# ILLINOIS POLLUTION CONTROL BOARD December 2, 1993

IN THE MATTER OF:	)
	)
STEEL AND FOUNDRY INDUSTRY	) R90-26
AMENDMENTS TO THE LANDFILL	) (Rulemaking)
REGULATIONS (35 Ill. Adm.	)
Code 807, 810 through 815	)
and 817)	)

PROPOSED RULE. SECOND FIRST NOTICE. CORRECTIONS ORDER FOR 35 ILL. ADM. CODE 810.103 AND 817.102 DEFINITIONS.

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

By order of September 23, 1993, the Board authorized publication of a second first notice of these rules. The rules appeared at 17 <u>Ill Reg.</u> 17644 et seq. (October 15, 1993). Certain definitions <sup>1</sup> added in Sections 810.103 and 817.102 were followed by a Board note which states:

The Board has requested that the proponent (steel and foundry) industries to provide a definition of this term.

Definitions of these terms were submitted by the proponent at the October 1 hearing; no challenge was made to the proposed language at the November 19 hearing.

However, staff of the Joint Legislative Committee on Administrative Rules has questioned the fact that no specific language was published at first notice. To avoid delaying the progress of this rulemaking which proponents would like to have concluded as quickly as possible, the Board is today authorizing publication of the definitions as submitted by the proponent. As the post hearing comment period is not scheduled to close until January 18, publication of the new language should not appreciably delay Board decisionmaking.

<sup>&</sup>lt;sup>1</sup> These were definitions for foundry sand, iron slag, steel slag, benefically usable waste, low risk waste, and potentially usable waste. Proponents have suggested that the "iron slag" and "steel slag" definitions be combined into one definition of "slag".

The language authorized for publication is as follows:

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

#### PART 810

## SOLID WASTE DISPOSAL: GENERAL PROVISIONS

Section

810.101 Scope and Applicability

810.102 Severability

810.103 Definitions

810.104 Incorporations by Reference

AUTHORITY: Implementing Sections 5, 21, 21.1, 22 and 22.17, and authorized by Section 27 of the Environmental Protection Act (Ill. Rev. Stat. 1989, ch.  $111\frac{1}{2}$ , pars. 1005, 1021, 1021.1, 1022, 1022.17 and 1027).

SOURCE: Adopted in R88-7 at 14 Ill. Reg. 15838, effective September 18, 1990; amended in R90-26 at 18 Ill. Reg. \_\_\_\_\_, effective

NOTE: Capitalization indicates statutory language.

Section 810.101 Scope and Applicability

This Part applies to all solid waste disposal facilities regulated pursuant to 35 Ill. Adm. Code 811 through 815<u>and 817</u>. This Part does not apply to hazardous waste management facilities regulated pursuant to 35 Ill. Adm. Code 700 through 750.

(Source: Amended at 18 Ill. Reg. \_\_\_\_, effective \_\_\_\_\_

Section 810.103 Definitions

)

Except as stated in this Section, or unless a different meaning of a word or term is clear from the context, the definition of words or terms in this Part shall be the same as that applied to the same words or terms in the Environmental Protection Act (Act) (Ill. Rev. Stat. 1989, ch.  $111\frac{1}{2}$ , pars. 1001 et. seq.):

"Act" means the Environmental Protection Act, Ill. Rev. Stat. 1989, ch. 111<sup>1</sup>/<sub>2</sub>, pars. 1001 et. seq.

"AGENCY" IS THE ENVIRONMENTAL PROTECTION AGENCY ESTABLISHED BY THE ENVIRONMENTAL PROTECTION ACT. (Section 3.08 of the Act.)

"Admixtures" are chemicals added to earth materials to

improve for a specific application the physical or chemical properties of the earth materials. Admixtures include, but are not limited to: lime, cement, bentonite and sodium silicate.

"Applicant" means the person, submitting an application to the Agency for a permit for a solid waste disposal facility.

"AQUIFER" MEANS SATURATED (WITH GROUNDWATER) SOILS AND GEOLOGIC MATERIALS WHICH ARE SUFFICIENTLY PERMEABLE TO READILY YIELD ECONOMICALLY USEFUL QUANTITIES OF WATER TO WELLS, SPRINGS, OR STREAMS UNDER ORDINARY HYDRAULIC GRADIENTS and whose boundaries can be identified and mapped from hydrogeologic data. (Section 3 of the Illinois Groundwater Protection Act (Ill. Rev. Stat. 1989, ch.  $111\frac{1}{2}$ , par. 7453).)

