

Notes—8th multi-agency silica sand Rulemaking Advisory Panel meeting

Wednesday, October 1, 2014, 10:00 TO 3:30

People's Electric Cooperative [1775 Lake Shady Ave S, Oronoco, MN 55960]

Contact: nathan.cooley@state.mn.us (651-757-2290)

10:00 Kris/Charlie: Welcome, Bringing Conversations into the Room

- Asked the panelists to be sure that they bring their opinions into the room
 - There has sometimes been additional information provided about what was said in the meeting after the fact
 - § Decision made that the notes should only reflect what was said in the room; another way needs to be found to share information from panelists received outside the room

10:15 Catherine Neuschler: Schedule and Transition to Formal Rulemaking

- We will meet in November, December, likely January
- All agencies will share draft rule language before we finish
- Once we move into formal rulemaking, all comments must be formal and in writing
- Was the WebEx useful?
 - Not good for conversation
 - Difficult for some people to schedule to attend based on technology availability
 - This should be used to prep panelists for discussion at later meetings - maybe walk through rule language, but not discuss detailed opinions

10:30 EQB: Update, Discussion

- Did not get information from the webex; needs to be sent out
- Best environmental review in the world does not matter if the conditions don't end up in CUP or IUP
 - That's really outside of the scope of the rulemaking
 - Should be considered under the technical assistance team
 - § This team must be requested by LGU, and if asked, they can help with permitting
- EQB meeting
 - Need to include members of the public to ensure the Agencies get the full picture
 - Were things changed? Discussed percentage increase for expanding, also 80 acre threshold for EIS
- EQB has been visiting with LGUs and other types of facilities (animal bedding, concrete)
 - Q: Is EQB announcing where they are going?
 - § Working directly with the LGUs

11:15 Heather Arends: Reclamation Preliminary Draft Rule Language

- Subp 1 and 2
- Subp 3 - Application contents
 - This is very general information that needs to be provided, not details about reclamation plan
 - Due diligence - past history on a company. Q: from past experience, what would you change?
 - § Reclamation plan is in perpetuity, which can be a problem
 - § Maybe some history on last three permits or actions - like a resume
 - Will this be retroactive?
 - § Very difficult, legally
 - § Can add for old pits if they expand, change material that they are mining, etc.
 - Minn Stat 394.36 - Nonconformity - would that apply?
 - § Requirement to come into compliance
 - DNR is limited by its statutory authority, which relies on LGU implementation
 - § Can only set up a framework
- Subp 4 - Assessment of pre-mining conditions
 - Maps, current land use, top soil, geology, hydrology, wells, etc.
 - Modified from Wisconsin NR 135, also a handbook about

- Add components. Do you want reclamation to be about stabilizing slopes or restoring some ecological function? If about functions, more is needed. And it should be about ecological function, and land should be able to be returned to original function.
 - § Areas will be fragile
 - § Add: descriptions of agricultural or other history, field and lab analysis of soil horizons, feasibility of returning land to agriculture or forestry (using an expert) - timeframe and what is needed to restore soil, geology, pre settlement vegetation, field survey of vegetation and species diversity, quantifiable standard to assess re-establishment of vegetation, natural heritage, description of source of soil, if land could be restored to farming what impacts might there be from farming processes like manure, fertilizers, irrigation.
 - § Q: Is this required in environmental review? Or do we wait to ask until a reclamation plan.
 - § Some EAWs have included wells, but don't get all of them. Need to be sure all are included.
 - § No one can answer for current mines how the removal of the material will affect the water. Is watershed included?
 - § Should include assessment of watershed or subwatershed, or groundwater area. Identify streams and rivers. Water balance to the site.
 - § Sounds like local ordinance from Chippewa County Wisconsin, might have some good language there.
 - § Maybe also 404(b)(2)?
 - § Wouldn't get into forestry or ag land
 - § Section e needs to be expanded
 - § Soil brought in needs to be regulated. Definitions: what is clean soil?
 - § Concerns that areas are dead zones post-mining
 - § Others have seen reclaimed areas that are very functional and returned to their native state
 - § Looks versus use
 - § Dead zones may be just in context of farming, which isn't the only good land use
 - § Counties may prioritize types of land use, like agriculture
 - § If a community's plan shows they are a farming community, that should be able to continue
 - § Loss of agriculture in Wisconsin
- Subp 5 - Descriptions of Mining Activities
 - § Map should include phases
 - § Map should show areas that are being avoided and why
 - § G is too vague.
- Subp 6 - Intermittent Mining
 - § Timeframe or definition of how intermittent the mining is
- Subp 7 - Post Mining Land Use
 - § Q: on estimated costs of reclamation, is there a way to use an inflation or discount rate for reclamation that will happen in the future?
 - § This is fairly standard, sometimes a permit requires a look at reclamation costs every 5 years
 - § Reclamation plan should be prepared by a natural resource professional and an engineer
 - § Nothing about subsurface fill or material going in aquifers
 - § What is the topsoil being put on?
 - § How deep is fill above aquifers?
 - § Source, location, type, and quantity of fill
 - § Add the seed mix into f. They often change, but would be useful to have an idea.
 - § Under g, what is a quantifiable standard under productivity?
 - § Also, add invasives to the performance standard
- Subp 8 - Criteria for Complete Reclamation
 - § What does it mean to have a variety of native plants?
 - § How far would the reclamation plan go in preparing the land for its next use, if that is changing?

