

ILLINOIS POLLUTION CONTROL BOARD
June 23, 1994

IN THE MATTER OF:)
)
STEEL AND FOUNDRY INDUSTRY) R90-26 (Docket B)
AMENDMENTS TO THE LANDFILL) (Rulemaking)
REGULATIONS (35 Ill. Adm.)
Code 817.309))

Proposed Rule. Second Notice.

OPINION AND ORDER OF THE BOARD (by R.C. Flemal):

By order of March 31, 1994 in this matter, the Board separated out one section from the then pending steel and foundry industry landfill rules for the purposes of sending that section to first notice. The section in question, 35 Ill. Adm. Code 817.309, had been first introduced into the record subsequent to first-notice adoption of the rest of the steel and foundry industry proposal. By today's action the Board adopts Section 817.309 for second notice.

The Board's responsibility in this matter arises from the Environmental Protection Act (Act) (415 ILCS 5/1 et seq. (1992)). The Board is charged therein to "determine, define and implement the environmental control standards applicable in the State of Illinois" (415 ILCS 5/5(b)). More generally, the Board's rulemaking charge is based on the system of checks and balances integral to Illinois environmental governance: the Board bears responsibility for the rulemaking and principal adjudicatory functions, whereas the Illinois Environmental Protection Agency (Agency) is responsible for carrying out the principal administrative duties. The latter's duties include administering any regulation that may result from the instant proceeding.

DISCUSSION

This matter concerns the proposed addition of a new Section to the regulations governing landfilling of wastes from the steel and foundry industries, as proposed in Docket R90-26(A)¹. The R90-26(A) rules were proposed by the Illinois Steel Group and the Illinois Cast Metal Association (collectively as SFG) under the premise that certain wastes generated by the steel and foundry

¹ In the Matter of: Steel and Foundry Industry Amendments to the Landfill Regulations (35 Ill. Adm. Code 810 through 185 and 817) R90-26 Docket A. Docket R90-26(A) is currently under review by the Joint Committee on Administrative Rules.

industries are sufficiently distinct from other regulated nonhazardous wastes that some unique provisions governing their disposal are warranted.

During the first-notice pendency of the R90-26(A) rules, the Board posed the question of whether the then existing standards of the location of potentially usable waste (PUW) landfills were adequate. The SFG responded² in part by proposing new Section 817.309, the subject of today's action.

The instant matter was set to first notice by Board order of March 31, 1994³; publication occurred at 18 Ill. Reg. 6246, April 29, 1994. The first-notice comment period ended on June 13, 1994. Four first-notice public comments were received, number PC #25 though PC #28.

In PC #25 Browning-Ferris Industries expresses its belief that proposed Section 817.309 is "an important step in the right direction" of "ensur[ing] that steel and foundry industry wastes are disposed of in environmentally protective facilities".

PC #26, filed by Waste Management Inc. - Midwest (WMI), consists of a request for a Board determination of the need for groundwater impact assessments under 35 Ill. Adm. Code 811.302. Although WMI correctly observes that today's proposed Section 817.309 is modeled after Section 811.302, the applicability of the two sections is not the same. The WMI request is accordingly inappropriate in the instant action.

PC #27, filed by the Illinois Department of Commerce and Community Affairs (DECCA), is DECCA's determination that the instant proposal does not impact small businesses.

In PC #28 the SFG proposed to amend the first-notice language at 817.309(b) as follows:

- b) No part of a unit shall be located within the recharge zone or within 366 meters (1200 feet), vertically or horizontally, of that portion of a geological formation containing Class I or Class III aquifer groundwater as defined at 35 Ill. Adm. Code Part 620, unless there is a stratum between the bottom of the waste disposal unit and the top

² The interested person is directed to the Board's opinion and order of this same date in Docket B for a full discussion of the location standards provision.

³ In the Matter of: Steel and Foundry Industry Amendments to the Landfill Regulations (35 Ill. Adm. Code 817.309) R90-26 Docket B, ___ PCB ___, March 31, 1994.

of the aquifer that meets the following minimum requirements:

The Board believes that this proposal generally addresses the concerns the Board expressed in its first notice opinion regarding use of "aquifer" within this subsection. The Board accordingly accepts these conceptual changes.

However, the Board does make two modifications for the purposes of additional clarity. The first is to replace "geological formation" with "stratigraphic unit". A "formation" is a term of art within the geologic profession that has a narrow definition based on parameters generally unrelated to groundwater considerations. Conversely, "stratigraphic unit" is a general term applicable to any distinguishable body of earth materials. The latter is the meaning desired.

The second change is to replace the second occurrence of "aquifer" with the phrase "Class I or Class III groundwater". This change is consistent with the first deletion of "aquifer" and, in the replacement phrase, provides the added clarity that it is the top of the Class I or Class III groundwater⁴ that is of interest.

The result is to amend Section 817.309(b) as follows:

- b) No part of a unit shall be located within the recharge zone or within 366 meters (1200 feet), vertically or horizontally, of that portion of a stratigraphic unit containing Class I or Class III groundwater as defined at 35 Ill. Adm. Code Part 620, unless there is a stratum between the bottom of the waste disposal unit and the top of the aquifer Class I or Class III groundwater that meets the following minimum requirements:

These constitute the only changes made today to the proposal as adopted at first notice.

ORDER

The Board hereby directs that second notice of the following proposed amendment to the landfill regulations be submitted to the Joint Committee on Administrative Rules.

