

Hazardous Waste Management

Satellite Accumulation of Hazardous Waste

Information presented in this fact sheet is intended to provide a general understanding of the regulatory requirements governing the satellite accumulation of hazardous waste. This information is not intended to replace, limit, or expand upon the complete regulatory requirements found in Division 14 of the Alabama Department of Environmental Management Administrative Code.

General Information

What is Satellite Accumulation? "Satellite Accumulation" is the accumulation of small amounts of hazardous waste in satellite accumulation areas ("SAAs"). The accumulation must be under the control of the operator of the process that generates the waste and it must be done in compliance with ADEM Administrative Code Rule ("ADEM Admin. Code r.") 335-14-3-.01(5).

What rules apply to satellite accumulation? Under ADEM Admin. Code r. 335-14-3-.01(5), a generator may accumulate up to 55 gallons of hazardous waste and/or either one quart of liquid acute hazardous waste or one kilogram (about 2.2 pounds) of solid acute hazardous waste in containers at or near any point of generation where wastes initially accumulate, provided he complies with the following requirements:

- Use containers that are in good condition.
- Ensure that the hazardous waste is compatible with the container in which it is placed.
- Keep all containers closed, except when waste is being added or removed.
- Mark all containers with the words "Hazardous Waste" and an indication of the hazards of the contents (i.e. "Ignitable", "Spent solvent", "Corrosive", etc.).
- Ensure that no more than the allowable amount of hazardous waste is present at the satellite accumulation area—up to 55 gallons of hazardous waste and/or up to either one quart of liquid acute hazardous waste or up to one kilogram of solid acute hazardous waste.
- Include all satellite accumulation areas in emergency and contingency planning.
- Once hazardous waste beyond the allowable quantity is present in a satellite accumulation area, the generator must mark the date on the container holding that initial amount of hazardous waste (the container holding 55 gallons or one kilogram) and remove it from the satellite accumulation area within three days. At that point, the waste may be shipped directly off site, placed into the less than 90- or 180-day hazardous waste storage area, or sent to an on-site treatment, storage, or disposal facility.

Satellite Accumulation Areas

Small amounts of hazardous waste collected near the point of generation in an area under the control and attention of the operator of the process generating that waste pose less likelihood of harm to human health or the environment from mismanagement or accident than if that same waste were to be 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 worker who generated it, 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.

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

Distance and location in relation to point of hazardous waste generation. Hazardous waste accumulation areas may not be regarded as satellite accumulation under the following circumstances:

- The waste accumulation container is located so far away from the process generating the waste that moving the waste from the point of generation to the accumulation area poses an increased risk of spillage;
- The waste accumulation container is located in an area that poses an increased risk of spillage or mismanagement (a high-traffic area, for example); or
- The waste accumulation container is in a location that it is not routinely under the control and attention of the operator of the process, which increases the potential for mismanagement.

Avoid the following situations:

- Locating the container in another room where intervening walls or partitions block it from the view of the process operator for significant periods of time; or
- Placing the container in areas that are not under the control of the process operator, where it may be subject to other plant activities and where the risks of release or mismanagement may be greater.

Locating the container outside a building in which the waste is generated may be regarded as placing it beyond the control of the process operator, depending on the circumstances. Such a location may not be viewed as a legitimate SAA. 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 purposes. While the waste may be generated inside the booth or clean room, the satellite accumulation container just outside will typically remain within the routine observation of the process operator. In these cases, the operator of the process must be able to demonstrate how he or she maintains control of the satellite accumulation container.

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 that—for reasons of safety, incompatibility, or to facilitate ultimate recycling or disposal—must be collected in separate satellite accumulation containers. Such multiple points of generation may necessitate maintaining multiple SAAs (one for each waste stream) in close proximity. ADEM allows satellite accumulation of up to 55 gallons (or one quart, or one kilogram) 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, so long as the various satellite accumulation containers are clearly separated and delineated to prevent mingling of the different waste streams.

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. The aggregation of 55 gallons or less (or one quart or less, or one kilogram or less) of such waste 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 rules are satisfied as discussed above. The work station personnel or the person collecting and aggregating the waste (or both) may be considered the operator of the process.

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 operator of the process may be more than one particular individual, but it can only be the individual or individuals who are involved with the specific process where the hazardous waste is being generated and accumulated at the satellite area.

Other Satellite Accumulation Issues

Marking of satellite accumulation containers. All satellite containers holding hazardous waste must be marked with the words “Hazardous Waste” and an indication of the hazards of the contents. When greater than 55 gallons of hazardous waste (or one quart or one kilogram of acutely hazardous waste) is accumulated at a satellite area, the container(s) holding that excess must be marked with the accumulation start date (the date the waste exceeded the limits stated above). Once the container is dated, it must be managed in accordance with all applicable requirements for less than 90- or 180-day storage (see ADEM Admin. Code r. 335-14-3-.01(6)(b) or (7)(a) for the full requirements) and must be removed from the satellite accumulation area within 3 days.

It is not necessary to mark a satellite accumulation container with the accumulation start date **until** greater than 55 gallons of hazardous waste or one kilogram of acutely hazardous waste has been accumulated. **Always mark the date on the full satellite container**, not on the new (nearly empty) one. It is a common error for a generator to mark a satellite accumulation container with the date that hazardous waste was first put into the container, rather than the date that an excess amount 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 less than 90- or 180-day storage allowance begins at the accumulation start date that is marked on the container.

Container capacity or accumulation greater than 55 gallons. Occasionally, you 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. The quantity limits for satellite accumulation still apply; once the container holds 55 gallons, it must be dated and removed from the area within three days. Otherwise, the waste container must be managed in accordance with the full requirements applying to less than 90- or 180-day hazardous waste storage.

In instances where a large volume of hazardous waste is generated at one time and the waste must be staged near the point of generation before removal for longer term storage or disposal (such as during a tank clean out), you must still observe the limits imposed for satellite accumulation in containers with regard to container management, marking,

