January 20, 2025

Mr. Geoffrey Spain
Environmental Engineer
Land Quality Bureau - Iowa Department of Natural Resources
6200 Park Avenue Suite 200
Des Moines, Iowa 50321



RE: Proposed End to Regulation under IAC 567, Chapter 113 (and 1998 Chapter 103) and Proposed End to the Closure Permit Ida County Sanitary Landfill, IDNR Permit #47-SDP-01-76C

Dear Mr. Spain:

The Ida County Board of Supervisors (County) is requesting the termination of the Closure Permit for the Ida County Sanitary Landfill (47-SDP-01-76C) issued April 16, 2008 (Doc #19669), and the end of regulation of the facility under Iowa Administrative Code (IAC) 567, Chapter 113 (and 1998 Chapter 103).

In lieu of regulation under IAC 567, Chapter 113, the County proposes that the limited on-going maintenance items warranted at the facility can be appropriately supervised and managed by the County. The County understands that certain legal instruments will be required to facilitate the end of IDNR regulation of the facility.

The basis of this proposal is rooted in the observed condition of the facility and the lack of perceived risk-based concerns associated with the facility as it exists in its current condition.

Evaluation of the following aspects of the facility is offered in support of this proposal,

Ground Water Quality

Groundwater has been monitored at perimeter monitoring wells at the site since at least the early 1990's. At the Ida County Sanitary Landfill, the following monitoring wells comprised the Hydrologic Monitoring System Plan (HMSP) in the SDP Closure Permit dated April 16, 2008: MW-3 (background), PZ-15 (background), MW-7, MW-8, MW-10, and PZ-11. Permit Amendment #1, December 30, 2009, removed MW-8 (sometimes referred to as PZ-8) and PZ-15 from the HMSP. Permit Amendment #2, October 26, 2010, added MW-13 to the HMSP.

The 2024 Annual Water Quality Report (AWQR), which was submitted to IDNR on January 16, 2025 (Doc #111877) is cited in support of the interpretation of the water quality.

The only compound of interest at this site is vinyl chloride at MW-7. Vinyl chloride detections at MW-7 from 2013 to 2019 resulted in the determination of a Statistically Significant Level (SSL). The SSL was never addressed through corrective action but it appears the issue corrected itself. Vinyl chloride has not been detected at MW-7 during the past four (4) years.

The Groundwater Protection Standard (GWPS) for all compounds, except cobalt, are the Statewide Standards for Protected Groundwater as published in IAC567, Chapter 137. A Site-Specific GWPS is developed for cobalt based on endemic cobalt concentrations in the background water quality at the site. The Site-Specific GWPS for cobalt is 3.6 ug/L.

Gas Control

Landfill gas was historically monitored inside site structures and in the breathing zone at the site perimeter. Between September 28, 2015 and the present, subsurface landfill gas has also been monitored in the headspace of monitoring wells MW-3, MW-7, MW-10, PZ-11, and MW-13.

Since headspace monitoring began in 2015, there have been no explosive gas detections in the monitoring wells/piezometers.

As reported in previous AWQR's, there have been intermittent methane gas detections in the office. The intermittent methane detections during previous sampling events are believed to be associated with the septic sewer system. There is no running water on site and the pipe traps on the toilet and sink are frequently observed to be dry. The office is occupied infrequently and usually just when the Citizens Convenience Cener is open. No gas has been detected in any other buildings. The IDNR is aware of the intermittent sewer gas detection in the office and has indicated reoccurring detections in this location do not require repeated notifications. All historic detections of explosive gas in the office have been below actionable levels.

Since gas generation curves typically illustrate gas generation peaking in the second or third decade of waste burial (e.g. EPA LMOP studies), it is anticipated that landfill gas generation will decrease with time.

Since gas detections in the monitoring wells/piezometers have been below detection to date, long-term gas migration appears unlikely.

Final Cover Condition and Maintenance

Landfill inspections have been performed semi-annually since the closure permit was issued in 2008.

Review of historic inspection reports indicate that vegetation on site continues to improve and the integrity of the final cover is being maintained. The landfill vegetation is in good condition and is mowed occasionally to control the growth of undesirable vegetation and saplings. Additional seeding is also conducted when warranted.

Diversion and drainage systems are in good shape with no evidence of erosion. The corrugated metal pipe that was noted as damaged in past Semi-Annual Engineer's inspection reports (most recently in the Spring Semi-Annual Engineer's inspection report dated April 29, 2024 – Doc #109935) was repaired in 2024. The repairs are documented in the Fall Semi-Annual Engineer's inspection report dated October 21, 2024 (Doc #111114).

The County understands that on-going inspection and maintenance of the cap, the diversion systems, the drainage systems, and the vegetation is necessary moving forward. However, at this point in the life of the facility, these tasks are merely maintenance items necessary for the perpetuation of the well-established and enduring cap/cover features. Now established, these features do not warrant on-going regulation by the IDNR, rather management by the County. The County is both willing to and capable of effectively performing the required maintenance tasks moving forward.

Leachate Management

As per Special Provision X.11 of the Closure Permit, the site is conditionally exempt from providing and operating a leachate collection system.

Historic Semi-Annual Engineer's inspection reports going back to the Spring 2020 report were reviewed and no mention of leachate seepage was noted in any of the reports.

The County is both willing to and capable of effectively performing continued cap maintenance tasks related to leachate seep control if any are noted in the future.

Conclusions

The County seeks a pathway to end regulation of the facility under IAC 567, Chapter 113, while providing the IDNR the appropriate assurances that the facility maintenance tasks will be on-going, as appropriate, to maintain the facility in conformance with the risk-based decision to end IDNR oversight.

The County appreciates your consideration of these requests, and we look forward to your reply. Please consider whether you believe the County is a candidate to successfully file an Environmental Covenant in coordination with IDNR's participation. If so, we anticipate that you may desire to visit the facility during 2025.

By virtue of this letter, the City is also requesting that postclosure activities in accordance with the Closure Permit at the Ida County Sanitary Landfill be temporarily suspended while progress toward an Environmental Covenant is being made.

Please contact the HLW Engineering Group office at (515) 733-4144 with any questions you may have or to schedule and coordinate a site.

Sincerely,

HLW Engineering Group

Douglas J. Luzbetak, P.E

Project Manager

cc: Kristy Gilbert, Auditor, Ida County (electronic copy)