



January 10, 2023

File Ref: FID #701040560
Adams County
SW Correspondence

Mr. Charlie Kuhn
Adams County Landfill
1420 State Highway 21
Friendship, Wisconsin 53934

Subject: Acceptance of Proposed Alternative Geotechnical Investigation Program for Feasibility Study, Adams County Landfill, License #3150

Dear Mr. Kuhn:

The Department of Natural Resources (department) has reviewed the proposed alternative geotechnical investigation program (AGIP) for the proposed vertical expansion of the Adams County Landfill (the landfill). The AGIP was detailed in a document titled, *Alternative Geotechnical Investigation Program, Vertical Landfill Expansion, Adams County Sanitary Landfill, FID 701040560, License No. 3150*, dated October 2022, and submitted by Ayres Associates, Inc. (Ayres) on behalf of Adams County. The proposed site of the landfill expansion would be located on land owned by Adams County in the SW ¼ and the SE ¼ of the NE ¼ of Section 13, Township 18N, Range 5E, Town of Strong Prairie, Adams County, Wisconsin.

The department has reviewed the document and accepts the proposed AGIP. Please include a copy of the AGIP request and this letter in the forthcoming feasibility report for the anticipated vertical expansion. Additionally, please include in the feasibility report any new and pertinent geotechnical or hydrogeologic information pertaining to the proposed expansion area that has been collected since the previous expansion area was approved in 2018, such as new soil borings and associated data, groundwater elevations, or groundwater quality exceedances. Formal approval of the AGIP would be included in the department's feasibility determination for this project. The department's comments on the proposed AGIP and rationale for this acceptance are provided below.

The footprint of the proposed vertical expansion comprises an approximate area of 8.3 acres, which would be located entirely within the currently permitted 21.9-acre footprint of the existing landfill. The proposed AGIP would reference regional and site-specific geotechnical and hydrogeologic information that has been collected over the course of previous investigations conducted for the 1986 and 2017 feasibility reports.

The AGIP included information regarding groundwater elevations at the site which have risen over time; many of the groundwater monitoring well screens are currently submerged. Please provide a discussion regarding sampling procedures and the validity of groundwater data collected from wells with submerged screens in the feasibility report.

The AGIP submittal included a request for exemptions to portions of ch. NR 512, Wis. Adm. Code. The requested exemptions are considered part of the AGIP proposal which would be formally granted as part of the department's AGIP approval in the feasibility determination. The department's comments regarding the requested exemptions are as follows.

1. Adams County requested an exemption to use previously collected data to meet requirements of s. NR 512.09(4), Wis. Adm. Code. Data would include, but not be limited to, field hydraulic conductivity tests, grain size analysis, Atterberg limits, soil classification, laboratory hydraulic conductivity, and existing groundwater quality data as background data.

Department Response: The department will allow the use of previously collected field and laboratory data towards meeting the requirements of s. NR 512.09(4), Wis. Adm. Code. This data must be submitted with the feasibility report. The exemption appears to be justified based on the location of the existing borings and wells and the amount of available previous technical data for the site.

The AGIP included information regarding well completion forms, boring log abandonment forms and Well Information Forms that had not been located, particularly for the older borings and wells. The missing forms are noted in the table on page 5 of the AGIP. The abandonment forms for borings located within the existing limits of waste would provide the greatest value for documentation of their abandonment. However, at this time there is no practicable further action regarding these borings and wells that can be taken; except that if any missing forms are found, please submit them to the department. The feasibility report should document that a search for the missing forms was conducted within the 1986 feasibility report, the plan of operation report that followed and subsequent liner construction documentation reports.

2. Adams County requested an exemption to s. NR 512.09(4)(a) and (b), Wis. Adm. Code, for the number of Atterberg limits and laboratory hydraulic conductivity tests conducted on samples of each major soil unit.

Department Response: The exemption appears to be justified based on the generally consistent subsurface conditions at the site.

3. Adams County requested that the AGIP be approved regarding the number of borings required under s. NR 512.09(1), Wis. Adm. Code.

Department Response: The existing borings meet the numerical requirement in s. NR 512.09(1), Wis. Adm. Code, for an 8.3-acre vertical landfill expansion. Please include the previous exemption requests and department approvals related to borings that were noted in the AGIP with the feasibility report.

4. Adams County requested that the AGIP be approved regarding the wells and piezometers required under s. NR 512.09(2), Wis. Adm. Code.

Department Response: The existing wells and piezometers meet the numerical requirement for wells and piezometers in s. NR 512.09(2), Wis. Adm. Code, for an 8.3-acre vertical landfill expansion.

5. Adams County requested an exemption to the requirement for 24-inch by 36-inch plan sheets in s. NR 512.11, Wis. Adm. Code. The AGIP included a proposal to prepare the drawings for the feasibility report on 22-inch by 34-inch plan sheets.

Department Response: The AGIP does not explain why the plan sheets were prepared for smaller sized paper; however, as long as the drawings meet all of the other specifications and legibly contain all of the required information in s. NR 512.11, Wis. Adm. Code, this should be satisfactory. It is not anticipated the proposed vertical expansion would involve a degree of complexity that would necessitate the additional paper space.

6. Adams County requested an exemption from s. NR 512.09(1)(b), Wis. Adm. Code, for soil borings B-101 and B-104, which were installed to depths less than the required 25 feet below proposed subbase.

Department Response: The department granted an exemption to this requirement for borings B-101 and B-104 in its April 11, 2018 feasibility determination and accepts this deviation for the proposed vertical expansion. Please include a copy of the April 11, 2018 feasibility determination in the feasibility report for the proposed vertical expansion as documentation of the previous exemption.

The department reserves the right to require additional geotechnical information if necessary to fully evaluate subsurface conditions at the site and to complete review of the feasibility study. If major changes are made to the proposed footprint during design development, Adams County should work with the department to determine if additional geotechnical investigation will be needed. The department may also require the installation of additional monitoring wells and piezometers as part of the feasibility determination or plan of operation approval if the department determines additional monitoring points are needed to adequately monitor groundwater quality around the landfill.

Please contact Carolyn Cooper at 608-931-9387 or by email at carolyn.cooper@wisconsin.gov with any questions about this letter.

Sincerely,



Bridget Kelly
Waste and Materials Management Program Supervisor
South Central Region

cc: Logan Seipel, Ayres (e-copy)
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