Comparison of the 8-19-13 Draft to the Current Chapter 133

Problem Definition

Current: The current Chapter 133 uses the term "significant risk" to indicate a problem. *Significant risk* is defined as "the presence in groundwater of a contaminant in excess of an action level." An *action level* is basically defined as a contaminant concentration that is equal to, and in some cases less than, the contaminant's drinking water standard.

Proposed: A problem in accordance with the proposed Chapter 133 would be based on an actual or likely exposure to contamination that would pose an unacceptable health or ecological risk. A contaminant in drinking water standard above the contaminant's drinking water standard would be considered an unacceptable health risk similar to the current Chapter 133. However, instead of applying to all groundwater, it would apply only to groundwater that is used or is likely to be used for drinking water.

Scope

Current: The current Chapter 133 is applicable to all contaminant releases to groundwater, except releases of petroleum from underground storage tanks subject to regulation under Chapter 135.

Proposed: The proposed Chapter 133 would be applicable to all contaminant releases to the environment that are not under the jurisdiction of another regulatory program. As such, it would not be limited only to groundwater-related contamination. In particular, it would establish the DNR's only comprehensive standards for soil and indoor vapors (resulting from vapor intrusion). The chapter would primarily address contamination associated with a viable party who is responsible for the contamination.

Liability

Current: In the current chapter, the person or persons responsible for the contamination — essentially *a person having control over a hazardous* substance as defined in Iowa Code section 455B.381 — is a responsible party. Joint and several liability is specified, meaning if more than one responsible party exists, but all are not viable, the viable responsible party(ies) can be held liable for all necessary costs.

Proposed: The proposed chapter would have no change regarding who is a responsible party. However, joint & several liability would be eliminated, such that a viable responsible party would only be liable for the portion of the contamination they contributed.

Reporting

Current: There are no reporting provisions in the current Chapter 133. Statutory requirements for reporting of a hazardous condition apply. However, the statutory definition of hazardous condition is extremely vague.

Proposed: The proposed chapter would more clearly define what constitutes a hazardous condition —called a condition warranting remedial action (CWRA) in the proposed rules— and only require reporting of a CWRA. As such, most findings of contaminants would not be required to be reported.

Cleanup Philosophy

Current: The cleanup philosophy in current chapter can best be described as one of *universal cleanup standards* for groundwater. Universal cleanup standards are applicable to every drop of groundwater. The current rules allow for what amounts to *risk-based standards* when the universal cleanup standards cannot be reasonably attained, which is most of the time. Therefore, in practice the DNR has implemented risk-based standards.

Proposed: A straightforward adoption of reasonable, risk-based principles is proposed for Chapter 133.

Anticipated Impacts

1. **Clarify reporting requirements**. The proposed rule should clarify reporting requirements. Now when evidence of contamination is found it is not clear when it must be reported. Currently the DNR *recommends* reporting when an exceedence of a statewide standard is found, which is significantly more stringent than what is being proposed.
2. **Limit DNR's authority to require action**. The proposed rules would substantially limit the DNR's ability to require actions in response to the finding of contamination in the ways listed below.
   - Evidence would have to demonstrate the existence of an *indeterminate condition* or a *condition warranting remedial action* before the DNR could require any action.
   - The DNR could only require cleanup action of a party responsible for the contamination, which would include the property owner only if the property owner caused, contributed, and exacerbated the contamination.
   - The DNR could require only on-site investigative actions by a property owner who is not a party responsible for contamination and then only when there is evidence that off-site contamination exists or is likely to exist in the foreseeable future.
   - The DNR could not require any action unless there is evidence that off-site contamination exists or is likely to exist in the foreseeable future.

Comment: While the above provisions would greatly limit the DNR's authority to require action in response to finding evidence of contamination, to do otherwise would be create another set of problems. The DNR is aware that varying degrees of contamination exist at a huge number of locations throughout the state, the majority of which have not been identified. Most new evidence of contamination is obtained from phases 2 environmental assessments (Phase 2s) conducted to facilitate property transfers. The DNR does not require Phase 2s for property transfers. Absent a comprehensive statewide program to identify contamination situations, it would be unfair to place burdensome requirements on parties who voluntarily look for and find evidence of contamination. Furthermore, burdensome requirements would be a disincentive to look for contamination in the first place and would increase brownfield concerns resulting in more urban decay and suburban sprawl. A goal of Chapter 133 is to provide reasonable standards that will facilitate productive reuse of properties. This approach might be viewed as being lax on protecting human health and the environment. However, it should be recognized that:

- the more significant environmental problems have already been dealt with,
- modern environmental regulations prevent creation of most new contamination situations, especially major ones,
- more significant contamination problems tend to become manifest on their own, e.g., contaminants showing up in mandatory samples of public drinking water,
- newly identified contamination situations (such as from a Phase 2) tend to be relatively minor and localized, often posing only a possible future risk, not a current risk, and
- risks posed by exposure to contaminants from legal use of common products often equal or exceed potential risks from exposure to environmental contaminants.

3. **Less stringent cleanup criteria**. The proposed rules would have cleanup criteria that are less stringent that exist in Chapter 137, in some cases substantially less stringent. The document entitled *" Rationale for Establishing Reasonable Environmental Standards for the Proposed Rewrite of Chapter 133"* (available at the following Internet address http://www.iowadnr.gov/Portals/idnr/uploads/consites/133_proposedlogic.pdf) describes the strategies that would result in less stringent standards including:

   - basing standards on lesser amount of assumed exposure,
   - adjusting non-cancer toxicity values,
   - using alternative low-dose cancer-risk models,
   - using OSHA air standards,
   - using standards based on cross-media migration contamination only for screening purposes, and
   - prescribing more reasonable means for establishing location of exposure and exposure point concentrations.

4. **More protective provisions**. While the proposed chapter would generally specify less stringent provisions compared to current rules, a few provisions would be more protective, including:

- A CWRA for synthetic organic compounds (SOCs) in actual drinking water would be 10% of the MCL, instead of the MCL.
- Universally applicable criteria for contaminants in soil and indoor vapors would be prescribed for the first time. That is, what is considered to be problematic contamination of soil and indoor vapors would be defined for a wide range of contaminants in situations that are not under the purview of another regulatory program.
- A new acute standard would be imposed for contaminants in soil, such that at single soil sample with a contaminant above its acute standard would be considered problematic. This is in contrast to general soil standards for which compliance would be based on average concentrations of contaminants in soil over a larger area.
- Greater emphasis would be placed on assessing the potential impact of contaminants migrating from one medium to another, e.g., contaminants in groundwater causing vapor intrusion.

5. **Allow evaluation and cleanup without DNR involvement**. Despite lack of required reporting, the criteria for an indeterminate condition and a CWRA in the proposed chapter would enable the regulated public to self evaluate and even cleanup contamination situations without the DNR's involvement in most cases. Reporting evidence of contamination that does not confirm a CWRA would be optional and could still be done by a party desiring DNR's guidance in addressing contamination. In addition, the DNR would have the discretion to use professional judgment to make a no further action classification of a situation that otherwise qualifies as an indeterminate condition.