



Satellite Accumulation

Technical Information Memorandum

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The purpose of this Technical Information Memorandum (TIM) is to provide guidance and interpretation on the Department of Ecology's (Ecology) satellite accumulation regulations.

This document does not replace the state or federal regulations dealing with the proper management of dangerous (hazardous) waste. Please refer to Chapter 173-303 Washington Administrative Code, and federal 40 CFR regulations for complete definitions and regulatory citations.

Problem Statement

All types of dangerous waste storage are regulated. The standards for storing and accumulating dangerous waste vary depending on the following three items:

1. length of time,
2. location, and
3. volume of waste being stored or accumulated.

The satellite accumulation provisions outlined in the *Dangerous Waste Regulations*, Chapter 173-303 WAC, have been difficult to interpret for both inspectors and the regulated communities. Since dangerous waste accumulation is commonly practiced, Ecology prepared this document to clarify the elements of satellite accumulation.

Satellite Accumulation Area Defined

Satellite Accumulation Area is defined as a location at or near any point of generation where dangerous waste is initially accumulated in containers before consolidating the waste at a designated accumulation area (90/180-day) or storage area. The term "satellite accumulation area" is not found in the federal Resource Conservation and Recovery Act (RCRA) regulations, 40 CFR. However, because the term is widely used, a definition was added to the *Dangerous Waste Regulations*. Refer to WAC 173-303-040.

It is important to note that accumulating waste in containers must occur during routine operations. And, the area must be under the control of the

process operator where the waste is being generated or secured at all times to prevent improper wastes from being added to the satellite containers.

Satellite Accumulation Provisions

The following is a list of provisions for maintaining satellite accumulation areas:

- A generator may accumulate as much as 55 gallons of dangerous waste or one quart of acutely hazardous waste, per waste stream in containers at or near any point of generation (see Satellite Accumulation Area Defined).
- The satellite area must be under the control of the process operator where the waste is being generated; or the area must be secured at all times.
- The generator must be able to prevent improper wastes from being added to the satellite container.

Satellite accumulation is allowed without a storage permit provided the generator complies with the following sections of WAC 173-303:

- Container labeling/marketing requirements, - 200(1)(d)
- Condition of containers, -630(2)
- Compatibility of waste with containers, -630(4)
- Containers to be closed, -630(5)(a)
- Container handling to prevent leaks, -630(5)(b)

- Special requirements for ignitable or reactive wastes, -630(8)(a), and
- Special requirements for incompatible wastes, - 630(9)(a) and (b)

When 55 gallons of dangerous waste or one quart of acutely hazardous waste is accumulated per waste stream, the container(s) must be marked immediately with the accumulation date. The waste must then be moved within three days to a designated storage or accumulation area.

On a case-by-case basis Ecology may require the satellite area to be managed in accordance with all or some of the 90/180 day accumulation standards, (WAC 173-303-200(2)). Ecology may require this if the nature of the wastes being accumulated, a history of spills or releases from accumulated containers, or other factors are determined to be a threat or potential threat to human health or the environment: WAC 173-303-200(2).

Problem Resolution

Ecology recognizes the various operational and waste management constraints that occur from site to site. Therefore, the satellite accumulation provisions were developed to provide flexibility for both the generator and inspector implementing waste management activities.

The regulations governing satellite accumulation apply to all generators subject to WAC 173-303-200. The advantage of the satellite accumulation regulations is that they allow generators, who comply with these regulations, to accumulate dangerous waste on-site without obtaining a dangerous waste storage permit. Otherwise, the generator and the waste collecting in satellite accumulation areas are subject to all other applicable dangerous waste regulations.

Conditionally exempt small quantity generators (SQGs) are exempt from Section 200 if they comply with “their own” subset of regulations outlined in the *Dangerous Waste Regulations*, (refer to WAC 173-303-070(8)). This TIM addresses and clarifies

implementation and compliance related issues associated with satellite accumulation.

Number of Satellite Accumulation Areas Allowed On-site

A generator is not limited to the number of satellite accumulation areas allowed on-site. Each waste stream is entitled to be accumulated under the satellite accumulation provisions and to its own satellite accumulation area.

“Per” or “Each” Waste stream

“Per” or “each” waste stream refers to individual waste streams, each with an individual point of generation. Individual waste streams include: wastes that are physically or chemically different from each other; wastes that are generated from different types of processes; and wastes that are the same type, but are generated at different points along the same process or at different process locations.

Volume Threshold Limit

Each satellite accumulation area is limited by volume, up to either 55 gallons of dangerous waste or one quart of acutely hazardous waste.

