



18 May 2007

Mr. Todd Mathes
Whiteman Osterman & Hanna LLP
One Commerce Plaza
Albany, New York 12260

Re: Archer Mine DEIS Review Comments on Air Quality Sections

Dear Mr. Mathes,

I have completed a review of the air quality section of the Draft Environmental Impact Statement (DEIS), for the proposed Archer Mine in Milan, New York. I have identified the following issues with the DEIS:

- 1) **Absence of an emission inventory.** An emission inventory was not provided anywhere within the DEIS. This document should list hourly and annual emissions of each source of air pollution. In this case, both fugitive dust and diesel air pollution sources should be included. The applicant claims the mine's annual emissions of fine particulate matter (PM_{2.5}) are less than a de minimus level of 15 tons per year and that air quality impacts will therefore be insignificant. This claim must first be substantiated with an emissions inventory and supporting emission calculations.
- 2) **De minimus emissions level questionable.** The DEIS refers to a DEC document entitled "Assessing and Mitigating Impacts of Fine Particulate Matter Emissions," which lists a de minimus level for PM_{2.5} of 15 tons per year. Furthermore, the document states, "The Department recognizes that the state of the science regarding direct PM_{2.5} emissions and secondary formation continues to evolve." It also states, "The Department expects knowledge in these areas to grow considerably over the next few years as implementation of EPA's NAAQS for PM_{2.5} proceeds."

Note the document was produced in 2003, prior to a major change in PM_{2.5} regulations. The change was based on newly developed scientific information showing impacts occur at lower than ambient concentrations and that there is no threshold concentration below which no health impacts will occur. As a result, the EPA lowered the 24-hour National Ambient Air Quality Standard (NAAQS) for PM_{2.5} from 65 µg/m³ to 35 µg/m³ in December of 2006. This is a significant reduction is what was previously considered an acceptable level of PM_{2.5}. Therefore,

it is likely that the 15 tons per year will need revision to provide an adequate threshold for protecting human health.

- 3) **Road sweeping not substantially quantified.** According to EPA, the control efficiency of sweeping and flushing of roads is “highly variable”.¹ Furthermore, Turkey Hill Road experiences relatively high vehicle speeds (posted speed limit of 55 mph); therefore, there is significant potential for any accumulated silt on that road to be entrained in ambient air.

The variability of control efficiency and high vehicle speeds suggest street sweeping equipment and procedures should be clearly specified. However, the DEIS only proposes sweeping and wet suppression “as needed.” While these can be effective mitigation measures, more information on sweeping equipment specifications, operating conditions and scheduling should be included in the DEIS to ensure fugitive dust will be controlled to the maximum extent that is practical.

Ineffective street sweeping will, at minimum, cause a violation of the New York State nuisance standard (Regulation 211.2). I have included the standard for convenience.

“No person shall cause or allow emissions of air contaminants to the outdoor atmosphere of such quantity, characteristic or duration which are injurious to human, plant or animal life or to property, or which unreasonably interfere with the comfortable enjoyment of life or property. Notwithstanding the existence of specific air quality standards or emission limits, this prohibition applies, but is not limited to, any particulate, fume, gas, mist, odor, smoke, vapor, pollen, toxic or deleterious emission, either alone or in combination with others.”

In the absence of more concrete information describing road sweeping, the applicant should at a minimum install a water spray wheel washing station to ensure compliance with the nuisance regulation.

- 4) **No signage proposed.** The DEIS does not mention signage will be installed which states all loaded trucks must be covered.

¹ “Compilation of Emission Factors, Volume 1: Stationary Point and Area Sources.” AP 42, Fifth Edition. Chapter 13, Revised 11/2006. U.S. E.P.A.



Todd Mathes

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Resource Systems Group, Inc.

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Please contact me if you have any further questions.

Sincerely,

Resource Systems Group, Inc.

A handwritten signature in black ink, appearing to read "John Hinckley". The signature is written in a cursive style with a large, stylized initial "J".

John Hinckley, Q.E.P.
Senior Associate