- § Ex: Residential development; if there is really going to be a change, it needs to be sure that will happen. The minimum should be restoration to a native plant community. Can't rely on some vision of next use or permanent change to reduce reclamation burden.
 - § C - would restoration success criteria be set ahead of time?
 - § Reclamation plan should have methods for determining success, including a defined reference area.
 - § Needs to work for existing mines that expand or change geology.
 - § Better to have success criteria laid out ahead of time
 - § Methods should be tied to those used in pre mining review.
- Subp. 9 - Maintenance (or does this go in standards?)

Other Notes

- Please share Katie's written comments
 - We will do this as an addendum/separate piece of the meeting notes
- Need an opportunity to comment on them in more detail
 - Can do via email to Nathan, compile without editing and finalize discussion at the next meeting.
 - § Yes. That will be the plan.
- Last meeting notes talk about it being difficult to separate out aggregate
- Remember legislative intent to not include aggregate; many LGUs are very dependent on aggregate
- Some areas are working on separating the two in ordinance

1:00 Heather Arends: Continued Discussion

- Heather has spoken to folks from Wisconsin
- Mixed opinions in exemptions
- Construction
 - What if you have sand while you are doing construction grading?
 - § Can be sold?
 - § What are the adverse impact on the community? Is it the same as where there is mining?
 - § Should be regulated as fill.
 - § Should have same regulation as any one else extracting and selling a mineral
 - § Silica is a class 1 carcinogen
 - Define the purpose of the project
 - § Exempt what is used for the purpose of the project that isn't sand mining
 - Industrial standards for construction should be used
- When should these rules go into effect?
 - Assuming they can't be retroactive
 - § Some LGUs may have ordinances that require coming up to compliance with new standards
 - § But look at 394.36
 - All new mines - immediately effective
 - § Date of adoption
 - § Issue of moratoriums and LGUs trying to get ordinances in line
 - § Counties likely can't change any ordinances quickly
 - § 14.128 for effective dates of rules that require ordinance changes
 - Some mines have been operating 40 to 100 years. Material is gone, so mass balance will not work. It would be difficult to find materials to fill that in.
 - § For nonconformity, there needs to be a time to come back into conformity
 - § There are other portions of our mines that have been operating for more than 100 years.
 - § Need a reclamation for grandfathered properties
- Subp. 1 - Solid waste - a mine can't be reclaimed as a landfill unless it follows solid waste rules
 - What about what is put in aquifers?
 - § Agencies are dealing with material placed in aquifers as a discharge to groundwater
 - Use of refuse is confusing - should be overburden and fines
 - § Some want to prohibit chemicals with the fines

