

March 2, 2007

Alex Moon
Energy and Waste Management Bureau
Iowa Department of Natural Resources
502 E. 9th Street
Wallace State Office Building
Des Moines, Iowa 50319-0034

Dear Mr. Moon:

Re: Comments on proposed Iowa Administrative Code 567 Chapter 113

The attached comments reflect the opinion of the Board of Directors of the South Central Iowa Solid Waste Agency regarding Iowa Administrative Code 567 Chapter 113 “Sanitary Landfills for Municipal Solid Waste: Groundwater Protection Systems for the Disposal of Non-Hazardous Wastes.”

The Agency wishes to thank the Department for its efforts to include participation by the regulated community during development of the proposed rules and through the use of small groups to discuss possible resolutions for concerns raised after the release of the proposed rules. We look forward to reviewing the Department’s responses to public comments as part of the Responsiveness Summary.

Thank you for your consideration.

Sincerely,

South Central Iowa Solid Waste Agency

Roger D. Schletzbaum
Chairman

Sara L. Bixby
Director

Attachment



Comments Regarding 567—Chapter 113 “Sanitary Landfills for Municipal Solid Waste: Groundwater Protection Systems for the Disposal of Non-Hazardous Wastes”

Comment 1: Process

In making changes to existing rules, the Department has historically provided a redlined version that through the use of strikeovers and underlining or highlighting shows both the original language and the changes being proposed (additions and deletions). With “replacement” Chapter 113, the Department did not do so, instead leaving it to each individual or organization to find the effects, if any, of the proposed language on the existing rule. That approach may well have contributed to the tension between the regulated community and the Department during the rule-making process.

It would be greatly appreciated if the Department would return to its use of redlined/highlighted text in future rule-making.

Comment 2: *113.1(3)...Therefore, the purpose of this chapter is to prevent groundwater contamination from MSW landfills to the maximum extent practical, and if necessary to restore the groundwater to a potable state, regardless of present condition, use, or characteristics.*

As written, this language implies that MSWLFs may be expected to clean or restore groundwater to a higher standard (potable state) than exists upgradient of an existing facility or prior to the development of a new facility. This is not a realistic expectation.

Comment 3: *113.2 (4) This chapter does not apply to municipal solid waste landfill units that did not receive waste after October 9, 1991. A general closure permit issued pursuant to IAC 567—Chapter 102, shall govern such landfills.*

Based on discussion with the Department and a small number of representatives of the regulated community, SCISWA recommends changing this section to read:

This chapter does not apply to MSWLF units that did not receive waste after October 9, 1994. The closure permit issued or the rules in effect at the time of closure shall govern post closure activities at such MSWLF units.

Comment 4: *113.2 (6) Municipal solid waste units failing to satisfy these criteria are considered open dumps for the purpose of State solid waste management planning under RCRA. Municipal solid waste landfill units failing to satisfy these criteria constitute open dumps, which are prohibited under section 4005 of RCRA.*

This language may have been pertinent when Subtitle D was initially drafted and adopted in the 1990s. However, the Department has previously recognized many of the landfills in Iowa as compliant with Subtitle D even though those landfills may now be non-compliant with the proposed rules. The Department also notes in its preamble to the rules that some sections of the

proposed rules are more restrictive than the federal program. Landfills that satisfy the federal rule but fall short of a state rule that exceeds the federal standard are not “open dumps” under RCRA, nor should they be labeled “open dumps” by the Department. These facilities are far advanced from the old unlined dumps targeted for closure by RCRA and Subtitle D.

Comment 5: *113.2 (9) a Existing MSWLF units that cannot make the demonstration specified in paragraphs 113.6(2) “a” pertaining to airports, 113.6(2) “b” pertaining to floodplains, or 113.6(2)”f” pertaining to unstable areas, must close in accordance with rule 113.12 and conduct postclosure activities in accordance with rule 113.13.*

Landfills closing for their inability to comply with the referenced sections should be allowed to close and complete post closure activities following the rules in effect at the time they were in operation, not those adopted concurrent with or after they cease operation. Landfills that are closing have developed their post closure plans and financing to meet existing rules, not the significantly increased levels included in the proposed rules. The Department has the ability to increase post-closure requirements for individual landfills based on site-specific monitoring results. This seems a more prudent fiscal approach than raising standards for all landfills being closed at the same time those landfills also lose their primary funding source (tipping fees).

