation’s NO_x emissions. According to expert Tran, these modeling errors—if corrected—are likely to indicate that, as presently written, the Draft Permit unlawfully authorizes emissions that violate the 1-hour AAAQS.²³ Per 18 AAC 50.540(c)(2)(A), ADEC may not issue an air permit until Usibelli conclusively demonstrates that the Proposed Operation “will not interfere with the attainment or maintenance of the ambient air quality standards.”

a. *Usibelli has neglected to model its impact on 1-hour NO₂ concentrations using an adequate density of receptors.*

A sufficient density of modeling receptors is essential to identifying the maximum projected air quality impacts from the Proposed Operation. Clearly, a model cannot identify a maximum impact if there is no receptor located in the area of highest impact. Indeed, it is well-established protocol among air agencies that ambient air modeling should include the placement of additional receptors in the vicinity of projected maximum impacts to ensure that the model does not miss the true maximum. ADEC itself acknowledges that “grid spacing of 25 meters is commonly used when modeling impacts [are] within one to two hundred meters of a stationary source”²⁴ Although “a larger spacing may be acceptable when modeling . . . emission units located well within the ambient boundary,”²⁵ it is inappropriate here, where “the impacts will typically occur on the western side . . . in an area with relatively short [emissions unit] to ambient boundary distances.”²⁶

Unfortunately, in its preliminary decision, ADEC has ignored established modeling practice and proposed to accept a receptor density incapable of reliably capturing the maximum projected air quality impacts of the Proposed Operation—particularly with respect to NO₂. As discussed in the Draft TAR, Usibelli only “used a 50 meter (m) spacing around the ambient air boundary and along the public trails and creek that transect the ambient boundary.”²⁷ ADEC has proposed to accept this non-standard, coarser modeling approach on the basis of an earlier sensitivity analysis conducted for the Proposed Operation which, according to the Department, found that 25-meter

²¹ 18 AAC 50.010(5)(B).

²² Draft TAR, Appendix B at Table 5, n.1.

²³ Tran Expert Report, Ex. 4 at 7 (“The modeled [1-hour NO₂] impact has been underestimated [in several respects]. Thus, a new modeling analysis that includes these corrections should be performed and modeling results likely will show an exceedance of the 1-hour standard.”).

²⁴ ADEC Modeling Review Procedures Manual, June 30, 2013, at 98.

²⁵ *Id.*

²⁶ Draft TAR, Appendix B at 7. *See also id.*, Appendix B at 19 (“The 1-hour NO₂ (98th percentile) and annual impacts occur along the western perimeter of the mine. This prediction location is in close proximity to the assumed location of the blast.”).

²⁷ Draft TAR, Appendix B at 16.

grid spacing did not change the location or concentration of the maximum impact for 24-hour concentrations of coarse particulate matter (PM₁₀).²⁸

ADEC's prior sensitivity analysis with respect to PM₁₀ is no basis for excusing Usibelli's failure to use a 25-meter spaced grid to assess maximum 1-hour NO₂ concentrations. PM₁₀ and NO₂ are different pollutants, originating from very different emissions sources at the Proposed Operation, and—owing to the differences in averaging times—24-hour concentrations of PM₁₀ are unlikely to exhibit the same variability as 1-hour NO₂ concentrations.

The failure to model maximum 1-hour NO₂ impacts at a finer scale is particularly troublesome because the maximum predicted 98th percentile impact (181 µg/m³) very nearly exceeds the AAAQS limit (188 µg/m³) and that maximum projected impact will “occur along the western perimeter of the mine.”²⁹ “The western portion of the project site includes an existing public trail . . . which is popular with recreational enthusiasts,”³⁰ and that is “an area with relatively short [emissions unit] to ambient boundary distances.”³¹ In other words, ADEC has accepted coarse modeling for an area that will see frequent use by Tribal and other community members, in close proximity to the sources of NO_x pollution at the Proposed Operation.

By failing to model with sufficient receptor points around the location of maximum projected impact, Usibelli has failed to account for the true magnitude of the impacts of its NO₂ emissions upon air quality. With such maximum impacts not only unaccounted for, but also likely in violation of the NO₂ AAAQS, Usibelli has failed to demonstrate that its Proposed Operations “will not interfere with the attainment or maintenance of the ambient air quality standards,” as required by 18 AAC 50.540(c)(2)(A). To correct this obvious error, ADEC must direct Usibelli to rerun its modeling for 1-hour NO₂ impacts with additional receptors.

b. Usibelli's modeling used NO₂/NO_x ratios that underestimate NO₂ impacts.

Predictions of ambient 1-hour concentrations of NO₂ require data (or assumptions) about the initial, in-stack ratio of NO₂ to NO_x in the emissions generated by a pollution source. EPA has identified in-stack ratios of NO₂/NO_x as one of “two key model inputs” for projecting ambient NO₂ concentrations.³²

As ADEC has acknowledged, “[s]ource-specific [in-stack ratio] data should be used when available.”³³ “[I]n the absence of such source-specific in-stack data,” EPA modeling guidelines state that “it would be appropriate . . . to adopt a default in-stack ratio of 0.5 as being adequately

²⁸ *Id.*

²⁹ Draft TAR, Appendix B at 19.

³⁰ *Id.* at 15.

³¹ *Id.* at 7.

³² Memorandum from Tyler Fox to Regional Air Division Directors, Re Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-Hour NO₂ National Ambient Air Quality Standard (Mar. 11, 2011) (“Fox Memo”), Ex. 5 at 6.

