Safe Management of Airbag Waste: Interim Final Rule

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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.
- <u>40 CFR 261.4(j)</u>: Citation for new <u>airbag waste conditional exemption</u>. 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
 3 or designated facility, provided certain conditions are met.

Airbag Module vs Airbag Inflator



Diagram showing placement of airbag inflator within the airbag module in a steering column

Goal of 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 is therefore promulgating 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 would remain in effect.

Regulation of Used Airbags under RCRA

- Gas-generating airbag systems (both Takata and non-Takata) 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.
- A number of different RCRA exemptions and exclusions can apply, depending on how the airbag waste is managed. These provisions are not affected by the new rule. See July 19, 2018, EPA memo.

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

However, because they can not be safely reused, nor safely deployed, used Takata airbags that have been removed from vehicles <u>must</u> be managed as hazardous waste <u>when discarded</u>.

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 15 deaths in the US and at least 250 injuries as of August 2018.



Takata Recalls (continued)

- The phase-stabilized ammonium nitrate (PSAN) propellant used in the recalled Takata airbag inflators 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.



DOT Preservation Order and the June 2017 EPA memo

- Until recently, Takata airbag inflators that have been collected as part of the recall effort have been stored under a February 2015 DOT Preservation Order.
- In June 2017, EPA issued a memo explaining that Takata airbags held under the Preservation Order <u>have not been discarded</u>, and are therefore not solid or hazardous waste under federal regulations.
- Thus Takata has collected the recalled airbag inflators from dealers and stored them without being subject to RCRA requirements.
- Once the Preservation Order no longer applies to them, then these collected Takata airbag inflators must be managed as hazardous waste.

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) (i.e., auto manufacturers) 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, <u>but</u> 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.

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Diversion of Recalled Airbag Inflators Back Into Vehicles

- Diversion of recalled Takata airbag inflators back into vehicles is extremely dangerous because a vehicle repaired with a scavenged airbag inflator will likely have no record of its origin.
 - In addition, recalled airbag inflators in scrapped vehicles are more likely to have been exposed to the heat and humidity that can cause the propellent to degrade.
- There is at least one documented case of a driver seriously injured by a recalled inflator from a salvage yard vehicle used to repair a damaged vehicle.
- To address this risk, some OEMs have commissioned salvage vendors to buy recalled airbag inflators from salvage yards and send them for destruction.
- However, because the DOT preservation order does not cover inflators from scrap vehicles, inflators collected from salvage yards are subject to RCRA hazardous waste requirements, once the determination is made that they are part of the recall.

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 (continued)

- 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.
- Note that the non-Takata airbag modules and inflators may also still be eligible for reuse and other exclusions and exemptions. (see July 19, 2018 EPA memo)

- The Interim Final Rule will be published shortly in the Federal Register, and will go into effect federally when published.
- There will be a 60-day comment period; EPA will use the comments to determine if any further revisions to the regulations are needed. Currently EPA plans to publish a "final" final rule by September 2019; this may change depending on public comments.
- In the meantime, EPA will work with the states on implementing the rule. While state requirements can be more stringent that the federal requirements, EPA encourages the states to follow the federal requirements for airbag waste in order to help facilitate the airbag recall.