"Bedrock" means the solid rock formation immediately underlying any loose superficial material such as soil, alluvium or glacial drift.

"BOARD" IS THE POLLUTION CONTROL BOARD ESTABLISHED BY THE ACT. (Section 3.04 of the Act.)

"Borrow area" means an area from which earthen material is excavated for the purpose of constructing daily cover, final cover, a liner, a gas venting system, roadways or berms.

"Chemical waste" means a non-putrescible solid whose characteristics are such that any contaminated leachate is expected to be formed through chemical or physical processes, rather than biological processes, and no gas is expected to be formed as a result.

"Contaminated leachate" means any leachate whose constituent violate the standards of 35 Ill. Adm. Code 811.202.

"Design Period" means that length of time determined by the sum of the operating life of the solid waste landfill facility plus the postclosure care period necessary to stabilize the waste in the units.

"DISPOSAL" MEANS THE DISCHARGE, DEPOSIT, INJECTION, DUMPING, SPILLING, LEAKING OR PLACING OF ANY SOLID WASTE INTO OR ON ANY LAND OR WATER OR INTO ANY WELL SUCH THAT SOLID WASTE OR ANY CONSTITUENT OF THE SOLID WASTE MAY ENTER THE ENVIRONMENT BY BEING EMITTED INTO THE AIR OR DISCHARGED INTO ANY WATERS, INCLUDING GROUNDWATER. (Section 3.08 of the Act.) If the solid waste is accumulated and not confined or contained to prevent its entry into the environment, or there is no certain plan for its disposal elsewhere, such accumulation shall constitute disposal.

"Disturbed areas" means those areas within a facility that have been physically altered during waste disposal operations or during the construction of any part of the facility.

"Documentation" means items, in any tangible form, whether directly legible or legible with the aid of any machine or device, including but not limited to affidavits, certificates, deeds, leases, contracts or other binding agreements, licenses, permits, photographs, audio or video recordings, maps, geographic surveys, chemical and mathematical formulas or equations, mathematical and statistical calculations and assumptions, research papers, technical reports, technical designs and design drawings, stocks, bonds and financial records, that are used to support facts or hypotheses.

"Earth liners" means structures constructed from naturally occurring soil material that has been compacted to achieve a low permeability.

"Existing facility" or "Existing unit" means a facility or unit which is not defined in this Section as a new facility or a new unit.

"Facility" means a site and all equipment and fixtures on a site used to treat, store or dispose of solid or special wastes. A facility consists of an entire solid or special waste treatment, storage or disposal operation. All structures used in connection with or to facilitate the waste disposal operation shall be considered a part of the facility. A facility may include, but is not limited to, one or more solid waste disposal units, buildings, treatment systems, processing and storage operations, and monitoring stations.

"Field capacity" means that maximum moisture content of a waste, under field conditions of temperature and pressure, above which moisture is released by gravity drainage.

"Foundry sand" means pure sand or a mixture of sand and any additives necessary for use of the sand in the foundry process, but does not include such foundry process by-products as air pollution control dust or

# refractories.

"Gas collection system" means a system of wells, trenches, pipes and other related ancillary structures such as manholes, compressor housing, and monitoring installations that collects and transports the gas produced in a putrescible waste disposal unit to one or more gas processing points. The flow of gas through such a system may be produced by naturally occurring gas pressure gradients or may be aided by an induced draft generated by mechanical means.

"Gas condensate" means the liquid formed as a landfill gas is cooled or compressed.

"Gas venting system" means a system of wells, trenches, pipes and other related structures that vents the gas produced in a putrescible waste disposal unit to the atmosphere.

"Geomembranes" means manufactured membrane liners and barriers of low permeability used to control the migration of fluids or gases.

"Geotextiles" are permeable manufactured materials used for purposes which include, but are not limited to, strengthening soil, providing a filter to prevent clogging of drains, collecting and draining liquids and gases beneath the ground surface.