- § Already regulated under solid waste rules, which defines clean fill vs. special waste fill
 - § Concern about aquifer vs. Groundwater vs. Drinking water
 - § Groundwater should not go in to a reclamation rule; other state rules govern
 - How are other impacts - ponds, etc dealt with?
 - § PCA regulation
- Subp 2 - Contemporaneous Reclamation
 - Looks unenforceable
 - § Relates to financial assurance, so incentives even if not enforceable
 - 40 acre maximum, but know that may not be palatable
 - § To limit the amount open at one time to a requirement set by the LGU
 - § LGU has that hammer through the financial assurance, so it should be up to what the company is willing to have financial assurance for.
 - § Is that enough of an incentive?
 - § Yes, in Wisconsin in the LGUs that really focus on it
 - Won't get a consistent regulation if rely on local enforcement
 - § No compliance without a set number; while FA may impact how many acres are open, that seems to just be an influence
 - § Problem with specifying a number is that every mine is configured differently
 - § Could a percentage model work?
 - § Needs a big range, scale is different for small and large mines
 - § Maybe acreage for smaller mines or a percentage for larger. Have tiers or similar.
 - § Then you can move out an acre for each acre under active reclamation
 - § There are local ordinances that define a number - that may mean that some sites are not mineable.
 - Wisconsin is having an issue where cities are annexing mines but they are not trained as well as the counties are on NR135.
 - § Annual training on NR135
 - Remember these are statewide performance standards and LGUs can add.
- Subp 3 - health, safety, welfare
 - Should be a purpose statement
- Subp. 4 - Habitat Restoration
 - Needs work
 - Proposed by reclamation plan, not required
 - Definition of condition does not apply to ag
 - § Is not meant to - this is only for reclamation plans that are for habitat?
 - § The default
 - § Like the term ecological sustainable condition
 - § Specify that this is the default or minimum level
 - Subp 5
- Subp 7, 8, and 9 - Water
 - Is it redundant to require compliance with other rules, like 7050, 7053, and DNR groundwater quantity?
 - § Yes. These are addressed in 6. There are so many other requirements, you'd have to list a LOT of them.
 - § Not really standard in rule writing
 - § Could be a guidance or a form or similar
 - § After hearing that mines are not regulated, developed a list of regulations in Wisconsin - it makes 50 pages
 - § Has and will share a bubble chart that has a regulated mine and all the federal and state rules that spin off and apply
 - § There are 240 bubbles on the chart with Wisconsin. These are general rules that apply to many different kinds of facilities.
 - § Concern is enforcement - not just the existence of the regulation

- § And there maybe so many that not everyone is aware of all the regulations
 - § Concern about how frequently mines are being visited
- Topsoil and overburden
 - § Have volume, what about depth?
 - § What if it is not up to standard? Needs to be amended, gotten up to standard.
 - § Soil must be stabilized at all times. Concern about one week time frame being too short, but also concerns about getting contractors to seed. (Cover crop.) In some cases it is taking 6 weeks.
 - § If we can't look at end use, how do we separate aggregate?
 - § We will work on definitions
 - § Mass balance is important because you can replace some of the volume. There's a fluff factor.
- Storage
 - § Could there be a buffer requirement for water resources? To avoid erosion.
 - § Free from contamination? What are the specific levels?
 - § Solid waste rules. Reference. Can we send a list of those?
- Substitution
 - § Enforceability? Testing before it is brought on site.
- Mineland Water Bodies
 - § Option not to allow a pond on karst?
 - § PCA has tougher rules for ponds in karst
 - § Stormwater rules regular retention ponds - elements are all in MPCA rules
 - § Need to talk to MPCA
 - § Is the intent to relate ponds at active mines?
 - § Yes, both active and reclaimed.
 - § Be clear
 - § Wisconsin allows ponds to become sediment basins
 - § Can't 100% prevent over topping or other problems
 - § More recognition through out of adaptive management and plans for dealing with things that go wrong
 - § Emergency or contingency plans
 - § Gets back to main concern in karst topography is the health of water
 - § Don't want mud pits
 - § What is meant by ponds?
 - § Process ponds or stormwater? Be clear. Better definition.
 - § Might be different fates for these two.
 - § Why does final grade have to extend 6 feet?
 - § To allow fluctuation in water depth.
 - § Restate a
 - § It is not always feasible to construct an island
 - § Be clear this is an example
 - § Re vegetation or other means? What are other means?
 - § Parks, open water features, etc.
 - § Remember there is approval needed
 - § Compatible with local land use plans
 - § Please provide additional comments, we'll come back to this
 - § 5 years, enforcement in financial assurance
 - § If signed off? Assurance extended if something doesn't work

3:15 Kris/Charlie: Check-In and Wrap Up

What will help panelists?

