

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

OPERATIONAL MEMO 115-20
REVISION 3

July 25, 2002

TO: All Waste Management Division Supervisors
FROM: Jim Sygo, Chief, Waste Management Division
SUBJECT: Waste Pile Regulation

This Operational Memo replaces Operational Memo 115-20, Revision 2, dated February 7, 2000.

The purpose of this memo is to clarify how waste piles are regulated under Part 115, Solid Waste Management, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), and to differentiate waste piles authorized by rule from open dumps. Figures 1, 2, and 3 (attached) illustrate how waste piles are regulated under Part 115.

This memorandum also discusses closure of waste piles (Figure 4).

Differentiating Authorized Piles from Open Dumps (Figure 1)

R 299.4104 of the administrative rules implementing Part 115 (Part 115 rules) defines an "open dump" as follows: "Open dump' means a disposal area that is not licensed under the Act and is not otherwise authorized by the Director."

R 299.4104 of the Part 115 rules defines a "pile" as follows: "Pile' means any noncontainerized accumulation of solid waste that is used for treatment or storage."

By definition, waste piles not authorized by the Director of the Department of Environmental Quality (DEQ) by rule, permit, or license are open dumps and are prohibited.

The rules authorize three types of waste piles without a permit or license, including:

1. construction and demolition waste piles at the site of generation,
2. low hazard industrial waste piles under certain circumstances, and
3. contained piles (see Figure 1).

The last two cases deserve additional clarification, as provided below.

Low Hazard Industrial Waste Piles (Figure 2)

The Part 115 rules provide several exemptions for low hazard industrial waste piles, whether they are contained or not. As with contained piles, this exemption only qualifies if the design and management of the pile prevents a nuisance and does not involve a discharge to the air and water that violates state law (see Figure 3).

First, R 299.4129(2)(a) of the Part 115 rules allows low hazard industrial waste reused in an industrial process to be stored in an uncontained pile. However, owners/operators who seek exemption under the "reuse" provision of R 299.4129(2)(a) of the Part 115 rules should keep records under R 299.4119 of the Part 115 rules, which demonstrate the waste material is not accumulated speculatively.

Second, R 299.4129(2)(b) of the Part 115 rules exempts low hazard industrial waste stored in an "existing pile." An existing pile is one that existed on October 9, 1993. The definition of "existing pile" provides that "waste placement in existing piles shall be consistent with past operating practices or modified practices to insure [sic] good management." The owner of a pile that is an "existing pile" may continue to add waste to the pile provided such placement does not violate other state law. R 299.4129(2)(b) does NOT authorize the placement of waste beyond the boundary of the pile, as it existed on October 9, 1993. Such an expansion beyond the existing boundary would constitute a "new disposal area" requiring a construction permit. The definition of "new disposal area" in R 299.4104(e) of the Part 115 rules specifies that a new disposal area includes "a disposal area, other than an existing disposal area, that is proposed for construction." In this case, only that area in existence as a pile on October 9, 1993, qualifies as an existing disposal area.

Third, R 299.4129(2)(c) of the Part 115 rules allows low hazard industrial waste to be stored in an uncontained pile up to 60 days prior to disposal. Since new waste may be generated during this 60-day period, R 299.4129(2)(c) effectively allows a pile to be maintained continuously, provided the volume of the pile does not exceed the amount of waste generated over 60 days.

The provisions of R 299.4129(3) of the Part 115 rules require that owners and operators of a waste pile ensure that the pile does not violate air and water quality requirements, create a nuisance, or result in environmental contamination after closure.

Although a monitoring program may be useful to determine whether a pile is discharging contaminants in violation of these requirements, R 299.4129(3) does not obligate the owner/operator of a waste pile to conduct such a program or to seek approval from the DEQ. However, owners and operators should take steps to prevent fugitive dust, prevent possible groundwater degradation from waste leachate, and control surface water runoff. Surface water runoff from a waste pile may be subject to a stormwater permit under Part 31, Water Resources Protection, of the NREPA. Since piles that violate the conditions of R 299.4129(3) lose their exemption and are subject to regulation as open dumps, and are therefore prohibited, the DEQ recommends that owners and operators otherwise exempt under R 299.4129(2) consult with the district office regarding conditions at the subject facility.