"GROUNDWATER" MEANS UNDERGROUND WATER WHICH OCCURS WITHIN THE SATURATED ZONE AND WITHIN GEOLOGIC MATERIALS WHERE THE FLUID PRESSURE IN THE PORE SPACE IS EQUAL TO OR GREATER THAN ATMOSPHERIC PRESSURE. (Section 3 of the Illinois Groundwater Protection Act)

"Hydraulic barriers" means structures designed to prevent or control the seepage of water. Hydraulic barriers include, but are not limited to cutoff walls, slurry walls, grout curtains and liners.

"Inert waste" means any solid waste that will not decompose biologically, burn, serve as food for vectors, form a gas, cause an odor, or form a contaminated leachate, as determined in accordance with Section 811.202(b). Such inert wastes shall include only non-biodegradable and non-putrescible solid wastes. Inert wastes may include, but are not limited to, bricks, masonry and concrete (cured for 60 days or more).

<u>"Iron\_slaq" means\_slaq</u>

"Land application unit" means an area where wastes are agronomically spread over or disked into land or otherwise applied so as to become incorporated into the soil surface. For the purposes of this Part and 35 Ill. Adm. Code 811 through 815, a land application unit is not a landfill; however, other Parts of 35 Ill. Adm. Code: Chapter I may apply, and may include the permitting requirements of 35 Ill. Adm. Code 309.

"Landfill" means a unit or part of a facility in or on which waste is placed and accumulated over time for disposal, and which is not a land application unit, a surface impoundment or an underground injection well. For the purposes of this Part and 35 Ill. Adm. Code 811 through 815, landfills include waste piles, as defined in this Section.

"Leachate" means liquid that has been or is in direct contact with a solid waste.

"Lift" means an accumulation of waste which is compacted into a unit and over which cover is placed.

"Malodor" means an odor caused by ONE OR MORE CONTAMINANT EMISSIONS INTO THE ATMOSPHERE FROM A FACILITY THAT IS IN SUFFICIENT QUANTITIES AND OF SUCH CHARACTERISTICS AND DURATION AS TO BE described as malodorous and which may be INJURIOUS TO HUMAN, PLANT, OR ANIMAL LIFE, TO HEALTH, OR TO PROPERTY, OR TO UNREASONABLY INTERFERE WITH THE ENJOYMENT OF LIFE OR PROPERTY. (Section 3.02 of the Act (defining "air pollution").)

"National Pollutant Discharge Elimination System" or "NPDES" means the program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements under the Clean Water Act (33 U.S.C. 1251 et seq.), Section 12(f) of the Environmental Protection Act and 35 Ill. Adm. Code 309.Subpart A and 310. "NPDES permit" means a permit issued under the NPDES program.

"New facility" or "New unit" means a solid waste landfill facility or a unit at a facility, if one or more of the following conditions apply:

It is a landfill or unit exempt from permit requirements pursuant to Section 21(d) of the Act that has not yet accepted any waste as of the effective date of this Part; It is a landfill or unit not exempt from permit requirements pursuant to Section 21(d) of the Act that has no development or operating permit issued by the Agency pursuant to 35 Ill. Adm. Code 807 as of the effective date of this Part; or

It is a landfill with a unit whose maximum design capacity or lateral extent is increased after the effective date of this Part. BOARD NOTE: A new unit located in an existing facility shall be considered a unit subject to 35 Ill. Adm. Code 814, which references applicable requirements of 35 Ill. Adm. Code 811.

"One hundred (100) year flood plain" means any land area which is subject to a one percent or greater chance of flooding in a given year from any source.

"One hundred (100) year, 24 hour precipitation event" means a precipitation event of 24 hour duration with a probable recurrence interval of once in 100 years.

"Operator" means the person responsible for the operation and maintenance of a solid waste disposal facility.

"Perched watertable" means an elevated watertable above a discontinuous saturated lens, resting on a low permeability (such as clay) layer within a high permeability (such as sand) formation.

"Permit area" means the entire horizontal and vertical region occupied by a permitted solid waste disposal facility.

"PERSON" IS ANY INDIVIDUAL, PARTNERSHIP, CO-PARTNERSHIP, FIRM, COMPANY, CORPORATION, ASSOCIATION, JOINT STOCK COMPANY, TRUST, ESTATE, POLITICAL SUBDIVISION, STATE AGENCY, OR ANY OTHER LEGAL ENTITY, OR THEIR LEGAL REPRESENTATIVE, AGENT OR ASSIGNS. (Section 3.26 of the Act.)