³³ Draft TAR, Appendix B at 13.

conservative.”³⁴ According to EPA, an in-stack ratio of 0.5 is “a better alternative to use of the Tier 1 full conversion or Tier 2 ambient ratio options[.]”³⁵ i.e., the higher and more conservative ratios of 1 (full conversion) or 0.75-0.90 (Tier 2).³⁶

Usibelli has not conducted any testing to develop source-specific in-stack ratios for the Proposed Operation. However, rather than use the EPA-recommended default ratio of 0.5, Usibelli used in-stack ratios of 0.1 (point sources) and 0.036 (blasting).³⁷ ADEC has proposed to accept these exceptionally low ratios on the grounds that an in-stack ratio of 0.1 is common for combustion units and Usibelli has provided field studies from other locations that address blasting.³⁸ This preliminary decision departs from EPA’s modeling guidance which indicates that, in the absence of source-specific data, 0.5 is the lowest in-stack ratio that may be used—a ratio that may be regarded as “adequately conservative in most cases” where source-specific data is missing, but not all.³⁹

Lacking source-specific data for its Proposed Operation, Usibelli must conduct its modeling using the higher default ratio of 0.5. Due to the importance of in-stack NO₂/NO_x ratios to the assessment of 1-hour NO₂ impacts, without a rerun of the modeling, ADEC cannot say that Usibelli has demonstrated compliance with the 1-hour NO₂ AAAQS, as required by 18 AAC 50.540(c)(2)(A).

c. Usibelli’s modeling omitted mobile source emissions.

An estimate of the maximum predicted impact from the Proposed Operation must account for NO_x emissions from all of the emissions units at the source as well as background concentrations of the pollutant. Among the emissions sources at the Proposed Operation are a number of mobile sources, including equipment used for grading, hauling overburden, coal hauling, and other traffic within the mine, at the loop road, and along the access road (emission units 29-36).⁴⁰ Usibelli neglected to calculate the potential NO_x emissions from these mobile sources or include their potential emissions in its impact analysis.⁴¹ Usibelli inventoried and modeled PM₁₀ emissions from these mobile sources⁴² and must do likewise for NO_x.

d. Usibelli’s use of the Ozone Limiting Method likely underestimates 1-hour NO₂ impacts.

EPA has identified two potential modeling techniques that may be used to estimate 1-hour NO₂ impacts: the Ozone Limiting Method (OLM) and the Plume Volume Molar Ratio Method

³⁴ Fox Memo, Ex. 5 at 7.

³⁵ *Id.*

³⁶ *See id.* at 6-7.

³⁷ Draft TAR, Appendix B at 13.

³⁸ *Id.*

³⁹ Fox Memo, Ex. 5 at 5-7.

⁴⁰ *See* Draft TAR, Appendix A.

⁴¹ Tran Expert Report, Ex. 4 at 6.

⁴² *Id.*; *see also* Draft TAR at Appendix A (listing PM₁₀ emissions for emission units 29-36).

(PVMRM).⁴³ Usibelli elected to use OLM and the Department “specifically invite[d] the public to comment” on this choice, owing to the fact that the model has been fully approved for estimating annual NO₂ impacts but not 1-hour impacts.⁴⁴

To ensure that maximum 1-hour NO₂ impacts are identified, Usibelli should have used PVMRM instead of—or in addition to—OLM. ADEC previously sponsored a sensitivity study of both OLM and PVMRM techniques using emission sources and meteorological inputs that are appropriate for Alaska.⁴⁵ The study concluded that, “[o]verall the PVMRM option appears to provide a more realistic treatment of the conversion of NO_x to NO₂ as a function of distance downwind from the source than OLM.”⁴⁶ Of particular significance for the Proposed Operation, the study revealed that, for sources with multiple emission units, OLM predicted much lower maximum 1-hour NO₂ impacts.⁴⁷ Because the Proposed Operation consists of three dozen different emission units, the NO₂ impacts predicted by OLM may be underestimated. As a consequence, expert Tran has recommended that the 1-hour NO₂ impacts also be analyzed with the PVMRM option.⁴⁸

e. Usibelli’s modeling addressing compliance with the AAAQS for NO₂ is insufficient to demonstrate compliance with 18 AAC 50.110.

Even if ADEC were to fully credit Usibelli’s NO₂ impact modeling as currently submitted, a demonstration of compliance with the so-called 98th percentile “form” of the AAAQS is inadequate to demonstrate compliance with 18 AAC 50.110’s prohibition against emissions “injurious to human health or welfare.” Borrowed from the 1-hour NO₂ NAAQS, the 98th percentile calculation is merely an “air quality statistic” used to arrive at long-term, area-wide attainment classifications.⁴⁹ The form was selected primarily for reasons of administrative expedience,⁵⁰ and because the form is calculated using the three-year average of the 8th highest daily maximum 1-hour NO₂ concentration for each year, the form itself places no limit on allowable NO₂ concentrations for a particular 1-hour period of exposure. Indeed, pursuant to the form (and the AAAQS), the seven highest daily 1-hour maximum concentrations for each year are disregarded, no matter how high or dangerous the values.⁵¹ Accordingly, a demonstration of compliance with the 1-hour NO₂ AAAQS is not sufficient to demonstrate compliance with 18

⁴³ Fox Memo, Ex. 5 at 5.

⁴⁴ ADEC, Revised Public Notice, Wishbone Hill Coal Mining and Processing Operation (Apr. 14, 2014).

⁴⁵ See generally MACTECH, Sensitivity Analysis of PVMRM and OLM in AERMOD, Alaska DEC Contract No. 18-8018-04 (Sept. 2004), Ex. 6.

⁴⁶ *Id.* at 55 (emphasis added).

⁴⁷ *Id.* at 16, Table 3.3.

⁴⁸ Tran Expert Report, Ex. 4 at 6.

⁴⁹ 1-hour NO₂ Fact Sheet, Ex. 3 at 1; see also 40 C.F.R. § 50.11(f).

⁵⁰ See 75 Fed. Reg. at 6,492-93 (noting form was selected because it is “reasonably stable and insulated from the impacts of extreme meteorological events” allowing EPA to avoid “areas shifting in and out of attainment”); *id.* at 6,493 (stating “there is not a clear health basis for selecting one specific form over another.”).