- Seeing what else had been submitted during conversations/emails with Agency
- Answers to questions about air
- Participation from all during disagreement

- Struggle with what is in the bounds of rules (esp. Reclamation) and what relates to other Agencies and other parts of these agencies
 - How will they all fit together
- Understanding how a rule gets down to something enforceable
- Like the concrete and the real time view of comments
 - Can help knowing and seeing where people agree
- Everyone's input and willingness to talk
- Time to review materials in advance - formulate questions
 - Willing to do homework

Comments – Preliminary Draft Rule Language for Reclamation Plan Requirements
Multi-Agency Silica Sand Rulemaking Panel
Prepared by Katie Himanga, CF (panelist)
10/1/14
2 pages

In addition to requirements already included in the DNR 8/28/2014 draft...

Reclamation Plan Requirements, Subpart 4.

- Reclamation plans shall be prepared by a qualified natural resources professional, ecologist or landscape architect along with a civil engineer

Permit applications shall include:

- Description of agricultural or forestry history (previous decade)
- Results of field analysis of soil thickness, both A and B horizons, and depth to C horizon
- Results of laboratory analysis of soil composition and bulk density of soil in the A and B horizons, and of organic matter and humus in the A horizon
- Steps required to restore fertility, soil microorganisms, organic matter and bulk density to a level no less than existed prior to mining
- For sites with a recent history (previous decade) of agriculture, provide a statement from a qualified expert (soil scientist or agronomist) regarding the feasibility of restoring the site to a condition suitable for agriculture (crops, pasture, barns, operations, storage, etc.) and, if so, in what time frame and with what required actions or inputs
- If farming is feasible, the opinion of a qualified expert (hydrologist) regarding the potential impact of farming, including manure and conventional corn/soybean rotation or corn/corn crop production systems, on surface and ground water.
- For sites with a recent history (previous decade) of forest management activity or timber production, provide a statement from a qualified expert (Certified Forester or soil scientist) regarding the feasibility of restoring the site to a condition suitable for forestry
- Statement from a qualified expert (geologist or hydrologist) as to whether or not any geologic materials that are protective of ground water will be disturbed or removed from the site and, if so, how the resulting loss of protection will be mitigated
- Map and description of “existing conditions” of biological resources, cultural resources, plant communities and wildlife use
- Map and description of pre-settlement vegetation (vegetation described in the Original Land Survey)
- Results of field survey conducted by a qualified expert (ecologist or other natural resources professional) of vegetation and wildlife, including no less than these:

vegetation cover type, listing of all native and non-native species and relative density, description of species diversity

- Quantifiable standard by which vegetation will be assessed to determine that a suitable stand has been established on the site to support the post-mining land use
- Natural Heritage Review (Minnesota Department of Natural Resources, Division of Ecological and Water Resources)
- If topsoil substitute or off-site material is to be used in reclamation, a description of the source, nature and volume of material
- Map of streams and rivers within one mile of proposed project.

Topsoil management:

- Soil in storage shall not be compacted
- Soil horizon A and horizon B shall be stockpiled separately and replaced in the same soil sequence
- Soil shall be protected and stabilized at all times with the use of a cover crop or natural vegetation (perennial grasses and forbs) and other erosion control practices
- At no time shall soil sit unprotected for more than one week.

Reclamation requirements:

- Topography restoration shall make provision for creation of perched, vegetated wetlands along the Decorah, St. Lawrence or other geologic edge where subsurface water may fall (seep) from one geologic layer into a lower layer due to the presence of shale or other impermeable layer
- Topography restoration shall make provision for creation of wetlands or vegetated infiltration zones/buffers as needed to clean surface water, mitigate the loss of geologic materials that are protective of groundwater (toe of slopes, etc.) and support the base flow of streams.

Subpart 5, G:

- Lowest floor elevation shall be stated numerically and in relation to an established baseline such as mean sea level (MSL).