"Professional engineer" means a person who has registered and obtained a seal pursuant to "The Illinois Professional Engineering Act" (Ill. Rev. Stat 1989, ch. 111, par. 5101 et seq.).

"Professional land surveyor" means a person who has received a certificate of registration and a seal pursuant to "The Land Surveyors Act" (Ill. Rev. Stat. 1989, ch. 111, par. 3201 et seq.). "Putrescible waste" means a solid waste that contains organic matter capable of being decomposed by microorganisms so as to cause a malodor, gases, or other offensive conditions, or which is capable of providing food for birds and vectors. Putrescible wastes may form a contaminated leachate from microbiological degradation, chemical processes, and physical processes. Putrescible waste includes, but is not limited to, garbage, offal, dead animals, general household waste, and commercial waste. All solid wastes which do not meet the definitions of inert or chemical wastes shall be considered putrescible wastes.

"Publicly owned treatment works" or "POTW" means a treatment works that is owned by the State of Illinois or a unit of local government. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastewater. It also includes sewers, pipes and other conveyances only if they convey wastewater to a POTW treatment plant. The term also means the unit of local government which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

"Recharge zone" means an area through which water can enter an aquifer.

"Responsible charge," when used to refer to a person, means that the person is normally present at a waste disposal site; directs the day-to-day overall operation at the site; and either is the owner or operator or is employed by or under contract with the owner or operator to assure that the day-to-day operations at the site are carried out in compliance with any Part of 35 Ill. Adm. Code: Chapter I governing operations at waste disposal sites.

"Runoff" means water resulting from precipitation that flows overland before it enters a defined stream channel, any portion of such overland flow that infiltrates into the ground before it reaches the stream channel, and any precipitation that falls directly into a stream channel.

"Salvaging" means the return of waste materials to use, under the supervision of the landfill operator, so long as the activity is confined to an area remote from the operating face of the landfill, it does not interfere with or otherwise delay the operations of the landfill, and it results in the removal of all materials for salvaging from the landfill site daily or separates them by type and stores them in a manner that does not create a nuisance, harbor vectors or cause an unsightly appearance.

"Scavenging" means the removal of materials from a solid waste management facility or unit which is not salvaging.

"Seismic Slope Safety Factor" means the ratio between the resisting forces or moments in a slope and the driving forces or moments that may cause a massive slope failure during an earthquake or other seismic event such as an explosion.

"Settlement" means subsidence caused by waste loading, changes in groundwater level, chemical changes within the soil and adjacent operations involving excavation.

"Shredding" means the mechanical reduction in particle sizes of solid waste. Putrescible waste is considered shredded if 90 percent of the waste by dry weight passes a 3 inch sieve.

"Significant Modification" means a modification to an approved permit issued by the Agency in accordance with Section 39 of the Act and 35 Ill. Adm. Code 813 that is required when one or more of the following changes, considered significant when that change measured by one or more parameters whose values lie outside the expected operating range of values as specified in the permit, are planned, occur or will occur:

An increase in the capacity of the waste disposal unit over the permitted capacity;

Any change in the placement of daily, intermediate or final cover;

A decrease in performance, efficiency or longevity of the liner system;

A decrease in efficiency or performance of the leachate collection system;

A change in configuration, performance, or efficiency of the leachate management system;

A change in the final disposition of treated effluent or in the quality of the discharge from the leachate treatment or pretreatment system;

Installation of a gas management system, or a

decrease in the efficiency or performance of an existing gas management system;

A change in the performance or operation of the surface water control system;

A decrease in the quality or quantity of data from any environmental monitoring system;

A change in the applicable background concentrations or the maximum allowable predicted concentrations;

A change in the design or configuration of the regraded area after development or after final closure;

A change in the amount or type of postclosure financial assurance;

Any change in the permit boundary;

A change in the postclosure land use of the property;

A remedial action necessary to protect groundwater;

Transfer of the permit to a new operator;

Operating authorization is being sought to place into service a structure constructed pursuant to a construction quality assurance program; or

A change in any requirement set forth as a special condition in the permit.

"Slag" means the fused agglomerate which separates in iron and steel production and floats on the surface of the molten metal.

"Sole source aquifer" means those aquifers designated pursuant to Section 1424(e) of the Safe Drinking Water Act of 1974, (42 U.S.C 300h-3).