⁵¹ 75 Fed. Reg. at 6,491 n.11, 6,492-93.

AAC 50.110 where, as here, pollution levels are still projected to reach levels that are known to be injurious to human health.⁵²

B. The Draft Permit and underlying air impact analysis fails to fully address PM₁₀.

As with Usibelli's modeling of air quality impacts from NO_x emissions at the Proposed Operation, the assessment of PM₁₀ emissions is flawed. The Draft Permit fails to fully account for all of the emissions attributable to the coal preparation plant in the calculation of the source's potential to emit, and the air impact analysis is inadequate.

1. ADEC unlawfully excluded haul road emissions from its calculation of the coal preparation and processing plant's potential to emit.

A source's "potential to emit" air pollution determines whether it is classified as "major" or "minor" and that classification, in turn, bears heavily on the type of permit that the source is required to obtain and the type of pollution controls that the source is obligated to install. Under the Clean Air Act and EPA's implementing regulations and guidance, only certain "listed" categories of stationary sources must include fugitive emissions in the calculation of their potential to emit.

Pursuant to 40 C.F.R. § 51.165, a federal rule adopted by Alaska under 18 AAC 50.502(i), "[a]ny other stationary source category which, as of August 7, 1980, is being regulated under section 111 or 112 of the [Clean Air] Act" is included among the list of major stationary sources that must include fugitive emissions in determining the source's potential to emit. As ADEC acknowledged in the Draft TAR, coal preparation and processing plants have been regulated under Section 111 of the Act since 1976, meaning that fugitive emissions associated with Usibelli's proposed coal preparation plant must be included in the calculation of the Proposed Operation's potential to emit.⁵³

For this reason, ADEC included certain fugitive emissions associated with the coal preparation plant, namely, those from coal dumping at the crusher and activities at the adjacent run-of-the-mine pile (emission units 9, 10, and 11).⁵⁴ However, ADEC declined to count fugitive emissions from haul roads at the co-located preparation plant and mine, on the grounds that hauling is not among the "primary activities" of a coal preparation plant.⁵⁵

ADEC incorrectly and unlawfully excluded haul road fugitive emissions from its calculation of the coal preparation plant's potential to emit. The Department has misapplied the "the primary activity test" which merely "provides that the primary purpose of a source determines the source

⁵² See discussion *supra* at I.A.1.

⁵³ Draft TAR at 6-7.

⁵⁴ Draft TAR, Appendix A; Draft TAR at 8.

⁵⁵ *Id.* at 8 & n.4.

category to which it belongs.”⁵⁶ Once a source has been categorized, if the source belongs to a “listed” category for fugitive emissions, all of the source’s emissions are counted toward the source’s potential to emit regardless of how directly the emissions relate to the source’s primary purpose.⁵⁷ As EPA explained in a 2007 guidance letter specifically addressing how to assess fugitive emissions for a source like the Proposed Operation (i.e., one “that has both a coal mine and a coal preparation plant”): “Fugitive emissions of particulate matter from coal preparation plants . . . , including emissions from haul roads, are to be considered for purposes of PSD applicability.”⁵⁸

Notably, EPA’s 2007 guidance letter construes and applies an earlier 2003 guidance letter from EPA to the Indiana Department of Environmental Management that ADEC cites and relies upon in the Draft TAR.⁵⁹ ADEC has misapplied the 2003 guidance in excluding fugitive emissions from haul roads, however, as EPA’s 2007 guidance letter specifies that “[s]ince the [2003] letter doesn’t exclude any specific type of fugitive emissions from the PTE calculations, we interpret this guidance to mean that all fugitive emissions including those from the relevant haul roads must be included.”⁶⁰

Inclusion of fugitive PM₁₀ emissions from the haul roads is consequential for ADEC’s determination of the coal preparation plant’s potential to emit, as haul road emissions at the Proposed Operation (emission units 35 and 36) are expected to generate more than 25 tons of fugitive PM₁₀ emissions per year.⁶¹ The Department must revise its potential to emit calculation to reflect these additional emissions. If the coal preparation plant’s potential to emit PM₁₀ exceeds 100 tons per year (tpy), Usibelli must apply for a Title V operating permit.⁶²

2. Usibelli’s modeling underestimates the impacts of the Proposed Operation’s PM₁₀ emissions.

The modeling analysis Usibelli submitted to demonstrate compliance with 24-hour PM₁₀ AAAQS underestimates air quality impacts in several significant respects. Usibelli must address each of these inadequacies and rerun its ambient air quality modeling prior to DEC making any final determination that, consistent with 18 AAC 50.540(c)(2)(A), the Proposed Operation “will not interfere with the attainment or maintenance of the ambient air quality standards.”

⁵⁶ Memorandum from Lydia Wegman, EPA, to Regional Air Directors, Re EPA Reconsideration of Application of Collocation Rules to Unlisted Sources of Fugitive Emissions for Purposes of Title V Permitting (June 2, 1995), Ex. 7 at 3.

⁵⁷ *Id.* at 3-4

⁵⁸ Letter from Pamela Blakely, EPA, to Edwin Bakowski, P.E. (Aug. 8, 2007) (“Blakely Letter”), Ex. 8 at 1 (emphasis added).

⁵⁹ *See id.* at 1 (citing Letter from Cheryl L. Newton, EPA, to Janet McCabe, Indiana Department of Environmental Management (Mar. 6, 2003) (“Newton Memo”), Ex. 9); *see also* Draft TAR at 7, 8 n.5.

⁶⁰ Blakely Letter, Ex. 8 at 1 (emphasis added).

⁶¹ Draft TAR, Appendix A.