The Board notes that, for the purposes of the instant order only, all provisions that have been added since first notice are

⁴ The Board notes that as of this date no groundwaters have yet been classified as Class III groundwaters.

indicated by redlining, and that all provisions that have been deleted since first notice are indicated by strike-throughs.

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE G: WASTE DISPOSAL
CHAPTER I: POLLUTION CONTROL BOARD
SUBCHAPTER i: SOLID WASTE AND SPECIAL WASTE HAULING

PART 817
REQUIREMENTS FOR NEW STEEL AND FOUNDRY INDUSTRY WASTES LANDFILLS

SUBPART A: GENERAL REQUIREMENTS

Section
817.101 Scope and Applicability
817.103 Determination of Waste Status
817.104 Sampling Frequency
817.105 Waste Classification
817.106 Waste Classification Limits
817.107 Waste Mining

SUBPART B: STANDARDS FOR MANAGEMENT OF BENEFICIALLY USABLE
STEEL AND FOUNDRY INDUSTRY WASTES

Section
817.201 Scope and Applicability
817.202 Limitations on Use
817.203 Notification
817.204 Long-Term Storage

SUBPART C: STEEL AND FOUNDRY INDUSTRY POTENTIALLY
USABLE WASTE LANDFILLS

Section
817.301 Scope and Applicability
817.302 Design Period
817.303 Final Cover
817.304 Final Slope and Stabilization
817.305 Leachate Sampling
817.306 Load Checking
817.307 Closure
817.308 Nuisance Precautions
817.309 Facility Location

SUBPART D: NEW STEEL AND FOUNDRY INDUSTRY LOW RISK WASTE
LANDFILLS

Section
817.401 Scope and Applicability
817.402 Facility Location
817.403 Design Period
817.404 Foundation and Mass Stability Analysis
817.405 Foundation Construction
817.406 Liner Systems
817.407 Leachate Drainage System

- 817.408 Leachate Collection System
- 817.409 Leachate Treatment and Disposal System
- 817.410 Final Cover System
- 817.411 Hydrogeologic Site Investigations
- 817.412 Plugging and Sealing of Drill Holes
- 817.413 Groundwater Impact Assessment
- 817.414 Design, Construction and Operation of Groundwater Monitoring Systems
- 817.415 Groundwater Monitoring Programs
- 817.416 Groundwater Quality Standards
- 817.417 Waste Placement
- 817.418 Final Slope and Stabilization
- 817.419 Load Checking

SUBPART E: CONSTRUCTION QUALITY ASSURANCE PROGRAMS

Section

817.501 Scope and Applicability

Section

817.Appendix A Organic Chemical Constituents List

AUTHORITY: Implementing Sections 5, 21, 21.1, 22, 22.17, 28.1, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1991, ch. 111½, pars. 1005, 1021, 1021.1, 1022, 1022.17, 1028.1 and 1027 [415 ILCS 5/5, 5/21, 5/21.1, 5/22, 5/22.17, 5/28.1, and 5/27]).

SOURCE: Adopted in R90-26(A) at 18 Ill. Reg. _____, effective _____; amended in R90-26(B) at 18 Ill. Reg. _____, effective _____.

Section 817.309 Facility Location

- a) No part of a unit shall be located within a setback zone established pursuant to Section 14.2 or 14.3 of the Act.
- b) No part of a unit shall be located within the recharge zone or within 366 meters (1200 feet), vertically or horizontally, of that portion of a stratigraphic unit containing Class I or Class III aquifer groundwater as defined at 35 Ill. Adm. Code Part 620, unless there is a stratum between the bottom of the waste disposal unit and the top of the aquifer Class I or Class III groundwater that meets the following minimum requirements:
 - 1) The stratum has a minimum thickness of 15.2 meters (50 feet);
 - 2) The maximum hydraulic conductivity in both the horizontal and vertical directions is no more than

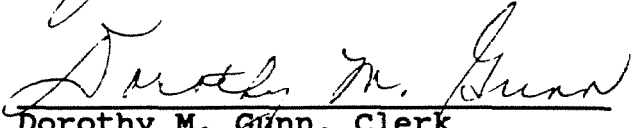
1 x 10⁻⁷ centimeters per second, as determined by in situ borehole or equivalent tests;

- 3) There is no indication of continuous sand or silt seams, faults, fractures or cracks within the stratum that may provide paths for migration; and
 - 4) Age dating of extracted water samples from both the aquifer and the stratum indicates that the time of travel for water percolating downward through the relatively impermeable stratum is no faster than 15.2 meters (50 feet) in 100 years.
- c) Subsection (b) shall not apply to units that accept only beneficially useable waste.
 - d) A facility located within 152 meters (500 feet) of the right of way of a township or county road or state or interstate highway shall have its operations screened from view by a barrier of natural objects, fences, barricades, or plants no less than 2.44 meters (8 feet) in height.
 - e) No part of a unit shall be located closer than 152 meters (500 feet) from an occupied dwelling, school, or hospital that was occupied on the date when the operator first applied for a permit to develop the unit or the facility containing the unit, unless the owner of such dwelling, school, or hospital provides permission to the operator, in writing, for a closer distance.

IT IS SO ORDERED.

Member Emmett E. Dunham, II abstains.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above opinion and order was adopted on the 22nd day of June, 1994, by a vote of 5-0.


Dorothy M. Gunn, Clerk
Illinois Pollution Control Board