

To: Mike Smith, P.E. IDNR
From: Cindy Turkle
Date: February 12, 2022
Re: Post-Closure Final Cover Meeting Comments

Hi Mike,

I want to again thank you for the summary and considerations document you provided before the meeting. It was very helpful.

Most of what I have at this time I already voiced at the committee meeting. Some of my comments will overlap into some of the other committee considerations (i.e., groundwater, gas, etc.) so I apologize for repeating some of them. For documentation purposes, I have some of the following thoughts:

- When the rules (or policies) are finalized be sure they are flexible enough to recognize the differences between old, closed landfills (pre-2008 without FML) and closure of new cells with FML and gas systems. Expecting the old landfills to meet some of the requirements related to leachate collection and gas control is unrealistic, expensive, and is opposed to the original post-closure requirements when the sites closed.
- Because some of the old, closed landfills are being looked at as green space and/or prairies, their maintenance of a prairie will include periodic “controlled” burning by certified groups. DNR should allow “controlled” burns by certified groups such as the County Conservation Dept. on a site-specific basis. A site may have an area that must be protected from burning, but that can be set aside by the parties involved.
- Along that same line, I think we need to rethink the requirement to prohibit saplings and small trees/brush on the cover. A dry tomb will not allow the waste to reach stabilization. Is there some advantage in allowing some saplings to grow on the cap if they can take up moisture and leachate and help limit erosion? They have a better root system than grass. Some brush areas on a conservation area are encouraged for animal cover and food. I can also see saplings being used to absorb a leachate seep.
- Allowing gas to vent naturally through a soil cap seems more productive than installing gas vents unless the site has problematic areas.
- If a small leachate seep is observed periodically, especially following snow melt or rain events, at an old, closed landfill that does not leave the property, flow into a receiving stream or impact a monitoring well, can we consider it insignificant and allow it to dry up without further repair? I believe we should let Mother Nature deal with it unless it increases and/or is observed over multiple years. I hate seeing good vegetation destroyed to repair intermittent leachate seeps.
- I think the stormwater controls and their maintenance have to be on a site-specific basis. New cells that have maximized their height during their operations likely do need to install and maintain stormwater controls to protect the cap. Old landfills using soil caps and that are now well vegetated may find it better to take out previously installed terraces and grade and reseed the area, letting the vegetation control runoff and minimize erosion. Any requirements should be flexible.

- Calculating settlement using benchmarks or surveyed points seems to be overkill. Most settlement can be determined visually. Knowing the type of waste, the age of the waste, and the amount of liquid (natural or recirculated) should help in understanding the potential settlement issues. Again, every site will be different so let it be a site-specific decision on whether calculating settlement is needed or just let it happen naturally.
- My concerns regarding the handling of any leachate will be site-specific and dependent upon the quantity, the quality (diluted by groundwater?), and the collection system in place. Is the system in an FML lined cell that is reaching a static condition with an FML cap? It will be different than a retrofitted toe drain. Is the leachate affected by groundwater infiltration? Can the landfill site absorb the leachate and reach a stable condition like at Butler County? Several years of monitoring may be needed to determine when a system can be turned off. This concern should probably be considered by the groundwater committee.

For right now those are my thoughts. Thanks