

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

OPERATIONAL MEMO 111-2  
REVISION 2

September 13, 1999

TO: All Waste Management Division Supervisors  
FROM: Jim Sygo, Chief, Waste Management Division  
SUBJECT: Satellite Accumulation Areas

The "satellite accumulation" rule, Michigan Administrative Code (MAC) R 299.9306(2), provides specific requirements for hazardous waste stored at or near the point of generation. This memorandum describes the provisions of the rules, the extent of its application, and how the Waste Management Division (WMD) has resolved certain issues. This memorandum replaces one on the same subject issued December 10, 1998. The conclusions reached herein are:

1. A satellite accumulation area is limited to 55 gallons of accumulated waste.
2. Distinct satellite accumulation areas may be in close proximity.
3. Each hazardous waste container in the satellite site must be marked with the words "Hazardous Waste" and the hazardous waste number or chemical name.

**RULE**

R 299.9306(2) states:

A generator may, without a license issued pursuant to part 111 of this act and without complying with the provisions of subrule (1) of this rule, accumulate as much as 55 gallons of hazardous waste or one quart of acute hazardous waste that is identified in table 203a, 204a, 204b, or 205a, or a severely toxic hazardous waste that is identified in table 202 in containers at or near any point of generation where wastes initially accumulate and which is under the control of the operator of the process that generates the waste if he or she complies with the provisions of 40 Code of Federal Regulations (CFR) §§265.171, 265.172 and 265.173 and marks his or her containers with the hazardous waste number or chemical name of the waste and the words "Hazardous Waste." A

generator may substitute the chemical name for the hazardous waste number of the waste on his or her container at or near the point of generation to comply with this subrule. A generator who accumulates hazardous waste, an acute hazardous waste that is listed in table 203a, 204a, 204b, or 205a, or a severely toxic hazardous waste that is listed in table 202 in excess of the amounts listed in this subrule at or near any point of generation shall, with respect to that amount of excess waste, comply, within 3 days, with the requirements of this subrule or other applicable provisions of this part. During the 3-day period, the generator shall continue to comply with the requirements of this rule. The generator shall mark the container that holds the excess accumulation of hazardous waste with the date the excess amount began accumulating.

**1. Each satellite accumulation area is limited to 55 gallons of accumulated waste.**

The development of the satellite accumulation area rule is quite clear that each satellite accumulation area is limited to 55 gallons. The rule as initially proposed contained the 55-gallon limit and the U.S. Environmental Protection Agency (EPA) explicitly considered comments to expand the volume amount. See 49 Fed. Reg. 49568-49569 (1984).

The volume limits of the satellite accumulation rule apply to the aggregate quantity of all wastes at a satellite site, not for each individual waste stream. Thus, a maximum of 55 gallons of all wastes, regardless of the number of containers and discrete waste streams, may be accumulated at an individual satellite site, not 55 gallons for each waste stream.<sup>1</sup>

In pertinent part, R 299.9306(2) provides that a generator may “. . . accumulate as much as 55 gallons of hazardous waste or 1 quart of acute hazardous waste . . . or a severely toxic hazardous waste . . . in containers at or near any point of generation where wastes initially accumulate . . . .” (emphasis added). The volume is described in absolute terms (“as much as”), while multiple containers (“containers”) and waste streams (“wastes”) are contemplated.

This interpretation is consistent with the genesis of the rule. In developing the federal rule upon which R 299.9306(2) is based, the EPA determined “that the accumulation of up to 55 gallons of non-acutely hazardous waste is reasonable and safe and does not pose a threat to human health or the environment. Accumulation of the amount in

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<sup>1</sup> Note that more than 55 gallons may be in a given satellite accumulation area during the 72 hours after the 55 gallon limit is reached that is allowed for transportation to a standard storage area. Such containers must be marked with the date that the excess accumulation began. See 49 Fed. Reg. 49569 (1984).

excess of 55 gallons is covered by this rule and, after three days, by the requirements of 264.34(a) or by the requirements of Part 264 or 265" [49 Fed. Reg. 49569 (1984)]. Initially EPA had considered setting a limit of one container at each satellite location instead of setting a waste volume limit; however, the EPA believed that protection of health and the environment is more closely associated with the quantity of accumulation at each location than with the number of containers used to accumulate the waste. [48 Fed. Reg. 119 (1983)].

## **2. Distinct satellite accumulation areas may be in close proximity.**

R 299.9306(2) refers to a satellite site as being "at or near any point of generation where wastes initially accumulate and which is under the control of the operator of the process that generates the waste . . . ."

The concept of a satellite accumulation area recognizes the practical stages in waste generation: "Satellite areas are those places where wastes are generated in the industrial process or the laboratory and where those wastes must initially accumulate prior to removal to a central area" [49 Fed. Reg. 49570 (1984)]. The EPA specifically recognized that "the 55-gallon threshold applies to each satellite area where hazardous wastes are accumulated. One manufacturing plant, therefore, may have several satellite areas on-site where as much as 55 gallons may be accumulated" [48 Fed. Reg. 120 (1983)].