Contained Waste Piles (Figure 3)

Generally, waste stored for reuse or disposal in piles that are contained, as specified in the provisions of R 299.4130 of the Part 115 rules, are not disposal areas and, therefore, are not subject to the permit and license requirements of the act. However, as shown in Figure 3, there may be several cases where a contained pile is regulated if its purpose or use otherwise constitutes disposal.

Section 11503(2) of the NREPA defines a “disposal area” as follows: “Disposal area” means a solid waste transfer facility, incinerator, sanitary landfill, processing plant, or other solid waste handling or disposal facility utilized in the disposal of solid waste.”

The definition of “disposal” contained in R 299.4102(k) of the Part 115 rules specifies, in part, that, “Disposal includes the placement of solid waste in an open dump, landfill, or waste piles that are not exempt pursuant to the provisions of R 299.4129(2) or R 299.4130.”

First, except for certain historical placements as described in the following section, waste may not be permanently disposed of in a contained waste pile. Several rules indicate that waste piles are not permanent disposal options.

Second, the definition of “pile” in R 299.4104 states that a pile is “any non-containerized accumulation of solid waste or material that is used for treatment or **STORAGE**” (emphasis added). Webster's Dictionary defines “store” as “to reserve or put away for future **USE**” (emphasis added). Permanent disposal does not constitute “use.” Also, R 299.4129(3) states that a waste pile shall not result in environmental contamination after closure. Similarly, R 299.4130(10) specifies that, at closure, an owner and operator of a pile shall remove all waste residues. Clearly, under this rule, no waste can remain, not even waste residues. Waste that is abandoned at a site with no intent for reuse or transfer to a sanitary landfill is an open dump and is prohibited.

Third, a waste pile may be subject to regulation as a transfer facility unless it is at the site of generation or disposal.

Lastly, under R 299.4129(3), a pile that violates other statutes or creates a nuisance is not exempt.

Waste Pile Closures (Figure 4)

The steps necessary to close a waste pile depend on when the waste was placed and how it is categorized:

1. Waste placed prior to 1979
 - a. Waste placed prior to 1979 is regulated pursuant to Part 201, Environmental Remediation, of the NREPA. The nature of necessary closure activities, if any, is determined pursuant to that part, rather than Part 115.

2. Waste placed from 1979 until October 9, 1993

- a. Waste meeting inert or low hazard industrial waste criteria qualifies for minimal closure requirements provided the DEQ receives and approves a closure plan that meets the following:

1) Capping

- a) If the waste pile has resulted in impacts to groundwater, a cap meeting the requirements of R 299.4304 must be constructed. Groundwater contamination above Part 201 standards must be remediated in accordance with that part.
- b) If the groundwater impacts have not occurred, a final cover to minimize erosion and infiltration must be constructed. Normally, this would entail two feet of soil and six inches of topsoil, followed by seed and mulching sufficient to establish vegetative cover. Slopes of the final cover shall not exceed one vertical for four horizontal (unless vegetation can be established with an alternative slope). However, if the waste is determined to be inert pursuant to Part 115, six inches of soil, seed, and mulch is sufficient for a waste pile that is not currently vegetated.

- 2) If methane or other decomposition gases will be generated, the closure design must employ a means of ensuring that gases cannot travel laterally from the site or accumulate in the structure.

- 3) A Part 91, Soil Erosion and Sedimentation Control, of the NREPA or Part 31 storm water permit may be required.

- 4) If the waste is not inert, a restrictive covenant is required to be placed on the property.

- b. Waste exceeding low hazardous waste criteria may be closed pursuant to a site specific designation of inertness under R 299.4116(2)(b). To qualify, the waste must be beneficially used. Beneficial use includes legitimate land form activities such as leveling, contouring, and creating relief and must be implemented within a reasonable amount of time. At a minimum, protective measures will include those described above for waste meeting inert and low hazardous waste criteria as well as, in all cases, an impervious cap.

3. Waste placed after October 9, 1993, must be closed pursuant to a DEQ-approved plan as follows:

- a. Waste meeting inert criteria: Waste may remain in place if it is being beneficially used. Beneficial use may include legitimate land form activities such as leveling, contouring, and creating relief and must be implemented within a reasonable amount of time. Other requirements for waste meeting inert and low hazard

industrial waste criteria placed prior to 1993 (as described above) also apply. Inert waste not being beneficially used must be removed.

