

RCRA and the Regulation of Airbag Waste

NEWMOA's Hazardous Waste Webinar

September 10, 2019

Airbag Waste (Modules and Inflators)

Module



Inflators




Regulation of Airbag Waste Under RCRA

- ▶ Gas-generating airbag systems contain an explosive propellant that causes airbag waste (i.e., discarded airbag inflators and airbag modules) to exhibit the hazardous waste characteristics of ignitability and reactivity.
- ▶ This applies to all types of gas-generating airbag systems; however, in the case of recalled Takata airbag inflators, the phase-stabilized ammonium nitrate (PSAN) propellant degrades over time, and can cause the inflator to over-pressurize during deployment.
- ▶ In some cases, this over-pressurization causes the metal canister to rupture, producing shrapnel-like metal shards that can seriously injure or kill vehicle occupants even in low impact accidents.





Takata Recalls

- ▶ Takata airbag recalls affect 65-70 million airbag inflators due to a defect that causes the metal inflator inside the airbag to rupture and explode violently when deployed.
 - ▶ There have been 16 deaths in the US and at least 250 injuries as of March 2019.
 - ▶ The urgent recall of Takata airbag inflators raised a number of questions and issues regarding how used airbags (both Takata and non-Takata) are regulated under RCRA.
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- The illustration shows a dark blue car from a side profile, moving towards the right. A driver is visible inside. A large white airbag is deployed from the dashboard area, and a circular callout bubble labeled 'Shrapnel' shows red fragments flying out from the airbag. The text 'AIRBAG RECALL' is written in bold black letters on the right side of the illustration.
- ▶ To address these issues, EPA developed the following:
 - ▶ June 2017 memo, specific to Takata airbag inflators
 - ▶ July 2018 memo, addressing the regulation of all types of airbag waste
 - ▶ November 2018 interim final rule, creating a conditional exemption for the collection and transport of airbag waste to a RCRA hazardous waste facility.

DOT Preservation Order and the June 2017 EPA memo

- ▶ Up until April 2018, Takata airbag inflators that have been collected as part of the recall effort were stored under a February 2015 DOT Preservation Order.
- ▶ In June 2017, EPA issued a memo explaining that Takata airbags held under the Preservation Order have not been discarded, and are therefore not solid or hazardous waste.
- ▶ This interpretation has allowed Takata to collect the recalled airbag inflators from dealers and store them without being subject to RCRA requirements.
 - ▶ To date, approximately 26 million of the 65-70 million affected Takata airbags have been collected and stored by Takata.
- ▶ Once the Preservation Order no longer applies to them, then these collected Takata airbag inflators must be managed as hazardous waste.

July 2018 Airbag Memo

- ▶ Although the June 2017 airbag memo specifically applied to recalled Takata airbag inflators, it raised questions about how the RCRA regulations apply to airbag waste in general.
- ▶ Specifically, stakeholders contacted EPA with questions regarding:
 - ▶ Unused (never installed) airbags that fail the QA/QC process
 - ▶ Used airbag modules and inflators that can be reused in vehicles
 - ▶ Airbag inflators still in vehicles when the vehicles are shredded to recover scrap metal
 - ▶ Used airbag modules that are deployed at the auto dealer
- ▶ Because different regulatory provisions apply in different circumstances, in July 2018 EPA issued a memo that summarized how RCRA regulations apply to all the possible airbag waste scenarios.

Regulation of Airbag Waste Under RCRA

Not regulated as hazardous waste (general summary):

- Unused (never installed) airbag modules/inflators going to reclamation (i.e., exempt commercial chemical products being reclaimed)
- Used airbags modules/inflators going to legitimate reuse (recalled airbags cannot be reused)
- Airbags modules/inflators installed in vehicles when entire vehicle is recycled as scrap metal
- Airbag *modules* (not inflators) recycled after electronic deployment (scrap metal)
- Takata (or other recalled) airbag modules/inflators under preservation order or similar legal hold.

Regulation of Airbag Waste Under RCRA (cont'd)

Regulated as hazardous waste (general summary):

- ▶ Used Takata (or other recalled) airbag modules/inflators removed from vehicle and not under preservation order.
 - ▶ Airbag modules purchased from scrap yards by salvage vendors for evaluation are regulated at the point the determination is made that they fall under the recall.
- ▶ Used airbag *inflators* not going to legitimate reuse. (Reuse of recalled airbag modules/inflators is sham recycling).
- ▶ All other discarded hazardous airbags modules/inflators.

Takata Bankruptcy and Amended DOT Preservation Order

- ▶ Takata went through bankruptcy proceedings, which ended February 2018 and went into effect April 2018.
- ▶ As a result, the Original Equipment Manufacturers (OEMs) now finance the recall, rather than Takata.
- ▶ DOT also amended the Preservation Order in April 2018, allowing Takata to reduce the number of preserved airbag inflators (while still requiring the preservation at least 5% of inflators, proportionate to the overall number of inflators received from each state and each type of inflator).

Takata Bankruptcy and Amended DOT Preservation Order (cont'd)

- ▶ This changing landscape affects how the recall of the remaining Takata airbag inflators proceeds.
- ▶ Auto dealers may continue to send the recalled inflators to Takata under the Preservation Order, but OEMs must pay Takata for this service.
- ▶ Absent the interim final rule, if OEMs chose instead to have their dealers dispose of the recalled inflators directly, then the dealers would become potentially subject to hazardous waste generator requirements.
 - ▶ This could have had a chilling effect on the pace of Takata airbag replacements.
 - ▶ Such a two-tiered system would also favor long-term storage of recalled inflators (rather than swift disposal), which is less preferable from a risk perspective.

