



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

Satellite Accumulation of Hazardous Waste by Generators

Office of Land Quality

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The Pre-Transport Requirements (Subpart C) of the Standards Applicable to Generators of Hazardous Waste in the Indiana hazardous waste rules (Code of Federal Regulations 40 CFR 262.34(c), adopted by reference in the Indiana Administrative Code at 329 IAC 3.1-7-1) allow generators to accumulate limited quantities of hazardous waste at satellite accumulation areas prior to removal to areas designated for 90-day or less (large quantity generator) or 180-day or less (small quantity generator) storage without a permit or interim status, and without complying with the full requirements that apply to 90 or 180-day storage. This allowance imposes several particular limitations and requirements, including:

1. That satellite accumulation is done in containers “at or near any point of generation where wastes initially accumulate, which is under the control of the operator of the process generating the waste”;
2. That satellite accumulation containers be marked “either with the words ‘Hazardous Waste’ or with other words that identify the contents of the container”;
3. That certain general container management requirements be observed, such as using containers which are in good condition, that are compatible with the waste put in them, that are kept closed except when adding or removing waste, and that are handled so as to avoid rupture or leakage;
4. That any accumulation of hazardous waste at a satellite area in excess of 55 gallons, or one quart of any acutely hazardous waste listed in 40 CFR 261.33(e), must be managed in accordance with all requirements applying to the 90-day or less, or the 180-day or less, storage allowance in 40 CFR 262.34(a). Containers holding such excess waste must be marked with the date the excess amount began accumulating, and must be moved into the designated 90 or 180-day storage area within three days.

Satellite Accumulation Area

The first point above, which aims to describe what a satellite accumulation area is, has been a source of some confusion. The following is a discussion of how IDEM evaluates the definition of “satellite accumulation” and the applicability of related management requirements.

“... at or near any point of generation”

Neither the language of the Federal Rule itself (40 CFR 262.34(c)), nor EPA interpretation in the Federal Register, specify a precise spacial definition of how far a satellite accumulation container may be from the point of hazardous waste generation. Nor do they define or limit the area that may be considered a satellite accumulation area, or prescribe a minimum spacing, or a maximum number, of satellite accumulation areas that may be maintained in a facility that generates hazardous waste.

The rationale for allowing reduced management requirements for satellite accumulation is, however, clear: small amounts of hazardous waste collected near the point of generation in an area under the control, and therefore the cognizance, of the operator of the process generating it poses less likelihood of harm to human health or the environment from mismanagement or accident than if it were placed at a location not so readily subject to the operator’s direct observation. The closer satellite accumulation is to the point of generation and the attention of the operator where it is generated, the more likely it is that any problem involving it, such as spillage, fire, or mismanagement, will be avoided or recognized soon enough to forestall an emergency.

IDEM recognizes that due to the great variability of plant design and process layout, it is impractical to impose specific spacial and numeric limits applicable to all situations to define satellite accumulation areas. Whether or not the intent of the satellite accumulation allowance is satisfied must be evaluated on a case-by-case basis. Such an evaluation may involve the following considerations.

Distance and location in relation to point of hazardous waste generation

Hazardous waste accumulation may not be regarded as satellite accumulation if

- (1) the waste accumulation container is of such distance or in such a location that transfer of the waste from the point of generation poses an increased risk of spillage or mismanagement; and
- (2) the waste accumulation container is of such distance from the process generating the waste, or in such a location, that it is not routinely within the control and cognizance of the operator of the process. Such situations may include location of the accumulation container in another room where intervening walls or partitions block it from the view of the process operator for significant periods of time, or place the container in areas subject to other plant activities not under the control of the process operator where the risks of release or mismanagement may be greater. Likewise, location of the waste storage container outside a

building in which the waste is generated may be regarded as placing it beyond the routine attention of the process operator, and therefore not legitimate satellite accumulation. Plausible exceptions to this interpretation may be instances such as a waste accumulation container maintained immediately outside an enclosed paint booth for safety reasons, or outside a “clean room” production area for quality control. While the waste may be generated inside the booth or clean room, the satellite accumulation container just outside will typically be within the routine cognizance of the process operator.

Multiple points of hazardous waste generation in close proximity

In certain manufacturing situations there are processes in succession or close proximity that generate different types of hazardous waste which, for convenience, must be temporarily accumulated nearby. For reasons of safety, compatibility, or to facilitate ultimate recycling or disposal, they may need to be collected in separate containers. Such multiple point collection may necessitate maintaining more than one 55-gallon drum (one for each waste stream) in close proximity.

The hazardous waste rules allow accumulating as much as 55 gallons of hazardous waste (or one quart of acutely hazardous waste) in containers “... at or near *any* point of generation where the wastes initially accumulate ... ” (emphasis added). This language, as well as Federal interpretation and guidance, is ambiguous in regard to whether or not a maximum of 55 gallons (or one quart) is allowable for each of multiple distinct waste streams that may be generated in close proximity of each other, or if the maximum accumulation allowance is for all waste streams generated in close proximity combined.