⁶² 42 U.S.C. §§ 7602(j), 7661(2)(B), 7661a(a).

a. *PM₁₀ impacts are underestimated by using particle deposition.*

In its modeling of 24-hour PM₁₀ impacts, Usibelli used “the optional particle deposition algorithm.”⁶³ According to expert Tran, because project emissions are already calculated as PM₁₀, “it is customary to model PM₁₀ emissions without particle deposition.”⁶⁴ Using the particle deposition algorithm as Usibelli has “only underestimates project impacts.”⁶⁵ To more accurately reflect impacts from the Proposed Operation, Usibelli must rerun its modeling without the particle deposition function.

b. *PM₁₀ impacts are underestimated by the large number of calm hours in the onsite meteorological data.*

According to expert Tran’s review of the site-specific meteorological data used by Usibelli in its modeling, data for 664 hours was missing from the one-year data set.⁶⁶ Further, the data set included 2,401 hours of calm conditions (27.4% of the total 8,760 hours).⁶⁷ Such missing or calm hours undermine the utility of the AERMOD model, as it does not calculate PM₁₀ concentrations for calm or missing hours.⁶⁸ According to Mr. Tran, the failure of the model to calculate PM₁₀ concentrations for calm hours is particularly troublesome as maximum impacts are expected to occur near the Proposed Operation under calm conditions with low wind—meaning air quality impacts “have been severely underpredicted.”⁶⁹ To remedy this deficiency, Usibelli must rerun the model after filling in the missing hours and calm hours with linearly interpolated data or reset wind speed to a minimum of 1 m/s.⁷⁰

c. *Usibelli and ADEC have failed to account for PM₁₀ pollution from burning coal seams with the Wishbone Hill permit area.*

As CVTC has reported to ADEC previously, there are burning coal seams within the Wishbone Hill permit area—comparable to the fires that have been identified at the Jonesville Mine. Smoke and other particle pollution from these burning fires (presumably including PM₁₀ as well as other harmful pollutants) often hang over Moose Creek and can be spotted from miles away. Usibelli’s modeling analysis and the Draft Permit fail to take into account PM₁₀ and other air pollution from these burning seams of coal. Usibelli must update its permit application to address this uncontrolled source of PM₁₀. Further, ADEC should address these fires in the Draft Permit with a condition that requires Usibelli to extinguish these fires as a precondition to any mining activities.

⁶³ Draft TAR, Appendix B at 4, 10-11.

⁶⁴ Tran Expert Report, Ex. 4 at 4.

⁶⁵ *Id.*

⁶⁶ *Id.* at 5.

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶⁹ *Id.*

⁷⁰ *Id.*

C. The Draft Permit unlawfully fails to address hazardous air pollutants.

The Draft Permit is premised upon an arbitrary and unlawful determination that the Proposed Project does not need to assess its emissions of hazardous air pollutants (HAPs). ADEC must determine the Proposed Operation's potential to emit HAPs in compliance with statutory requirements and then institute appropriate emission limits and monitoring provisions.

HAPs are regulated under section 112 of the Clean Air Act.⁷¹ The purpose of the Act's HAP program is to force the stringent control of these highly toxic and harmful air pollutants because they could "cause, or contribute to, an increase in mortality or an increase in serious irreversible[] or incapacitating reversible[] illness."⁷² A "major source" of HAPs is subject to maximum achievable control technology standards that "require the maximum degree of reduction in emissions" that the EPA determines to be achievable by each particular source category.⁷³ Pursuant to section 112(a)(1), a "major source" is one that "emits or has the potential to emit . . . 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants."⁷⁴ Due to the importance of controlling HAPs, it is crucial that sources accurately identify and control potential HAP emissions.

In its Draft Technical Analysis Report ("Draft TAR"), ADEC mistakenly asserts: "The Applicant is not proposing to burn coal at the stationary source. Therefore, there was no need to evaluate Hazardous Air Pollutant emissions."⁷⁵ The Department offers no support for this conclusion, which is incorrect as a matter of law.

The Clean Air Act requires a source to assess its potential to emit HAP from all emissions units within the source. As the U.S. Court of Appeals for the D.C. Circuit explained in *National Mining Association v. EPA*: "all emissions are to be counted in determining whether a source is major, subject only to the qualification that they emanate from a contiguous site under common control."⁷⁶ This requirement to count all HAP emissions applies to all sources—irrespective of the source's industrial classification and, significantly, a source must include even those HAPs emitted as fugitives. EPA spelled out the requirement to account for all HAPs in a 2003 guidance letter that declared: "An owner or operator of a source must include the fugitive emissions of all hazardous air pollutants ('HAPs') listed under section 112(b) of the Act in

⁷¹ 42 U.S.C. § 7412.

⁷² *New Jersey v. EPA*, 517 F.3d 574, 578 (D.C. Cir. 2008) (quoting legislative history of section 112).

⁷³ 42 U.S.C. § 7412(d)(2).

⁷⁴ *Id.* § 7412(a)(1).

⁷⁵ Draft TAR at 10.

⁷⁶ 59 F.3d 1351, 1361 (D.C. Cir. 1995) (emphasis in original); *see also id.* at 1355 ("EPA made clear that in determining whether a source is major, emissions from all sources of hazardous air pollutants within a plant site must be aggregated, so long as the sources are geographically adjacent and under common control.") (citing 59 Fed. Reg. 12,408, 12,412 (Mar. 16, 1994)).

determining whether the source is a major source for purposes of section 112 and Title V, regardless of whether the source falls within a listed source category.”⁷⁷

At least ten different HAPs listed pursuant to section 112(b) of the Clean Air Act have been identified as chemicals of potential concern associated with surface coal mining activities at operations like those proposed by Usibelli for Wishbone Hill: antimony compounds, arsenic compounds, beryllium compounds, cobalt compounds, chromium compounds, lead compounds, manganese compounds, mercury compounds, nickel compounds, and selenium compounds.⁷⁸ These toxic substances frequently are emitted as a fraction of the dust and other coarse particulate matter (PM₁₀) that is common with coal mining activities.⁷⁹ The Proposed Operation is projected to emit more than 250 tpy of PM₁₀,⁸⁰ raising the prospect of significant HAP emissions.