Comment 6: *113.2(9)b Existing MSWLF units that do not comply with the leachate collection and liner requirements of subrule 113.7(5) shall close by October 1, 2007 in accordance with rule 113.12 and conduct postclosure activities in accordance with rule 113.13.*

The South Central Iowa Solid Waste Agency (SCISWA) supports the October 1, 2007 deadline for compliance with Subtitle D basal liner and leachate collection system requirements. This deadline was negotiated between the Environmental Protection Agency and the Department with input from the regulated community and publicized to the regulated community in 2005. The deadline implements Subtitle D requirements adopted nationally in 1993 and delegated to the Department for enforcement in 1997. The need to comply with these requirements should not come as a short-term surprise to members of the regulated community.

An e-mailed correspondence from John Skinner, Executive Director of the Solid Waste Association of North American (SWANA) to SCISWA Director Sara Bixby also speaks to this point:

“...This exemption for existing units was not intended to provide a loophole to avoid the liner and leachate collection requirements over a long period of time....SWANA believes that since it has been more than thirteen years since the promulgation of these requirements, existing units, not in compliance with the liner and leachate collection requirements, should be closed as soon as practical and wastes should be landfilled in new units in compliance with the requirements.”

Landfills that do not comply with the referenced leachate collection and basal liner requirements should be allowed to close and complete post closure activities following the state rules in effect at the time they were in operation, not those adopted concurrent with or after they cease operation. Local decision-makers relied on the Department as a credible resource for interpreting, implementing and enforcing federal standards and made local plans for closure and

post-closure on that basis. The existing rules allow the Department to increase post-closure requirements for individual landfills based on site-specific monitoring results. This is a more reasoned and fiscally prudent approach than a universal increase in requirements that will create a disincentive for closure.

Comment 7: *113.4(3) Transfer of title and permit*

The change allows a permit transfer for owners that contract for operation. The owner should be required to inform the Department of the identity of the contract operator at the time of permit transfer.

Comment 8: *113.4(5) Effect of revocation*

The subsection says that no new MSWLF permit shall be issued to a public or private agency for that MSWLF for a period of one year from the date of revocation. The language should also apply the effects of the revocation to the contract operator if operating items were a factor in the revocation.

Comment 9: *113.4(6) Inspection of site and operation. The Department shall be notified when the construction of a new facility or MSWLF unit or significant components thereof has been completed so that the Department may inspect the facility to determine if the project was constructed equal to or better than the design approved by the Department.*

Wouldn't "better than" constitute a design change and require Department approval of a plan change? Who decides and approves "better than" and at what point during the process? SCISWA recommends striking the words "or better than" as it creates the potential for problems during inspection and approval.

Comment 10: *113.4(7) "a" Operating permits. MSW permits shall be issued and may be renewed for a period no longer than five years...*

SCISWA supports increasing the length of an MSWLF permit beyond three years and appreciates the five year period proposed. However, landfill design and cell construction plans often extend longer than five years. We suggest providing for a longer permit (i.e. 10 years) with a mandatory design and operations update at the end of five years or as new cell construction begins, whichever comes first.

Comment 11: *113.4(11) Factors in permit issuance...The Department may issue a permit on a trial basis.*

What does it mean to issue a permit on a "trial basis?" Doesn't every permit issued have the potential to be pulled for non-compliance? Are there different procedures or criteria for ending permits issued on a trial basis than for those issued as MSWLF permits or RD&D permits? SCISWA recommends striking the sentence "The Department may issue a permit on a trial basis."

Comment 12: 113.4(12) Notice and public participation in the MSWLF permit issuance and post-permit actions process.

The requirement to notify the public of changes in the MSWLF permit (i.e. permit renewal or amendment) should differentiate between major and minor permit changes. MSWLF permits amended for minor operating changes should not be subject to the public notification requirements. Minor operating changes might include such items as:

- Moving the location of a recycling area
- Adding a new material item (e.g., CRTs or brown goods) to those accepted in on-site recycling programs
- Adding or deleting individual groundwater, surface water, or gas monitoring points
- Changes in service area otherwise addressed as a change to the approved service area in the comprehensive solid waste management plan
- Changes to the Emergency Response and Remedial Action Plan

Similarly, major changes might include:

- Increasing landfill volume by more than a specified amount (e.g., 20 percent)
- Deleting more than a specified number or percentage (e.g., 25 percent) of the groundwater, surface water, or gas monitoring points without replacement
- Adding an engineered process or technology component (e.g., landfill gas recovery, leachate recirculation)

Some other implementation clarifications are also needed:

- Define “geographical areas of the MSWLF.” Is this intended to mean within the MSWLF’s service area? That’s a very different definition for the SCISWA (four member counties and one contracted customer county) than for Metro Waste Authority (one member county and a contracted customer county) than for Sac County (one county).
- Should publication of the public notice occur only in the county that hosts the MSWLF (geographic location), in all member counties, or in all counties sending waste to the MSWLF?
- Many counties don’t have a newspaper of general circulation. Some counties designate a number of official county newspapers, though that may not include all of the local newspapers in some areas. MSWLFs serving multiple counties are even less likely to have a newspaper of general circulation. Without additional detail, this rule has the potential to add a considerable amount to MSWLF operating costs.

- Who provides public notice of a hearing outlined in 113.4(12)“g” – the Department or the applicant?
- The Department should provide the applicant MSWLF with copies of all comments received from the public or affected government agencies in all cases but definitely prior to holding a public hearing on the application so that the relevant issues and concerns may be addressed.

Comment 13: 113.6(2)“l” Housing and sensitive populations

Add the word “original” to this section as follows:

A MSWLF unit shall not be within 500 feet of an occupied residence, recreational area, child care facility, educational facility, or health care facility in existence at the time of receipt of the original permit application, unless there is a written agreement with the owner of such facility.

Landfills are required to submit permit applications every three to five years under the current and proposed rules, respectively. Without referencing the “original” permit application, the language proposed by the Department could force host community or neighbor agreements to be developed in response to any permit application, most of which will occur long after a landfill has been sited and become operational.

Comment 14: 113.6(3) Soil and hydrogeologic investigations

Because the proposed rule provides the Department the authority to issue approvals based on site specific conditions, the Department review should also be completed by a qualified groundwater scientist as defined in paragraph 113.10(1) “d.”

Comment 15: 113.6(3) “a” Number of borings

SCISWA supports the intention of the comment developed by Geosyntec under contract to the Iowa Society of Solid Waste Operations:

The minimum number of borings required for characterizing new MSWLF units should be based on the hydrogeologic and stratigraphic characteristics of the proposed site, as well as its size, rather than on a prescribed number.

Comment 16: 113.7(5) “a” (1) 4 The composite liner must slope toward the leachate collection pipes at a slope greater than or equal to 2%. The side slopes of the composite liner shall not exceed a slope of 33%.

SCISWA supports the intention of the findings of Geosyntec in response to this item:

The maximum liner system side slopes and the minimum slope of liner system abutments should be based on site specific conditions and engineering and operational criteria rather than a prescribed value.

The Department's fiscal impact statement acknowledged that its rule is more prescriptive than the federal requirements. SCISWA supports the addition of rule language that would allow an alternative design providing equivalent protection to the prescriptive design included in the proposed rule.

Comment 17: *113.7(5) "b" 7 Leachate collection system*

This rule is prescriptive and does not accommodate either site specific conditions or future changes in best practices. Design of leachate collection systems should be based on the quantity of leachate generated, the requirement to maintain leachate head at no more than one foot, and locally available materials. SCISWA supports the comments on this item submitted by its site engineer, Foth Infrastructure & Environment (Foth).

SCISWA also supports the intent of the comment developed by Geosyntec in reference to measuring leachate head on the liner (IAC 567-113.7(5)"b"(3)):

The requirement to measure leachate head on the liner at a secondary location rather than in the sump or within the collection trench should be deleted. Until sensors that are more robust are developed, readings from the non-retrievable sensors required to collect the Department-specified measurements will be of questionable reliability.

Comment 18: *113.7(6) ...A double ring infiltrometer test shall be utilized as a final QC&A test of the compacted soil portion. Electrical resistivity testing is required for the FML.*

The requirements to use double ring infiltrometer testing and electrical resistivity testing are prescriptive and require test methods that may not be suitable in all applications. For example, SCISWA's site engineer notes that electrical resistivity testing will be less effective for landfills that use a geocomposite drainage net as part of their leachate collection system. Similarly, Foth notes that other test methods, less costly and time consuming than a double ring infiltrometer, are available for testing hydraulic conductivity of a compacted clay liner. Construction of new MSWLF units would be unacceptably delayed by the use of double ring infiltrometer testing, which can require 30 to 60 days to receive results.

