

Clarification on the Applicability of the Satellite Accumulation Rule to Laboratories

This memorandum provides clarification on the applicability of the satellite accumulation rule to laboratories in Massachusetts. The Massachusetts Department of Environmental Protection (DEP) and the United States Environmental Protection Agency, Region 1 (EPA Region 1) have recently evaluated their respective satellite accumulation rules as applied to the laboratory workplace. Although the rules are equivalent overall, the regulatory language is different, and this has led to differing enforcement approaches to some aspects of satellite accumulation.

To ensure consistency, EPA Region 1 and DEP have agreed to apply consistent interpretations of the satellite accumulation rule as described below.

DEP's Satellite Accumulation (SA) rule, cited at 310 CMR 30.340(6), 30.351(4) and 30.353(6)(i), limits a generator to one container (up to 55 gallons) per waste stream, for each point of generation. The DEP's satellite accumulation rule is generally regarded as more flexible for larger companies that generate "drum quantities" of waste in Satellite Accumulation Areas (SAA). Under the DEP's rule, there is no limit on the number of 55-gallon drums that can be accumulated in a SAA, provided the contents are different waste streams.

EPA's SA rule has an overall limit of 55-gallons for each point of generation, which is more restrictive than DEP's rule in terms of how much waste can be held in a SAA. However, EPA's rule has no "one-container per waste stream" limit, provided that no more than 55 gallons are accumulated overall. This generally favors smaller, lab-oriented companies that produce smaller quantities of the same waste in multiple containers.

While the DEP's SA rule differs from the federal analog, EPA has nonetheless deemed it to be "no less stringent." EPA authorized DEP in 1998 to be the lead agency for enforcement of the SA rule, which continues to provide larger companies much needed flexibility. Despite the "authorized" status, implementation of this rule in laboratory settings has been problematic because EPA's interpretation of the Massachusetts SA rule is different than DEP's interpretation with respect to containers that are "in use." Because EPA's interpretation of this component of the Massachusetts rule is more restrictive, DEP has historically deferred enforcement of the SA rule for RCRA hazardous waste to EPA Region 1. At best, overlaying this more stringent federal interpretation on the state limit of one satellite container per wastestream, limits the flexibility that DEP's SA rule

was designed to provide; at worst, it puts generators at risk of inconsistent enforcement between state and federal agencies.

Specifically, the agreed upon interpretations below pertain to containers used to collect the elutriate from analytical instruments such as liquid chromatographs and atomic absorption spectrometers, as well as containers used on bench tops or in fume hoods to collect wastes from chemical procedures. In Massachusetts, it is common to find quality assurance labs, analytical labs, bioassay labs, and biotechnology related labs with many analytical instruments of this type that require the use of elutriate collection containers such as flasks and/or beakers. It is also common practice for labs to use flasks and/or beakers as collection containers on bench tops and inside fume hoods.

In order to provide a consistent regulatory interpretation that does not compromise the protection of human health or the environment, DEP will not consider certain containers that are "in use" to be satellite accumulation containers; rather they will be regulated as "working containers" provided that certain conditions are met. Working containers are small waste containers (i.e., two gallons or less), managed under the control of key staff, used at a bench or work station, that are emptied into "satellite" container(s) located at or near the point of generation at the end of every work shift. Generators may use this approach provided that "working containers" are:

- Closed except during active use. Containers on bench tops or in fume hoods shall be considered to be in active use during those parts of the work shift when they are being filled, but need to be covered when not in use.
- Managed in a manner so as to prevent spills and minimize releases.
- Emptied either when full or at the end of the work shift, whichever comes first, into a larger satellite container.
- Marked and labeled as "hazardous waste" and with words describing the nature and hazard of the waste.
- Located on an impervious surface.
- Located at or near the point of generation.
- Under the control of staff directly responsible for the process generating the waste collected in the working container(s).

While EPA Region 1 considers the "working containers" described above to be satellite accumulation containers, by meeting the conditions specified above, the "working containers" meet the minimum federal requirements for satellite accumulation. Thus EPA Region 1 considers generators to be in compliance with satellite accumulation requirements for such "working containers" (of two gallons or less), so long as all of the above conditions are met.

If a generator using this "working container" approach fails to comply with any of the conditions, then under DEP's interpretation the "working container" becomes subject to regulation as a satellite accumulation container. The generator may then be subject to state or federal enforcement for violating any of the DEP satellite accumulation requirements.

DEP and EPA Region 1 believe that this approach for "working containers" acknowledges and accommodates the unique activities typical of laboratory operations without diminishing protection of public health, safety or the environment, and is consistent with the requirements of RCRA.

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