Since the expressed intent of EPA in promulgating the satellite accumulation allowance was not to explicitly define the spacial limits, or limit the number, of satellite accumulation areas a facility could maintain (refer to discussion in the Federal Register, 49 FR 49568-49572), and since the rule language itself relates this allowance to “*any* point of generation,” IDEM believes it is justified to allow satellite accumulation of up to 55 gallons (or one quart of acutely hazardous waste) for *each* distinct waste stream at or near its respective point of generation, even when the result is more than 55 gallons in total of different wastes being maintained in adjacent containers. This not only is more convenient for the generator, but it lessens the risk of waste release from spillage by reducing the frequency of waste transfer from the point of generation to the designated storage area.

Satellite aggregation of small quantities of waste from multiple work stations

Certain manufacturing processes, such as manual circuit board cleaning or certain types of soldering operations, sometimes entail generating very small quantities of the same type of hazardous waste at individual work stations. Such small accumulations of waste may be periodically collected by someone other than the work station personnel, and aggregated in a container which is maintained as a satellite accumulation point in the same room or work area before removal to a designated hazardous waste storage area.

In such instances, either the work station personnel or the person collecting the waste from the individual work stations may be regarded as the operator of the process, since one or the other typically will be aware of the activity during operating hours. The aggregation of the waste in a total volume of 55 gallons or less may be regarded as legitimate satellite accumulation so long as it is done at or near the points of generation and in such a way that the intent of the satellite accumulation allowance is satisfied as discussed above.

Multiple operators of a process

Frequently a process generating a hazardous waste may be operated by different individuals, either simultaneously or at different times, such as during successive work shifts. The language of the Rule does not explicitly define, or limit the identification of, “operator of the process generating the waste.” As a practical matter, the “operator” may be more than one particular individual, but such a designation only may apply to the individual or individuals who are involved (i.e., “under the control of ... the process”) where and when the hazardous waste is being generated and accumulated at the satellite area.

Other Satellite Accumulation Issues

Marking of satellite accumulation containers

The satellite accumulation allowance requires that satellite containers holding hazardous waste must be marked with the words “Hazardous Waste” or with other words that identify the contents of the container (40 CFR 262.34(c)). It further requires that when greater than 55 gallons of hazardous waste commences accumulating at a satellite area, the container(s) holding the excess of 55 gallons must additionally be marked with the date of start of accumulation of the excess of 55-gallons, and must be managed in accordance with all applicable requirements for 90-day or less or 180-day or less storage (referenced in 40 CFR 262.34(a)) and removed from the satellite accumulation area to the designated 90 day or 180-day hazardous waste storage area within 3 days.

The generator should keep in mind that it is unnecessary to mark a satellite accumulation container with a start of accumulation date until greater than 55 gallons of hazardous waste commences accumulating. The date to be marked is the day that the excess of 55 gallons commences accumulating at the satellite area. It is a common error for a generator to mark the first satellite accumulation container put into use with the date that hazardous waste commenced being put into the container, rather than the date that an excess of 55 gallons was accumulated. The result of such a premature marking of accumulation date is to reduce the effective length of time the waste in that container may be stored at the facility, since the maximum 90 or 180-day storage allowance will be reckoned from the start of accumulation date marked on the container.

Container capacity or accumulation greater than 55 gallons

Occasionally, a generator may use a container for intended satellite accumulation that has a capacity greater than the standard drum size of 55 gallons. An example would be a 20-cubic yard roll-off. In such an instance, the generator should be aware that the quantity limit for the allowance to manage waste under the reduced requirements granted for satellite accumulation is 55 gallons, and any excess hazardous waste would have to be managed as outlined above, including marking and dating, or else the waste container(s) would have to be managed in accordance with the full requirements applying to 90 or 180-day storage.

In instances where a large volume of hazardous waste is generated at once (such as a tank clean out) and must be staged near the point of generation before removal for longer term storage or disposal, the generator must again observe the limits imposed for satellite accumulation in containers in regard to marking accumulation date, container management, and removal to designated 90 or 180-day storage area within 3 days, or else manage the containers where they are under the full requirements for 90 or 180-day storage.

In most cases, consideration of both the letter and the intent of the satellite accumulation allowance, and common sense, should suffice to guide the hazardous waste generator to a valid determination as to whether or not a particular scenario represents legitimate satellite accumulation. As it is impossible to generalize in such a way that all possible circumstances are anticipated or described in regulatory interpretation or guidance, there may be instances when site-specific evaluation should be sought.

If you have questions or for additional information, please contact the staff of the Compliance Branch, Office of Land Quality, at 317-234-6923 or (800) 451-6027 or visit <http://www.in.gov/idem/5221.htm>.