Comment 19: *113.7(7) Vertical and horizontal expansions of MSWLF units*

SCISWA commends the Department's willingness to allow lined cells to abut unlined airspace through the use of an abutment liner. This approach will help to recover some of the planned disposal capacity otherwise lost through the implementation of this rule change. The Department's compromise position exhibits reasonable consideration for both environmental protection and cost effectiveness. It may also help avoid the future need to site new landfills to replace the lost airspace.

SCISWA understands the Department's concern for groundwater protection, differential settlement, slope failure and other risks associated with using abutment areas. However, we believe professional engineers can address the design of an abutment liner and the environmental protection concerns on a site specific basis and that preferred design may vary from the Department's proposed prescriptive 20 percent slope.

SCISWA supports the intention of the findings of Geosyntec in response to this item:

The maximum liner system side slopes and the minimum slope of liner system abutments should be based on site specific conditions and engineering and operational criteria rather than a prescribed value.

Comment 20: 113.8(1)"b" 2 *The waste is leachate or gas condensate derived from the MSWLF unit and the MSWLF unit, whether it is a new or existing MSWLF unit or lateral expansion, is designed with a composite liner and leachate collection system as described in paragraph 113.7(5) "a."*

The proposed text appears to bring the Department's rules into conformance with the EPA prohibition on recirculation of leachate in MSWLF units that do not contain a geomembrane. This prohibition was published December 16, 1998 and states in part "Leachate recirculation is not allowed in MSWLF units that meet §258.40(a)(1), i.e., units that are constructed with alternative liner designs."

Because it is currently operating in an alternative lined cell, the SCISWA has developed a leachate management system that does not include recirculation. However, we note the Department has allowed other landfills with alternative lined cells to recirculate leachate in those cells. We encourage the Department to enforce its rule on this practice in a consistent manner.

Comment 21: 113.8(2) "f" Cover material and alternative cover material

Further clarify the language in paragraphs (1) and (2) of this subsection to make it apparent that alternative cover material does not need to be applied to a depth of 6 inches (daily cover) or 1 or 2 feet (intermediate cover). The words the approved depth or application of could be added in front of the words "alternative cover material" in each of these paragraphs to provide the needed clarification.

Comment 22: 113.8(2) "g" Leachate seeps

We suggest the Department replace the word "immediately" to create a more achievable standard. One approach would be:

Leachate seeps shall be contained and plugged as soon as practical upon being identified but under no circumstance shall a seep be allowed to reach waters of the state.

Comment 23: 113.8(2) "h" Leachate recirculation

The proposed rule on prohibited operations and activities have already identified (IAC 567-113.8(1)"b" 2) that leachate recirculation can occur only over a composite liner. This standard, if it is to be enforced, should also be added here as an allow disposal operation and activity.

Comment 24: 113.8(3) “f” litter control

The rule as proposed does not set any limits on the responsibility of the operator to collect off-site litter. Nor does the Department differentiate between windblown litter leaving a site and littering from vehicles coming to or passing by a site. Operators are legitimately responsible to prevent and collect windblown litter blowing offsite but should not be at risk of a violation if something is thrown or falls from a passing vehicle onto a road or ditch near the landfill.

Comment 25: 113.8(5) Emergency Response and Remedial Action Plan

SCISWA supports the changes proposed for the contents and organization of an Emergency Response and Remedial Action Plan (ERRAP). These were developed with input from the regulated community.

Comment 26: 113.10(2) “e” (2) Designed and constructed with a maximum of 300 feet between down gradient groundwater monitoring wells

SCISWA supports the intention of the comment developed by Geosyntec under contract to the Iowa Society of Solid Waste Operations:

The maximum spacing between down gradient monitoring wells should be based on site-specific conditions rather than a prescribed value. The rules should contain a mechanism for consideration of well spacing wider than the proposed prescribed spacing of 300 feet. This mechanism should be based on site-specific analysis or modeling.

Comment 27: 113.10(2) “f” (4) Every five years conduct in-situ permeability tests on monitoring wells to compare test data with those collected originally to determine if well deterioration is occurring

SCISWA supports the comments on this item submitted by Foth. The item should be removed from the proposed rules and well deterioration determined by a qualified groundwater scientist based on site-specific data and laboratory analysis.