Number of Waste streams at each Satellite Accumulation Area

Each satellite accumulation area is limited to an individual waste stream. A generator may accumulate up to 55 gallons of one dangerous waste or one quart of acutely hazardous waste “waste stream” in a single satellite accumulation area. However, since the rule does not specify a minimum distance between satellite accumulation areas, two or more separate areas may be adjacent to each other.

Distance Between Satellite Accumulation Areas

A minimum distance requirement for two separate satellite accumulation areas is not outlined in the regulations. A generator may have two or more separate satellite

accumulation areas immediately adjacent to each other provided each area independently meets the definition and requirements for satellite accumulation.

Number of Containers at Each Satellite Accumulation Areas

A generator is not limited to the number of containers allowed in a satellite accumulation area to collect waste. The important point is that each area does not exceed the volume threshold limit as mentioned above.

Container Requirement

Satellite accumulation is limited only to containers. Satellite accumulation activities occurring in tanks, waste piles, lagoons, or another dangerous waste management unit or device is prohibited. A container is any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled: WAC 173-303-040.

“At” or “Near” the Point of Generation

There is no maximum or minimum distance used to define or interpret “at” or “near” the point of generation. Since there are numerous processes where dangerous wastes are generated, a specific distance requirement, such as 10 feet between the point of generation and the satellite area, would limit the ability of a generator and inspector to effectively and safely manage dangerous waste.

This element of satellite accumulation provides flexibility in applying and using the rule. “At” or “linear” is intended to be used as its common, everyday meaning.

Satellite Accumulation in 90/180 Day Accumulation Areas

The satellite accumulation regulations do not prohibit a generator from locating a satellite accumulation area within a 90/180 day accumulation area. The areas located as such, must independently meet the definition of

satellite accumulation area and be in compliance with the satellite accumulation regulations.

Off-Site Locations

Satellite accumulation areas cannot be located off the site where the waste is initially generated. Any dangerous waste shipped off-site by large or medium quantity generators must be sent to a designated facility listed on the manifest. Dangerous waste shipped off-site by small quantity generators is also limited to where it can be sent (refer to WAC 173-303-070(8)). In any case, waste cannot be sent away from where it was initially generated or to a separate location (off-site) under the provisions of satellite accumulation.

Operator Control or Secured

Satellite accumulation areas must be either “under the control of the operator of the process generating the waste” or “secured at all times.” The intent of providing both options in this rule is to allow flexibility in locating a satellite accumulation area and to prevent the improper or unauthorized addition of waste to a satellite accumulation container.

Operator of the Process Generating Waste

The “operator of the process generating waste” means any person at the production level who is responsible for operating, or coordinating the operation of, manufacturing process or any other process which generates a waste. The “operator” may include several individuals in cases where the facility has two or three shifts with a different process operator during each shift. If an operator can assure a second party, not involved in the generation of the waste, that he can secure the satellite accumulation area “to prevent improper additions of waste into the satellite container” then the intent of the satellite regulations would be met.

Secured at All Times

The “secured at all times” option allows a satellite accumulation area to be located in one location although a waste stream, such as

batteries and rags, may be generated throughout a facility. This option can also accommodate other regulatory jurisdictions that may require specific conditions for dangerous material accumulation. For example, such as meeting the local fire marshal's Uniform Fire Code that may require certain types of materials having to be located in specific types of structures or locations on-site. These locations may be located outside of the room where the waste is initially generated.

"Secured" means the use of a locked area (possibly located outside the building, a locking device on the container, or the use of administrative controls developed and implemented by the generator. The administrative controls must be able to prevent the improper or unauthorized addition of waste to a satellite accumulation container.

During Routine Operations

The term "during routine operations" is intended to limit the provisions of satellite accumulation to wastes which are generated on a relatively continuous basis. Wastes which are generated on an infrequent or one time basis, (e.g., spills), cannot be held for extended periods of time in satellite accumulation areas. Ecology does not intend to allow cleanup material to accumulate or be stored indefinitely in a satellite accumulation area container.

Accumulation Start Date

Once the volume threshold limit has been reached in a satellite accumulation area, the container(s) must be marked immediately with the accumulation start date. The satellite areas are the only accumulation areas where waste containers do not require an accumulation start date until such thresholds of waste are met.

Three (3) Day Time Limit

Within 3 calendar days from the time the volume threshold has been reached in a satellite accumulation area, the container(s) must be either transported off-site to a

designated facility or transported to a 90/180 day accumulation or "storage" area on-site. The 3 day time period applies only to moving the waste out of a satellite accumulation area. It does not apply to other management requirements such as placing the accumulation start date on the container.