Goal of the Airbag Interim Final Rule

- ▶ The goal of the interim final rule is to structure the hazardous waste regulations in such a way that:
 - ▶ There is no impediment under RCRA to the swift removal of recalled Takata airbag inflators from vehicles.
 - ▶ The removed airbag inflators and airbag modules (i.e., airbag waste) are managed safely during accumulation and transport, and are tracked to their destination.
 - ▶ The airbag waste is properly disposed of at a RCRA hazardous waste facility in a timely manner, and long-term storage is discouraged.
 - ▶ The recalled airbag inflators are not diverted back into vehicles.
- ▶ While the exemption provides alternative standards for auto dealers and other entities that remove the recalled airbag inflators, it does not change their obligation to safely manage and dispose of the airbag waste.

Goal of Interim Final Rule (Continued)

- ▶ **Every day counts:** The propensity for Takata airbag inflators to rupture increases over time, especially when exposed to high temperatures and high absolute humidity.
 - ▶ On July 13, 2017, two days before his car was scheduled to be repaired, a man was killed in a minor collision by metal shards from a defective airbag.
- ▶ EPA therefore promulgated the airbag waste exemption as an interim final rule under the APA “good cause” exemption, effective immediately upon publication, with a 60-day public comment period.
- ▶ Public comments will help EPA determine if further revisions are needed, but in the meantime, the exemption remains in effect.

Key Terms Used In New Rule

- ▶ Airbag waste - hazardous waste airbag modules and airbag inflators.
- ▶ Airbag handler - person who generates airbag waste (e.g., auto dealers).
- ▶ Airbag collection facility - a facility that collects and stores airbag waste for more than ten days and is under the control of a vehicle manufacturer or their authorized representative, or under the control of an authorized party administering a remedy program in response to a DOT recall.
- ▶ Designated facility - RCRA facility permitted by EPA or the authorized state to accept airbag waste for treatment, disposal or recycling.
- ▶ 40 CFR 261.4(j): Citation for new airbag waste conditional exemption. This optional provision exempts airbag waste from RCRA hazardous waste requirements while at the airbag waste handler and during transportation to airbag waste collection facility or designated facility, provided certain conditions are met.

Overview of Airbag Waste Interim Final Rule

- ▶ The interim final rule promulgates a new conditional exemption at 40 CFR 261.4(j) for airbag waste, provided that the airbag handler sends the airbag waste either to a RCRA designated facility or to a airbag collection facility, and also meets the other conditions of the exemption.
- ▶ Conditions of exemption are modeled after current industry practices and are designed to ensure that the exempted airbag waste is managed safely and is appropriately destroyed and not diverted back into vehicles. The conditions for the airbag waste handler are:
 - ▶ Maximum 250 discarded airbag modules or airbag inflators stored at the airbag handler
 - ▶ Storage time limit of 180 days
 - ▶ Packaged and shipped in a container designed to address risk posed by inflator
 - ▶ Container labeled “Airbag Waste - Do Not Reuse”
 - ▶ Maintain shipping records and confirmation of receipt for 3 years (Ordinary business records such as bills of lading are sufficient; electronic records acceptable.)

Overview of Airbag Waste Interim Final Rule (cont'd)

- ▶ The RCRA designated facility or airbag collection facility then acts as the RCRA generator for the airbag waste.
- ▶ In addition, the reuse of recalled defective airbag modules or airbag inflators is prohibited under 40 CFR 261.2(g) as sham recycling.
- ▶ Scope of the exemption includes all airbag waste, not just Takata airbag waste.
 - ▶ While the Takata recall is the source behind the urgency for this rulemaking, it makes sense from a risk perspective to have one airbag waste collection system.
 - ▶ A two-tiered system for Takata and non-Takata airbag waste would create unnecessary confusion.
 - ▶ In addition, the much smaller volume of non-Takata airbag waste could result in it being Very Small Quantity Generator waste, and therefore, possibly diverted to the municipal waste stream.

Next Steps

- ▶ The Interim Final Rule was published on November 30, 2018 in the Federal Register, and went into effect federally when published.
- ▶ The 60-day comment period ended January 29, 2019; EPA is currently evaluating the comments to determine if any further revisions to the regulations are needed. Currently EPA plans to publish a “final” final rule by May 2020.
- ▶ In the meantime, EPA will work with the states on implementing the rule. While state requirements can be more stringent than the federal requirements, EPA encourages the states to follow the federal requirements for airbag waste in order to help facilitate the airbag recall.

Resources

Takata recall information:

<https://www.nhtsa.gov/equipment/takata-recall-spotlight>

June 2017 EPA Airbag memo:

<https://rcrapublic.epa.gov/files/14893.pdf>

July 2018 EPA Airbag memo:

<https://www.epa.gov/hw/regulatory-status-automotive-airbag-inflators-and-fully-assembled-airbag-modules>

Airbag Interim Final Rule Website:

<https://www.epa.gov/hw/interim-final-rule-safe-management-recalled-airbags>

For more information, contact:

Tracy Atagi

atagi.tracy@epa.gov

703-308-8672