



February 12, 2024

MIKE BUSH PRESIDENT
LINWOOD MINING AND MINERAL CORPORATION
401 E FRONT ST
DAVENPORT IA 52804

Re: Linwood Mining & Minerals Corporation (401 E Front St, Davenport, IA 52804)
Contaminated Sites Database ID No. 1853
Comments to Site Assessment Plan for Mine Stope

Dear Mr. Bush:

This letter is in response to the Site Assessment Plan for Mine Stope (Plan) ([Doc #41309](#)) for Linwood Mining and Minerals Corporation located at 401 E Front St, Davenport, Iowa 52804 that was received by the Iowa Department of Natural Resources, Solid Waste and Contaminated Sites Section (DNR) on October 20, 2023. The Plan was reviewed in accordance with [567 IAC 133](#).

The general approach proposed for this site assessment is to review data that would include collection of relevant historic documents and data, well data in the area to determine if any are wells located/screened such that they may be useful in creating a conceptual site model, and review of site practices. Although site work is not part of this Plan, it was acknowledged that this Plan does propose an initial round of activities, the results of which will be used to guide further field activities as deemed necessary based on those results. Most site assessments performed under [567 IAC 133](#) require data collection from the site and surrounding areas. Data collection from the site and surrounding areas will likely be required once additional site information is established.

The Plan is generally accepted with the following requirements:

- 1) Section 3.1 *Recommendations for Collection of Relevant Historical Data* outlines the information that will be reviewed as part of the Site Assessment process. Staff interviews are planned to be part of the collection of information. In addition to this, information must be gathered related to the exhaust operation's chemical interaction with Continental's Cement Kiln Dust (CKD) landfill. It is important to determine if exhaust is allowed to migrate offsite. If exhaust interacts with deposited wastes, this could impact groundwater chemistry.
- 2) Section 3.3 *Methodology for Identifying Contaminant Plumes* indicates that groundwater samples will be collected from existing water supply wells near the Stope and analyzed for nitrate, boron, magnesium, molybdenum, and nickel, among other geochemical parameters. The Plan states that these parameters may be amended based on an informational review. It seems that this analytical list is based off of known exceedances in Continental's CKD landfill. This may not fully capture contaminants in the Stope. The Plan must also consider the kiln exhaust constituents that have been deposited in the Stope over the last 50 years (including fuels that may have been used at site kilns) when developing a final analyte list.

- 3) Section 3.3 *Methodology for Identifying Contaminant Plumes* indicates that a determination will be made in the future on the necessity of groundwater wells in the Stope. A site assessment usually requires the investigation of the source area. In order to evaluate the source area, soil and groundwater samples will likely be necessary in the Stope area. Although we understand this may not be possible right now (since exhaust is being actively diverted to this area), a full investigation into the Stope area will likely be required before this site can close. During our last in-person meeting held August 29, 2023, it was indicated that the current owners are planning to stop the practice of diverting the exhaust into the Stope. DNR is also requiring an Action Plan for cessation of exhaust into the mine, with an updated schedule due March 15, 2024. ([Doc #109123](#)) When considering future assessment actions, please keep in mind the language from [567 IAC 133.4\(1\)](#) which states in part, *"In all cases where an active source of contamination is identified, such as leaking tanks or current practices, which may be readily corrected, the source shall be removed, repaired or otherwise contained, or the contaminating practices ceased, immediately upon discovery of the source."* DNR expects that management practices leading to ongoing groundwater contamination will be eliminated.

In cases like this, a full site conceptual model may be a collection of several assessment reports/addendums. Before a Remedial Action Plan is submitted (as referenced in both [567 IAC 133](#) and Section 3.4 *Remedial Action Plan*), please compile the data proposed in this Plan and the items required in this letter into a Site Assessment Report that outlines findings, analysis from nearby wells, and proposed next steps. The Site Assessment Report shall be submitted to DNR by **June 15, 2024**.

Please contact me at [515-669-5494](tel:515-669-5494) or by email at shelly.nellesen@dnr.iowa.gov if you have questions or concerns.

Sincerely,

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