90 Day Accumulation or Storage Areas

If dangerous waste is placed in an area which is not defined and managed as a satellite accumulation area, then the area must be identified as either a permitted storage facility or a 90/180 day accumulation area. The 90/180 day accumulation area commonly refers to a "central" collection point on the generator's site where dangerous wastes from satellite accumulation areas are brought before being further managed. The 90/180 day accumulation area requirements are outlined in WAC 173-303-200 and require accumulation start dates to appear on containers as soon as waste enters the containers.

Permitted Storage Areas

A permitted storage area refers to a facility designed for long-term storage (longer than 90 or 180 days) of waste and generally is not on the generator's site. Wastes are commonly shipped from a generator's 90/180 day or satellite accumulation area on-site to an off-site permitted storage area. The permitted storage facility standards and permit requirements are found in WAC 173-303-280 through 395, 600-680, and 800-840. These regulations require a dangerous waste permit before dangerous waste storage begins.

Case-by-Case Situations

A provision has been included in this rule that allows Ecology, on a case-by-case basis, to require additional management requirements for satellite accumulation areas. This will occur if certain factors are determined to be a threat or potential threat to human health or the environment such as the nature of the wastes being accumulated or a history of spills or releases from accumulated containers.

For More Information

The Hazardous Waste and Toxics Reduction Program is responsible for the management and reduction of dangerous (hazardous) waste and toxic substances in Washington State. We're here to answer your questions. Contact your nearest regional office and ask for a

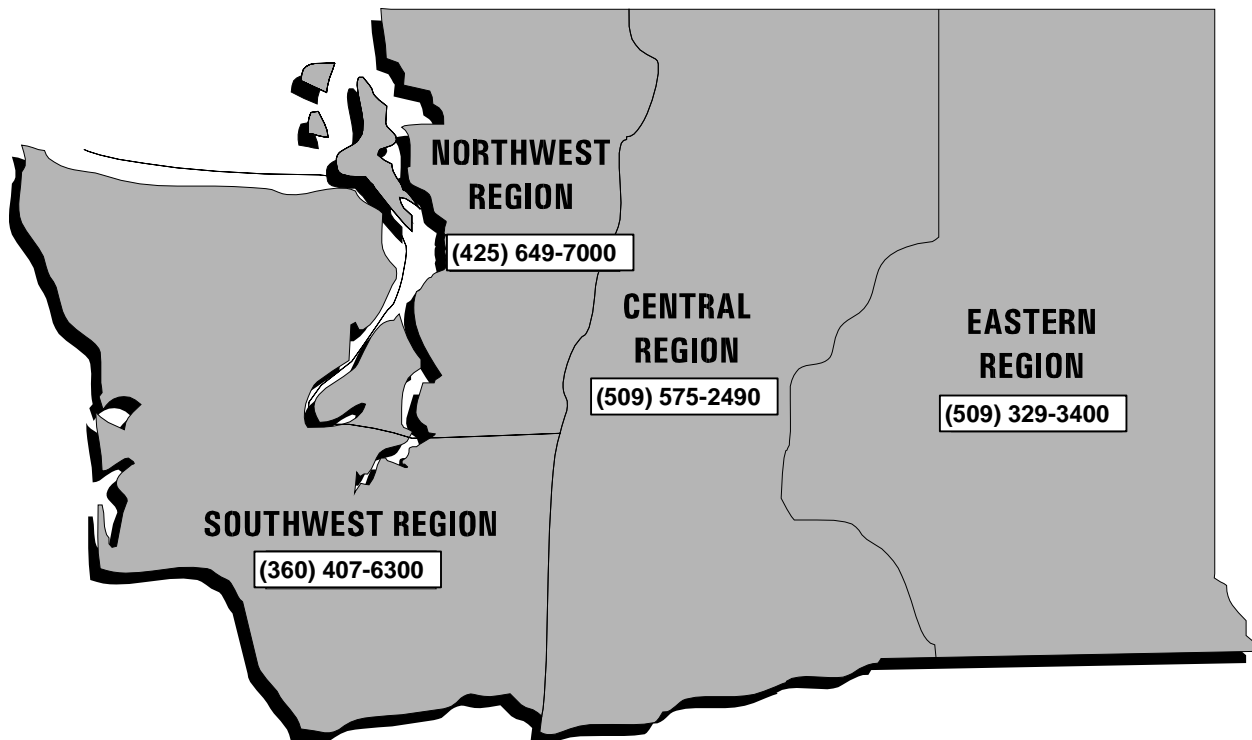
Hazardous Waste Specialist if you are uncertain about your responsibilities as a hazardous waste generator. And for information on reducing or recycling hazardous waste, ask for a Toxics Reduction Specialist.

Additional Phone Numbers:

Olympia Headquarters

Hazardous Waste and Toxics Reduction Program (360) 407-6700
Industrial Section (360) 407-6900
Nuclear and Mixed Waste (360) 407-6600

Regional Offices



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