BOONE COUNTY
Landfill & Recycling

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February 23, 2026

Department of Natural Resources
Field Office 5
6200 Park Ave Suite 200
Des Moines, Iowa 50321

Dear Mr. Gross,

This letter is in response to the Notice of Violation dated February 6, 2026 for the Boone County Sanitary Landfill, Permit No. 08-SDP-01-75P. As requested by March 1, 2026, this response will address the requirements, reminders, and recommendations listed in the report, particularly to the prevention of leachate flowing off-site.

In response to the items listed in the "Requirements" section:

- Control of leachate seepage and prevent it from flowing off-site:

I consulted with HLW Engineering about this issue, and they prepared the following:

Required Actions – Control leachate seepage and prevent it from flowing off-site.

Landfill staff is either in the process or will soon implement the following steps to help limit future leachate seepage from the south slope of Phase 8-R:

1. Due to the relatively low permeability of site soils used for historic landfill daily cover (in comparison to the permeability of solid waste), it is recognized that a large part of the seepage issue in Phase 8-R could be due to leachate in the solid waste being prevented from migrating vertically to the sand drainage layer. The presence of low permeability soil cover may be causing leachate to take the path of least resistance by moving horizontally in the waste mass toward the south slope rather than vertically to the sand drainage layer. When conditions allow this Spring, landfill staff will excavate trenches into the waste mass on the south slope of Phase 8-R. The trenches will be excavated to the sand drainage layer and will be backfilled with high permeability material (clean river rock, tire shreds, or similar) to promote the downward flow of leachate to the sand drainage layer for conveyance to the leachate collection piping.

2. As noted in the NOV, "The preferred cover method is to place earthen cover on the outer slope of the working face and alternative daily cover can be used on top." This practice should promote the vertical movement of leachate through the waste mass to the sand drainage layer to limit future seepage and should continue.

3. Due to past landfilling and soil stockpiling operations, a fairly large portion of the landfill active area drains to the south and exits the active landfilling area over the south slope of Phase 8-R. This drainage pattern contributes to the leachate seepage in two ways:

a. Due to the long flow distance over previously placed waste, surface water infiltrates into the waste mass which increases the leachate volumes.
b. The flow of the surface water over the slope continues to wash some of the cover soils away leading to additional seepage.

Staff have started to grade the solid waste and soil cover in the northern portion of the active area so surface water sheds radially away from the active area instead of being concentrated as flow to the south. This will serve to limit the amount of leachate generated as well as to limit erosion on the south slope of Phase 8-R. Operations to achieve and maintain the radial drainage will be a continuous process throughout the life of the landfill.

4. The Phase 9-R expansion is currently under design with construction anticipated during the 2026 construction season. Phase 9-R is being designed with a 4' berm at the south waste boundary. When landfilling begins in Phase 9-R, staff will keep waste back from the berm to allow cover soils to be placed between the solid waste slope and the berm to force any leachate migrating horizontally in the waste mass into the sand drainage layer. This will not result in reduced seepage from the south slope in Phase 8-R but should keep this situation from reoccurring in the future.

- Apply at least six inches of soil or other approved alternate waste cover after each day of operation.

At the time of your inspection, we had been receiving an unexpectedly high amount of waste, particularly from Ames/Story County, for most of January. With the weather conditions and staff relocating the working face to a higher area, we had fallen behind on the use of soil cover. Staff had been relying on the use of tarps for daily cover, but the excess waste had created issues in getting the waste completely covered.

<u>In response to the "Reminders" section:</u>

- Keep the workface a reasonable size to accommodate adequate daily cover requirements and minimize vector activity.

As mentioned above, due to the new location for the working face and the excessive tonnage from Story County, staff had issues keeping the working face at more workable size. Since the time of your inspection, the tonnage has decreased, allowing staff to get caught up with soil cover and to decrease the size of the work face.

- Collect off-site litter and litter outside the immediate working area at the end of each day of operation

The increased waste and high-wind conditions had created issues with litter blowing away from the work face. Staff first spent several days and many hours collecting waste that had blown off-site, then spent several more days collecting waste that had stayed on-site but away from the work face.

- Monitor water quality trends (especially COD) in stormwater sampling analyses and take action as deemed necessary.

In working with HLW Engineering, these results will continue to be analyzed on an annual basis during stormwater sampling.

<u>In response to the "Recommendations" section:</u>

- Place a windrow of soil at the outer slope of the working face to improve waste containment.

Re: your photos titled 'outer portion of working area': Boone County Landfill operators hauled soil to that location and have all waste in that area covered.

- Cover exposed waste on the outer slope of the working face with soil at the end of each day of operation, and use alternate daily cover methods on the top.

Staff have been working to incorporate the use of landfill tarps to cover daily waste. We will continue developing a process to use soil on the outer slope and tarps or posi-shell on the top.

- Collect litter more frequently than weekly (daily, if possible)

We are working on a more accurate litter log to reflect the time spent collecting litter. The litter log will be kept daily instead of weekly. This should enable litter collection efforts to be more accurately tracked.

Please let me know if you have any questions or need anything further.

Sincerely,

John Roosa

John Roosa

Administrator, Boone County Landfill