Even though these HAP emissions will be generated as fugitives, ADEC has a clear legal obligation to quantify these emissions and to institute appropriate control measures and monitoring requirements. Until these toxic emissions are accounted for, the Draft Permit may not be finalized and the Proposed Operation may not proceed.

D. The air impact analysis prepared for the Draft Permit is premised on an unlawful delineation of the ambient air boundary.

The Clean Air Act regulates the concentration of air pollution in the “ambient air.”⁸¹ Because areas not included within the definition of “ambient air” are not protected by provisions of the Act, ADEC’s delineation of where the ambient air begins in relation to emission units at the Proposed Operation is of great importance. If the ambient air boundary is determined to begin at a point far away from the Proposed Operation, or delineated beyond an area where Tribal members or other community members are likely to be, then Usibelli will be authorized to emit more pollution with fewer controls than would be lawful otherwise.

In conjunction with Usibelli’s proposed delineation of the ambient air boundary, the company has proposed a Public Access Control Plan that cannot be accepted because it fails to protect Tribal access to and use of the permit area for critical cultural and spiritual activities. Because neither Usibelli nor ADEC has consulted with CVTC, there has been no consideration of

⁷⁷ Newton Letter, Ex. 9 at Analysis 1 (citing *Nat’l Mining Ass’n*); see also *id.* at Analysis 4 (“You include fugitive HAP emissions from all emissions units at a source to determine if the source is a major source without regard to whether the source falls within a listed source category.”).

⁷⁸ Compare 42 U.S.C. § 7412(b) with State of Alaska Health Impact Assessment Program, Draft Health Impact Assessment for Proposed Coal Mine at Wishbone Hill, Matanuska-Susitna Borough Alaska (Mar. 5, 2012), Ex. 10 at 4, 90-91 and with Viney P. Aneja, “Characterization of Particulate Matter (PM₁₀) in Roda, Virginia” (undated) (“Aneja Report”), Ex. 11 at 17, Table 2.

⁷⁹ Aneja Report, Ex. 11 at 12-13.

⁸⁰ Draft TAR, Appendix A at 2.

⁸¹ See 42 U.S.C. § 7409.

protected Tribal uses of the area or the consequences for the ambient air boundary. DEC must withdraw the Draft Permit until and unless Tribal spiritual and cultural practices are taken into account and protected from air pollution that exceeds the NAAQS or AAAQS. To effectuate this access and protection, the ambient boundary necessarily must be drawn much more narrowly, with an attendant reduction in emissions from the Proposed Operation.

Even if ADEC could ignore Tribal access, which it cannot, the boundaries and proposed actions to establish the ambient air boundary in the Draft Permit are inconsistent with clear EPA guidance and ADEC's own Modeling Review Procedures Manual and are insufficient to protect the general public from harmful air emissions. As used in the Clean Air Act, "ambient air" refers simply to "outdoor air used by the general public."⁸² EPA defines "ambient air" as "that portion of the atmosphere, external to buildings, to which the general public has access."⁸³ EPA's interpretation of this regulation is set forth in a letter from former EPA Administrator Douglas M. Costle to then Senator Jennings Randolph, Chairman of the Environment and Public Works Committee.⁸⁴ This interpretation affords an "exemption from ambient air . . . only for the atmosphere over land owned or controlled by the source and to which public access is precluded by a fence or other physical barriers."⁸⁵

The preclusion of public access is critical; in order to exclude an area from Clean Air Act requirements as Usibelli has proposed to do with most of the expansive Wishbone Hill mine site, "a source must actually take the necessary steps to preclude the general public from accessing the property by relying on some type of physical barrier."⁸⁶ EPA has clearly instructed that "areas of private property to which the owner or lessee has not restricted access by physical means such as a fence, wall, or other barrier can be trespassed upon by members of the community at large. Such persons, whether they are knowing or innocent trespassers, will be exposed to and breathe the air above the property."⁸⁷

ADEC's Modeling Review Procedures Manual echoes EPA's guidance by requiring "a fence or some other barrier."⁸⁸ DEC allows, "[i]n limited circumstances and on a case-by-case basis,

⁸² *Train v. Natural Res. Defense Council*, 421 U.S. 60, 65 (1975).

⁸³ 40 C.F.R. § 50.1(e).

⁸⁴ Letter from Douglas M. Costle, EPA, to Hon. Jennings Randolph (Dec. 19, 1980) ("Costle Letter"), Ex. 12.

⁸⁵ *Id.*

⁸⁶ Memorandum from Stephen D. Page, EPA, to Regional Air Division Directors, Re Interpretation of "Ambient Air" In Situations Involving Leased Land (June 22, 2007) ("Page Memo"), Ex. 13 at Attachment at 3.

⁸⁷ *In the matter of Hibbing Taconite Co.*, PSD Appeal No. 87-3, 2 E.A.D. 838, 1989 WL 266359, at *6 (July 19, 1989) (emphasis omitted) (quoting Memorandum from Michael A. James, EPA, to Jack R. Farmer, EPA, Re Ambient Air Quality Monitoring by EPA (Sept. 28, 1972), included as an attachment in Memorandum from Walter C. Barber, EPA, to Gordon M. Rapier, Re Applicability of PSD Increments over Company Property (May 23, 1977) ("Barber Memo"), Ex. 14).

⁸⁸ ADEC Modeling Review Procedures Manual (June 30, 2013), at 32.

geographical barriers such as a cliff or river” to be used as an ambient air boundary, and in “rare cases” if a “physical barrier is impractical or creates a safety concern . . . ADEC has allowed applicants to establish an access control plan for their ambient air boundary.”⁸⁹ But “if there is [even] a very remote possibility that the public would attempt to use this property,” EPA has required the boundary to be “fenced and marked.”⁹⁰

ADEC’s proposal to define the ambient air boundary by devil’s club, dense trees,⁹¹ and elevation changes of about 130 feet over the first phase of the mine⁹² does not comport with previous applications of the ambient air interpretation or ADEC’s own manual. Vegetation does not provide a suitable barrier to public access and the elevation changes are not sufficient to preclude public access. The Public Access Control Plan is not appropriate in this situation and, even if it were, it fails to ensure that public access is effectively precluded. Existing trails may continue to provide access to the area excluded from ambient air.