- b. Waste meeting low hazard industrial waste criteria: Must be closed in place as a type III landfill according to the Part 115 rules or removed **unless** the waste was placed within the footprint of a pile that existed as of October 9, 1993. Waste placed after that date within the footprint as of that date [pursuant to R 299.4129(2)(b)] may be closed as if the waste was placed before October 9, 1993. See Item 2.a above.
- c. Waste exceeding low hazard industrial waste criteria: Must be closed in place as a type III landfill according to the Part 115 rules or removed. Note that waste placed after October 9, 1993, within the footprint of a pile existing as of that date does not qualify the entire pile for pre-1993 treatment (as it would for low hazard industrial waste).

Attachments

Figure 1
Differentiating Waste Piles from Open Dumps

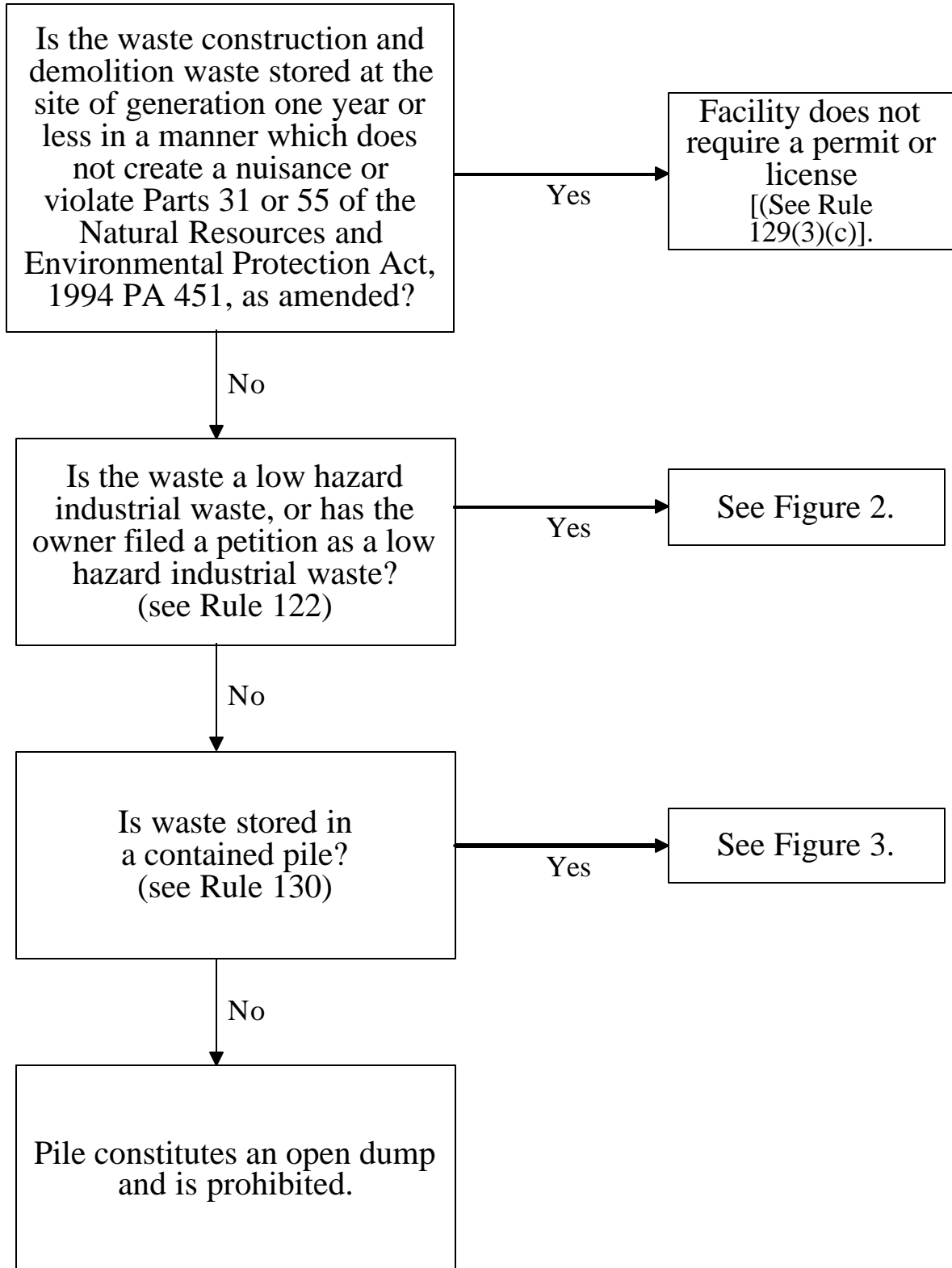


Figure 2
Low Hazard Industrial Waste Stored in Piles

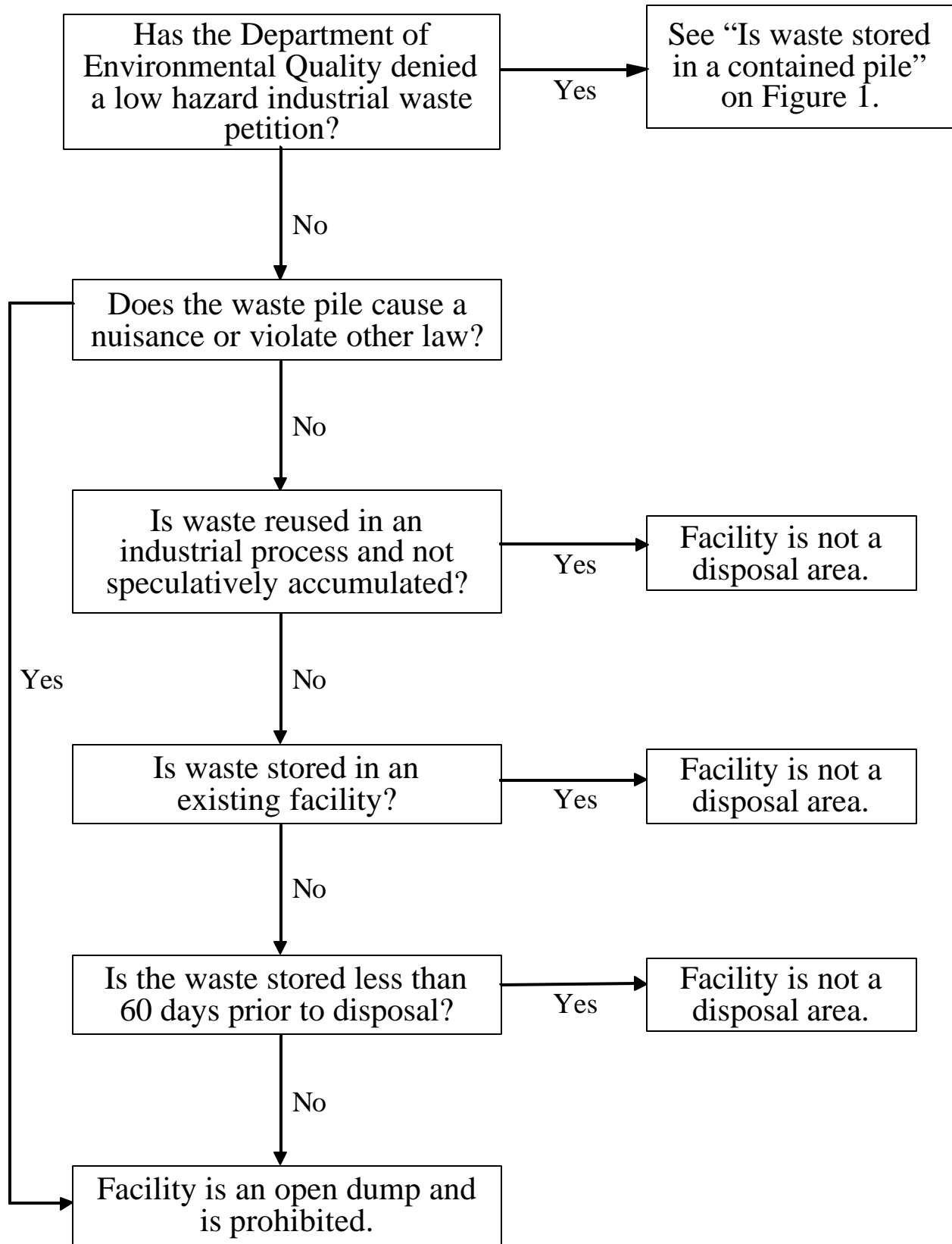