Comment 28: 113.10(3) Surface water monitoring systems

Landfills already have NPDES permits. The Department should seek ways to address its concerns for surface water monitoring through modification of those permits rather than through development of a new rule and an additional sampling program.

Comment 29: 113.10(5) “a” Detection monitoring program

SCISWA supports the intention of the comment developed by Geosyntec under contract to the Iowa Society of Solid Waste Operations:

The final rule should include a mechanism that allows the Department to approve the use of an alternative list of detection monitoring constituents based on typical constituents detected in MSW leachate and site-specific conditions.

SCISWA endorses an approach for this mechanism that requires sampling for the full Appendix I list four times in the first year after the rule becomes effective to develop adequate understanding of the site-specific conditions prior to considering use of an alternative [shorter] list. This approach would also replace the requirement to collect four samples from each background and down gradient well for all Appendix I constituents and indicator parameters during the first semi-annual sampling event.

Comment 30: *113.10(6) Assessment monitoring program*

The rule should require that the well showing an SSI over background be resampled within one month of the original high reading to confirm the findings. An assessment monitoring program should be required only if the high reading is confirmed in that resample. If the high reading is not repeated, the detection monitoring program should continue.

Comment 31: *113.12(1) “e” The final cover system must have a slope between 5 percent and 25 percent.*

The slope of the final cover system should be designed based on site-specific engineering and operations criteria rather than limited to the proposed prescribed range.

Comment 32: *113.13(1) ...Post closure care must be conducted for 30 years, except as provided under subrule 113.13(2) ...*

SCISWA supports the use of the 30 year post closure period and the authorization provided the Department under 113.13(2) to increase or decrease the length of that period. By specifying 30 years, the rule provides a finite time frame landfill owners can use in estimating annual requirements for financial assurance and the annual deposits to the closure and post closure accounts.

Comment 33: *113.14(8) Closure and post closure accounts*

The proposed rules will increase the number of down gradient groundwater monitoring wells and annual sampling costs incurred by SCISWA. A wide variety of cost estimates have been made across the state as a result of these rules but the true impact on each landfill won't be known until a new Hydrologic Monitoring System Plan can be completed for each site some months following the effective date of the rule.

SCISWA uses multiple mechanisms to meet the requirements for financial assurance, which is a federal requirement. We can continue this approach after the effective date of the new rule to remain compliant with the federal stand. SCISWA also deposits money into its state-required dedicated reserve fund for closure and post closure care on a monthly basis. The potential exists that the new cost estimate, including additional wells and sampling constituents, in combination with the loss of disposal capacity driven by the October 1, 2007 deadline will create an annual deposit requirement that exceeds the amount SCISWA can reasonably deposit. The rule should include a period of time (i.e. 10 years) during which landfill owners can build up the balance needed to satisfy the new requirements.

Comment 34: Request for new section for *Implementation Schedule*

Department staff has indicated they are considering an effective date of October 1, 2007, for proposed Chapter 113. Landfills staying open after this date will require time to implement the requirements of the new rules and should be allowed to do so without risk of regulatory violation if they make changes in a timely manner.

SCISWA asks that the Department add a new section addressing implementation schedules under which active landfills would be allowed 3½ years from October 1, 2007 or the effective date of the rules, whichever is later, to fully comply with all requirements of the new Chapter 113. We suggest this language include the following provisions:

- Waive groundwater monitoring in October 2007 because the constituents are changing as are the monitoring requirements
- Waive the need for an Annual Ground Water Quality Report (AGWQR) in November 2007 – no monitoring, no need for a report
- Remove requirements for semi-annual engineer’s inspections beginning October 2007
- Start Appendix I sampling in spring 2008
- Require landfills to update their Hydrologic Monitoring System Plan (HMSP) to determine the validity of existing wells and the need for additional down gradient wells to meet the spacing and location requirements of the new rule
- Allow landfills that meet basal liner requirements but negatively affected by the Environmental Protection Agency’s November 9, 2006 letter on side slope liners (i.e. abutment liners between compliant and non-compliant MSWLF units) to work themselves into compliance during the 3½ year period following a compliance plan they present to the Department within six months of the effective date of the rules.