1. Vegetation is not a suitable barrier to public access.

ADEC’s assertion that “different vegetative species” such as “dense treed areas” and “dense lower shrubbery growths of spiny Devils Club”⁹³ will act as an effect barrier to public access is unprecedented. In most of the applications of the access preclusion requirement—including for large surface coal mines—EPA has required the source to erect a fence or wall surrounding the exempted area to make sure the public will not be able to access it.⁹⁴ If a fence is inappropriate for a certain location, EPA has determined that other physical barriers, such as a river, cliff, or mountainous area, may sufficiently prevent access if the source also posts signs and regularly patrols the area.⁹⁵

⁸⁹ *Id.* (emphases added).

⁹⁰ Memorandum from G.T. Helms, EPA, to Steve Rothblatt, EPA, Re Ambient Air (Apr. 30, 1987) (“Helms Memo”), Ex. 15 at 1 (emphasis added).

⁹¹ Wishbone Attachment H, Public Access Control Plan, Feb. 2014, at 2 (Public Access Control Plan) (“Vegetative barriers in the form of dense treed areas as well as dense lower shrubbery growths of spiny Devils Club (*Oplopama horridus*) occur in many parts of the Wishbone Hill area. This spiny vegetation is sufficiently dense to act as a natural barrier in the same manner as terrain.”).

⁹² Usibelli Permit Application, Dispersion Modeling (June 2013), at 18 Fig. 1.

⁹³ Public Access Control Plan at 2.

⁹⁴ See Page Memo, Ex. 13 at Attachment at 3; Helms Memo, Ex. 15 at 1; 57 Fed. Reg. 38,641, 38,645 (Aug. 26, 1992) (requiring Wyoming to include in each air permit for surface coal mines in the Powder River Basin a condition “to restrict public access [including] fencing the entire permit boundary”).

⁹⁵ Helms Memo, Ex. 15 at 1; 50 Fed. Reg. 7,056, 7,057 (Feb. 20, 1985); *In the matter of Hibbing Taconite Co.*, 2 E.A.D. 838, at *6 n.26 (“extremely rugged and mountainous” terrain “helped to create an effective barrier”).

A search of several sources—including a database of EPA guidance,⁹⁶ Westlaw compilations of EPA Administrative Law Judge decisions, Environmental Appeals Board decisions, General Counsel memoranda, EPA Regional decisions, and *Federal Register* notices—reveals not a single instance of vegetation being used as an ambient air boundary. The most analogous situation is one in which the Nebraska Department of Environmental Quality sought guidance as to whether “a three-strand barb-wire fence and ‘no trespassing’ signs” could serve as an ambient air boundary.⁹⁷ EPA responded that these measures “may not be adequate to keep the general public off the land” as “[t]hree-strand barb-wire fences are easy to cross and signs could be ignored.”⁹⁸ Relying on the spines of devil’s club is similar to relying on barbed wire to keep the public out: despite some minor discomfort on bare skin, not all members of the public may be deterred from entering the mining area.

Additionally, as a practical matter the Draft Permit does not indicate where, exactly, this vegetation provides a sufficient barrier, other than to assert that it is present “in many parts of the Wishbone Hill area,” nor does it state how wide the vegetative barrier is to demonstrate how difficult it may be to penetrate.⁹⁹ Trees and shrubs, even if dense, are permeable barriers under the right conditions, such as during colder seasons when vegetation dies back or is covered in snow, or for people with adequate clothing to protect against the “spiny vegetation.” Because devil’s club is a deciduous plant, the lack of leaves in winter will leave the proposed ambient air boundary exposed and even easier to cross. For these reasons, vegetation does not satisfy the requirement that public access to the area be precluded.

2. The elevation changes at Wishbone Hill are not likely to deter public access.

The Public Access Control Plan also relies on “significant terrain and topographic relief changes” such as “significant bluffs” and a “series of ridge lines” to block public access.¹⁰⁰ As noted above, cliffs and mountainous areas have formed a part of a plan to exclude the public in other circumstances.¹⁰¹ But some measure of scrutiny must be paid to the effectiveness of natural barriers. EPA has stated that “occasional rolling hills” are not analogous to rugged, mountainous terrain, and has questioned whether a berm “is an effective physical barrier.”¹⁰²

⁹⁶ EPA, Region 7 Air Program Databases of NSR Policy & Guidance, Title V Policy & Guidance, and Title V Petitions, <http://www.epa.gov/Region7/air/search.htm> (last searched Mar. 28, 2014).

⁹⁷ Letter from Donald C. Toensing, EPA, to W. Clark Smith, Nebraska Department of Environmental Quality (Aug. 1, 2000), Ex. 16 at 1-2.

⁹⁸ *Id.* at 2.

⁹⁹ See Public Access Control Plan at 2.

¹⁰⁰ Public Access Control Plan at 2.

¹⁰¹ *Supra* note 95.

¹⁰² *In the matter of Hibbing Taconite Co.*, 2 E.A.D. 838, at *6 nn.26 & 28.