Figure 3
Regulation of Contained Piles

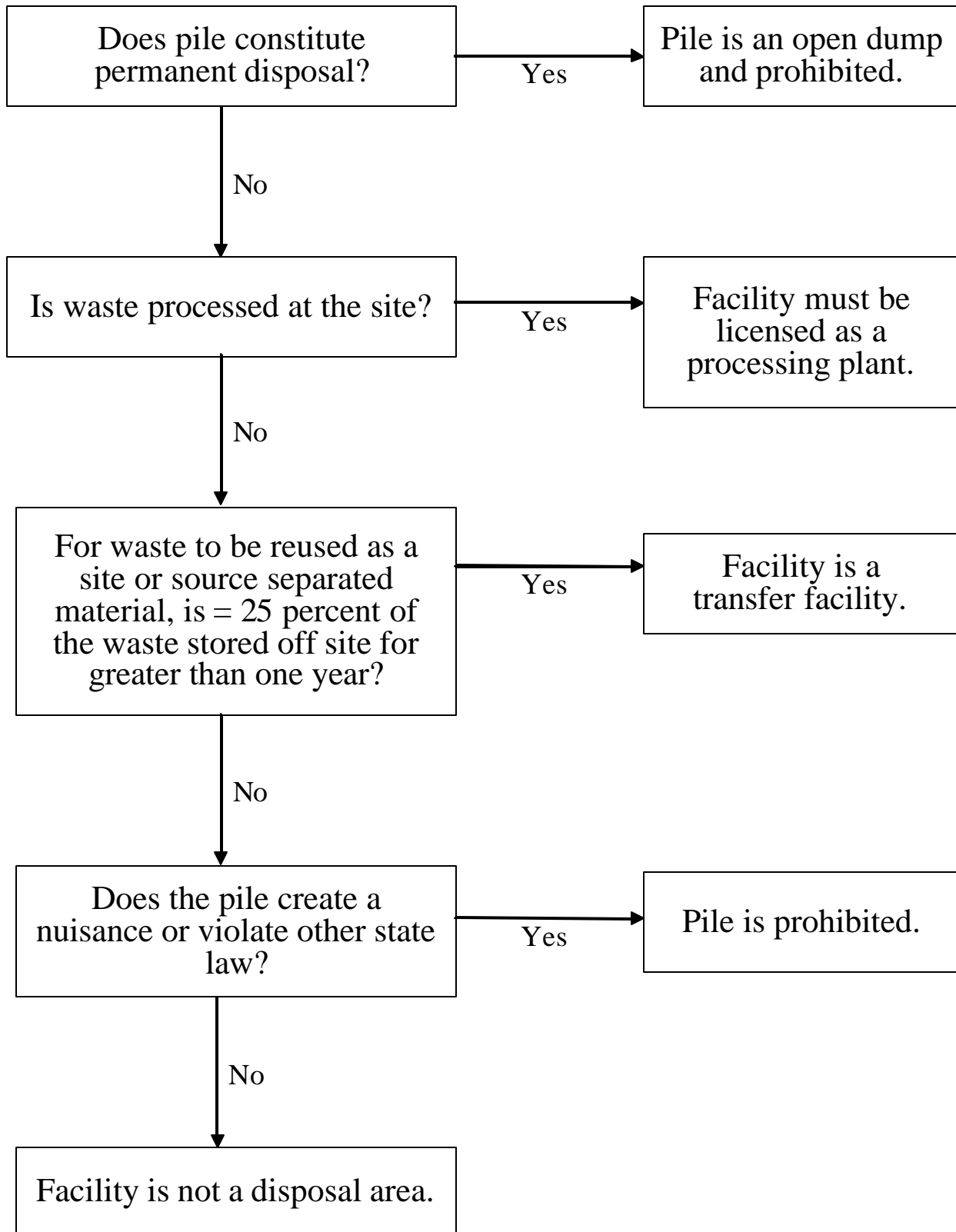
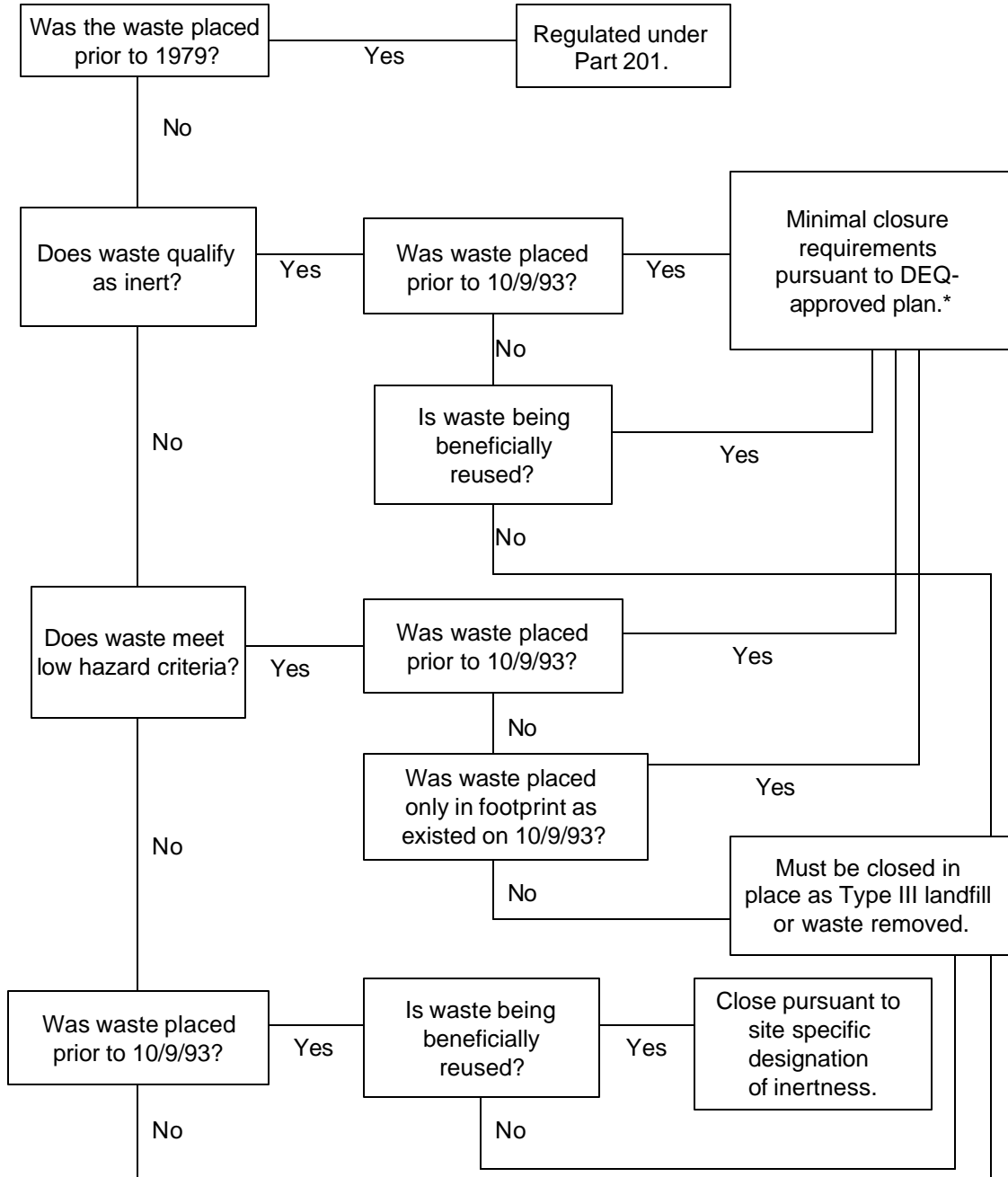


Figure 4
Closure of Waste Piles



*May be different minimal requirements for inert and low hazard waste. If there have been impacts to groundwater from waste placement, requirements of Part 201 must be met.