While the EPA indicated that one facility may have multiple satellite accumulation areas, it did not explicitly indicate how close those areas could be to one another. The closest the EPA came to such a discussion was in response to a comment concerning "a generator storing 55 gallon drums 5 feet apart along the wall of his facility in an attempt to circumvent further regulatory responsibilities." [49 Fed. Reg. 49568 (1984)]. The EPA found that this does not meet the requirements of the rule.

We believe the key phrase in this scenario is "in an attempt to circumvent further regulatory responsibilities." In developing the satellite accumulation rule, it is clear that the EPA was attempting to walk a fine line between pragmatic, temporary storage of hazardous waste where it was generated and waste accumulations that are unsafe because they do not meet the full generator storage requirements. See 49 Fed. Reg. 49568 - 49572 (1984). The EPA resolved the appropriateness of the cited example, therefore, because the satellite accumulation area was laid out for purposes of avoiding full storage requirements, rather than due to operational requirements related to facility layout and process requirements. In subsequent communications, the EPA has confirmed that "a case-by-case analysis is necessary to determine whether a generator is accumulating more than 55 gallons of waste at one satellite area, or whether a generator has more than one satellite area." Sylvia K. Lowrance, Director, Office of Solid Waste, EPA, to T.R. Kirck, Fehr-Graham & Associates, August 2, 1989.

This raises the question of what factors are used to determine whether or not a given instance of satellite accumulation is permissible. First, of course, the accumulation must meet all requirements of the satellite accumulation rule: It must be: 1) at or near the point of generation where the waste initially accumulates, 2) under control of the operator of the process that generates the waste, and 3) marked as required. In addition, the area must be placed so as to provide a practical method for initial accumulation given the manner and process by which it is generated. This determination is made based on factors such as: 1) distance and ease of travel between the point of generation and the satellite accumulation area, 2) safety of the operator and nearby workers, and 3) protection of the satellite accumulation area from disruption by equipment, machinery, or other workers. Finally, the practicality of alternative methods or configurations for satellite accumulation should be considered. If it appears that such alternatives would meet the purposes of satellite accumulation while avoiding large accumulations in adjacent areas, that may be an indication that the generator has designed the area in order to circumvent the requirements of full generator storage. As indicated above, satellite accumulation designed for that purpose is not permitted.

In short, the generator should be able to explain to an inspector why the chosen satellite accumulation configuration meets the interests of safety, practicality, and convenience without constituting a method of circumventing general storage requirements.

This line of analysis has concluded that, in some situations, it is permissible to store multiple 55-gallon drums adjacent to one another (e.g., four drums of different wastes in distinct satellite accumulation areas) and in others it is not (e.g., four drums of the same waste in one accumulation area). We recognize that this raises an important question: If the EPA set the 55-gallon limit per satellite accumulation area based, in part, on safety concerns, what is the functional difference between one area with multiple 55-gallon drums and multiple adjacent areas with single drums? While there may be some differences, we believe that they are likely to be minor.<sup>2</sup> Nonetheless, in the interest of providing some flexibility to waste generators, we believe it appropriate to draw the distinction discussed herein. We also believe that there should be relatively few instances in which the factors discussed above will dictate several adjacent or proximate satellite accumulation areas. However, if experience with adjacent or proximate satellite accumulation areas indicates that safety is a real concern, the WMD will consider amending the Part 111 administrative rules to require additional protections, such as secondary containment, for such areas. Issues relating to safety concerns at satellite accumulation areas should be discussed in the RCRA Committee.

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<sup>2</sup> One such difference may be in reducing the risk of spillage: It may be necessary to handle multiple waste streams in multiple standard containers to reduce spillage; it is not necessary to handle the same waste in multiple containers for that purpose. Another difference is preventing the mixing of different waste streams.

**3. Specific storage requirements apply to satellite storage.**

R 299.9306(2) requires only that the words "Hazardous Waste" and the hazardous waste number or chemical name of the waste must be marked on each container in the hazardous waste storage area. Contingency plans and training plans are not required, *ibid.*, but are still advisable. However, "when waste generated in a satellite area is transported to a storage area the training and contingency plan requirements will apply." *Ibid.*

If the volume limitation is exceeded at a satellite accumulation site, the containers must be marked with the date the excess accumulation began and then within three days moved to the central accumulation area that meets the requirements of R 299.9306(1) and 40 CFR 262.34(a) or R 299.9306(4) and 40 CFR 262.34(d). This may be within the same room but it must be a totally and easily identified separate area from the satellite accumulation area. The EPA has expanded this guidance for one specific circumstance: when hazardous wastes are generated through periodic cleaning of product vessels, the resulting drums are commonly removed from the clean-out area within two to three days and, therefore, the need to comply with the regulatory requirements for 90-day accumulation poses an unreasonable burden. Under the rule, a generator would have three days after the first 55 gallons are accumulated in which to comply with either 40 CFR 262.34(a) for continued on-site accumulation or other hazardous waste management standards, as appropriate. The EPA believes this would alleviate the problems that generators experience with complying with 40 CFR 262.34(a) during maintenance of product vessels [48 Fed. Reg. 120 (1983)].

A handwritten signature in black ink, appearing to be "John Smith", written in a cursive style.