The elevation changes at Wishbone Hill¹⁰³ are unlikely to preclude members of the public from accessing the property. Not including the access road, the first phase of the mine ranges in elevation from just under 260 to 300 meters, a difference of 40 meters (approximately 130 feet).¹⁰⁴ The second phase includes elevations of 340 meters to about 420 meters in the far northeast corner, representing a difference in elevation of 80 to 160 meters from the lowest point in the mine area (approximately 260-525 feet).¹⁰⁵ In comparison, the elevation at the Kennecott smelter in Magna, Utah, which depended on the rugged, mountainous terrain in the vicinity to aid in preventing public access, ranges from 4200 to 4600 feet in immediate vicinity, and to over 6400 feet in surrounding property owned by Kennecott.¹⁰⁶ This represents a range of 400 to over 2000 feet. The elevation changes at Kennecott surround the smelter, such that someone attempting to access the property would either have to go over a mountain or arrive from a public road, which cannot be exempted from ambient air.¹⁰⁷ In contrast, Wishbone Hill slopes upward towards the north in a manner fairly uniform with the surrounding area, meaning that someone approaching from the east or in the southwest corner would experience little or no change in elevation.¹⁰⁸ The topography at Wishbone Hill is inadequate to assure that public access is precluded from the area proposed to be exempt from ambient air.

Furthermore, the more dramatic elevation changes at the Kennecott smelter were only one part of a plan to protect the public from entering the area exempt from ambient air. Kennecott also owns all of the land surrounding its smelter.¹⁰⁹ The company installed “fences, posts, and no-trespassing signs,”¹¹⁰ and “[r]outine patrols are made by Company security forces with diligent efforts to evict any trespassers found on Kennecott property.”¹¹¹ Of these additional measures, Usibelli plans only to post signs and lacks a dedicated security force or control over the adjacent property.

¹⁰³ Usibelli Permit Application, Dispersion Modeling, at 18 Fig. 1.

¹⁰⁴ *Id.*

¹⁰⁵ *Id.*

¹⁰⁶ U.S. Geological Survey, The National Map US Topo for Farnsworth Peak Quadrangle (“USGS Map”), Ex. 17 (excerpt); Kennecott smelter map (“Smelter map”), Ex. 18, printed from Salt Lake County Recorder Interactive Map, *available at* <http://assessor.slco.org/Javaapi2/ParcelViewExt.cfm> (location of smelter facility outlined in yellow).

¹⁰⁷ USGS Map, Ex. 17.

¹⁰⁸ *See* Usibelli Permit Application, Dispersion Modeling, at 18 Fig. 1.

¹⁰⁹ *See* Kennecott smelter map, Ex. 18 (Kennecott owns all of sections 13-20, 13-21, 13-22, 13-29, 13-28, 13-27, 13-15, 13-16, and additional adjacent property not shown on the map).

¹¹⁰ 50 Fed. Reg. at 7,057.

¹¹¹ 49 Fed. Reg. 10,946, 10,947 (Mar. 23, 1984). *See also* Helms Memo, Ex. 15 at 1 (“riverbank must be clearly posted and regularly patrolled by plant security”).

3. DEC has not demonstrated that a Public Access Control Plan is necessary at Wishbone Hill and the Plan is inadequate.

ADEC's Modeling Review Procedures Manual states that if "the use of a fence or similar physical barrier is impractical or creates a safety concern (e.g., in some area, fences can become hazards during whiteout conditions) . . . ADEC has allowed applicants to establish an access control plan for their ambient air boundary."¹¹² There is no finding in the Draft TAR or related materials, however, that a fence is impractical or creates safety concerns at the Proposed Operation. Thus, ADEC may not rely on the Public Access Control Plan to preclude public access in the absence of effective physical barriers.

In addition to the lack of an effective barrier, Usibelli's Public Access Control Plan fails to provide dedicated security. Instead, "[a]ll personnel will be asked to observe the location perimeter as they conduct their regular duties," and "will periodically observe the perimeter of the facilities area."¹¹³ This approach does not meet the standard set by previous applications of EPA's ambient air interpretation, where security personnel actively and regularly patrol ambient air boundaries that lack an effective physical barrier.¹¹⁴ In contrast to the security personnel at the Kennecott smelter, who make "diligent efforts to evict any trespassers,"¹¹⁵ Usibelli plans to instruct its mine employees to ask trespassers twice to leave, and if an individual refuses to do so, the mine employee will inform the individual that "Usibelli will not be liable or responsible for any harm" he or she may encounter.¹¹⁶ This approach flies in the face of the purpose of the ambient air exclusion, which is not to protect the source from liability but to protect "knowing or innocent trespassers" from pollution not subject to the protections of the Clean Air Act.¹¹⁷ The mine employee will also make a record of the trespasser's name, "[d]uration of unauthorized presence within the AAQB," and other information.¹¹⁸ It is irrelevant how long someone is within the exempted area, because "ambient air is defined in terms of public access, not frequency of access, length of stay or other factors."¹¹⁹ If unauthorized individuals are within the ambient air quality boundary, public access has not been precluded and the exemption must be withdrawn.

¹¹² ADEC Modeling Review Procedures Manual, June 30, 2013, at 32.

¹¹³ Public Access Control Plan at 4 (emphasis added).

¹¹⁴ 50 Fed. Reg. at 7,057; Helms Memo, Ex. 15 at 1.

¹¹⁵ 49 Fed. Reg. at 10,947.

¹¹⁶ Public Access Control Plan at 4-5.

¹¹⁷ See *In the matter of Hibbing Taconite Co.*, 2 E.A.D. 838, at *6 (quoting Memorandum from Michael A. James, EPA, to Jack R. Farmer, EPA (Sept. 28, 1972), in Barber Memo, Ex. 14).

¹¹⁸ Public Access Control Plan at 5.

¹¹⁹ 54 Fed. Reg. 2,112, 2,114 (Jan. 19, 1989).

4. The ambient air exclusion does not sufficiently account for potential use of existing trails.

It is inappropriate to exclude Usibelli's access road connecting the mine area to the Glenn Highway from ambient air. Several trails intersect with the access road but a restricted crossing is provided for only one, Right of Way (ROW) 52715.¹²⁰ As for ROW 52715, there is no discussion of how effective the relocation is expected to be. If the trail currently is used to access features not provided by the relocated segment, such as cultural, spiritual, recreational, aesthetic, hunting, or fishing uses, or if the old trail is not well-blocked, it is unlikely to deter members of the public from continuing to use the old trail. Since the elevation change over the length of the road is even less than that in the mine area,¹²¹ it is also unlikely that the terrain will preclude access to the road.