"Solid Waste" means a waste that is defined in this Section as an inert waste, as a putrescible waste, as a chemical waste or as a special waste, and which is not also defined as a hazardous waste pursuant to 35 Ill. Adm. Code 721.

"SPECIAL WASTE" MEANS ANY INDUSTRIAL PROCESS WASTE,

POLLUTION CONTROL WASTE OR HAZARDOUS WASTE, EXCEPT AS DETERMINED PURSUANT TO SECTION 22.9 OF THE ACT and 35 Ill. Adm. Code 808. (Section 3.45 of the Act.)

"Static Safety Factor" means the ratio between resisting forces or moments in a slope and the driving forces or moments that may cause a massive slope failure.

## "Steel slag" means slag.

"Surface impoundment" means a natural topographic depression, a man-made excavation, or a diked area into which flowing wastes, such as liquid wastes or wastes containing free liquids, are placed. For the purposes of this Part and 35 Ill. Adm. Code 811 through 815, a surface impoundment is not a landfill. Other Parts of 35 Ill. Adm. Code: Chapter I may apply, including the permitting requirements of 35 Ill. Adm. Code 309.

"Twenty-five (25) year, 24 hour precipitation event" means a precipitation event of 24 hour duration with a probable recurrence interval of once in 25 years.

"Uppermost aquifer" means the first geologic formation above or below the bottom elevation of a constructed liner or wastes, where no liner is present, which is an aquifer, and includes any lower aquifer that is hydraulically connected with this aquifer within the facility's permit area.

"Unit" means a contiguous area used for solid waste disposal.

"Unit of local government" means a unit of local government, as defined by Article 7, Section 1 of the Illinois Constitution. A unit of local government may include, but is not limited to, a municipality, a county, or a sanitary district.

"Waste pile" means an area on which non-containerized masses of solid, non flowing wastes are placed for disposal. For the purposes of this Part and 35 Ill. Adm. Code 811 through 815, a waste pile is a landfill, unless the operator can demonstrate that the wastes are not accumulated over time for disposal. At a minimum, such demonstration shall include photographs, records or other observable or discernable information, maintained on a yearly basis, that show that within the preceding year the waste has been removed for utilization or disposed elsewhere.

"Waste stabilization" means any chemical, physical or thermal treatment of waste, either alone or in combination with biological processes, which results in a reduction of microorganisms, including viruses, and the potential for putrefaction.

"Working face" means any part of a landfill where waste is being disposed.

"Zone of attenuation" is the three dimensional region formed by excluding the volume occupied by the waste placement from the smaller of the volumes resulting from vertical planes drawn to the bottom of the uppermost aquifer at the property boundary or 100 feet from the edge of one or more adjacent units.

(Source: Amended at 18 Ill. Reg. \_\_\_\_, effective \_\_\_\_\_ )

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

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

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817.308 Nuisance Precautions

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

- 817.401 Scope and Applicability
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- 817.417 Waste Placement
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- 817.420 Closure and Written Closure Plan
- 817.421 Postclosure Maintenance

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 at 18 Ill. Reg. \_\_\_\_\_, effective

Section 817.102 Definitions

In addition to the definitions of 35 Ill. Adm. Code 810.103, the following terms shall have the following meanings for the

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# purposes of this Part only:

"Beneficially usable waste" means any solid waste from the iron and steel or foundry industries that will not decompose biologically, burn, serve as food for vectors, form a gas, cause an odor, or form a lechate that contains chemical constituents that exceed the limits for this type of waste as specified at 35 Ill. Adm. Code 817.106.

"Low risk waste" means any solid waste from the iron and steel or foundry industries that will not decompose biologically, burn, serve as food for vectors, form a gas, cause an odor, or form a leachate that contains chemical constituents that exceed the limits for this type of waste as specified at 35 Ill. Adm. Code 817.106.

"Potentially usable waste" means any solid waste from the iron and steel or foundry industries that will not decompose biologically, burn, serve as food for vectors, form a gas, cause an odor, or form a leachate that contains chemical constituents that exceed the limits for this type of waste as specified at 35 Ill. Adm. Code 817.106.

IT IS SO ORDERED.

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, hereby certify that the above order was adopted on the  $2^{7}$  day of \_\_\_\_\_\_\_, 1993, by a vote of 6-0.

Dorothy M. Gunn, Clerk Illinois Pollution Control Board