In sum, because ADEC's draft permit "does not provide the facts to support [its] presumption"¹²² that public access will be precluded from large areas in the immediate vicinity of the Proposed Operation, the Department should not adopt the ambient air exclusion proposed for the Draft Permit. Due to CVTC's use of the area for critical cultural and spiritual activities as well as ongoing use by other community members, installation of restrictive physical barriers is not an acceptable or realistic solution. Instead, Usibelli and ADEC should concentrate on reducing air emissions from the Proposed Operation and place ambient air quality modeling receptors on any unfenced, accessible property. Further, ADEC must withhold approval until or unless Usibelli demonstrates, consistent with 18 AAC 50.540(c)(2)(A), that the Proposed Operation "will not interfere with the attainment or maintenance of the ambient air quality standards" at all of these additional receptor locations.

¹²⁰ Public Access Control Plan at 2-3, 8.

¹²¹ See Usibelli Permit Application, Dispersion Modeling, at 18 Fig. 1.

¹²² See Letter from Nancy Helm, EPA, to John Kuterbach, ADEC, Re Determining the Ambient Air Quality Boundary for Potential Permit Application in Support of Alaska Industrial Development and Export Authority's Restart of Healy Clean Coal Project (Sept. 11, 2007), Ex. 19 at 2.

CONCLUSION

The Draft Permit does not meet the standards set by the Clean Air Act and State of Alaska regulations. Usibelli's application, ADEC's analysis, and the Draft Permit all fail to acknowledge and consider adequately the importance of the area to the Tribe, and the permitting process has not fulfilled the Department's continuing obligation to undertake government-to-government consultation with the Tribe on these matters. For the foregoing reasons, CVTC respectfully objects to the Draft Permit and requests that ADEC withdraw its preliminary approval pending resolution of the issues identified in these comments.

May Creator Guide Our Footsteps,

s/ Chief Gary Harrison

Gary Harrison,
Traditional Chief and Chairman

Cc: President Barack Obama
James Anaya, United Nations Special Rapporteur on the Rights of Indigenous Peoples
Sally Jewell, Secretary, Department of the Interior
Dennis McLerran, Regional Administrator, Environmental Protection Agency Region 10
Sean Parnell, Governor, State of Alaska
Mead Treadwell, Lieutenant Governor, State of Alaska

Exhibits in Support of Chickaloon Village Traditional Council Comments on
Preliminary decision to approve Usibelli Coal Mine, Inc.'s Application for Air Quality Control
Minor Permit AQ1227MSS04 for the Wishbone Hill Coal Mining and Processing Operation

Exhibit No.	Description
1	Chickaloon Village Traditional Council, Comments on Preliminary Decision to Approve Minor Permit Application for Usibelli Coal Mine, Inc. Wishbone Hill Mining and Processing Operations, Air Quality Control Minor Permit AQ1227MSS03 (Sept. 9, 2011)
2	Environmental Protection Agency (EPA) Region 10, Alaska SIP – Federally Approved Rules
3	EPA, Fact Sheet, Final Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide (undated)
4	Khanh Tran, Comments on the Air Quality Impact Analysis of the Minor Permit Application for the Usibelli Wishbone Hill Coal Mining and Processing Project (Mar. 31, 2014)
5	Memorandum from Tyler Fox, EPA, to Regional Air Division Directors, Re. Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-Hour NO ₂ National Ambient Air Quality Standard (Mar. 11, 2011)
6	MACTECH, Sensitivity Analysis of PVMRM and OLM in AERMOD, Alaska DEC Contract No. 18-8018-04 (Sept. 2004)
7	Memorandum from Lydia Wegman, EPA, to Regional Air Directors, Re. EPA Reconsideration of Application of Collocation Rules to Unlisted Sources of Fugitive Emissions for Purposes of Title V Permitting (June 2, 1995)
8	Letter from Pamela Blakely, EPA, to Edwin Bakowski, P.E. (Aug. 8, 2007)
9	Letter from Cheryl L. Newton, EPA, to Janet McCabe, Indiana Department of Environmental Management (Mar. 6, 2003)
10	State of Alaska Health Impact Assessment Program, Draft Health Impact Assessment for Proposed Coal Mine at Wishbone Hill, Matanuska-Susitna Borough Alaska (Mar. 5, 2012) (excerpts)
11	Viney P. Aneja, “Characterization of Particulate Matter (PM ₁₀) in Roda, Virginia” (undated)
12	Letter from Douglas M. Costle, EPA, to Hon. Jennings Randolph (Dec. 19, 1980)

- 13 Memorandum from Stephen D. Page, EPA, to Regional Air Division Directors, Re. Interpretation of “Ambient Air” In Situations Involving Leased Land Under the Regulations for Prevention of Significant Deterioration (June 22, 2007)
- 14 Memorandum from Walter C. Barber, EPA, to Gordon M. Rapier, Re. Applicability of PSD Increments over Company Property (May 23, 1977)
- 15 Memorandum from G.T. Helms, EPA, to Steve Rothblatt, Re. Ambient Air (April 30, 1987)
- 16 Letter from Donald C. Toensing, EPA, to W. Clark Smith, Nebraska Department of Environmental Quality (Aug. 1, 2000)
- 17 U.S. Geological Survey, The National Map US Topo for Farnsworth Peak Quadrangle
- 18 Kennecott smelter map, printed from Salt Lake County Recorder Interactive Map, *available at* <http://assessor.slco.org/Javaapi2/ParcelViewExt.cfm>
- 19 Letter from Nancy Helm, EPA, to John Kuterbach, Alaska Department of Environmental Quality, Re. Determining the Ambient Air Boundary for Potential Permit Application in Support of Alaska Industrial Development and Export Authority’s Restart of Healy Clean Coal Project (Sept. 11, 2007)