



HOT TOPICS IN WASTE CLASSIFICATION AND RECYCLING

Presented by

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TOPICS

- Alcohol-Based Hand Sanitizer
- Jewelry Sweeps
- E-Cigarette / Nicotine
- Use Constituting Disposal
- Paints / LEDs
- Propane Cylinders
- Fuels: Transmix, Intentional mixture of fuels



ALCOHOL-BASED HAND SANITIZER



Joint Advisory on Handling and Management **Just Published!**

Covers management as a hazardous material and hazardous waste.



ALCOHOL-BASED HAND SANITIZER



- Businesses, schools, and other entities have large volumes due to the pandemic which are now expiring.
- US EPA RIN Calls
April 2022
September 2022



DISCARDED HAND SANITIZER

- Ignitable RCRA Hazardous Waste (D001)
- Supplements US EPA guidance ([June 2021](#), [Feb 2022](#), [Nov 2022](#))
- US EPA Website ([March 2023](#))
<https://www.epa.gov/hw/how-dispose-and-recycle-alcohol-based-hand-sanitizer#Q1>
- See [FDA website](#) for additional information
- Additional and more stringent requirements in California



MANAGING WASTE HAND SANITIZER

- *Retrograde Material*
 - HSC § 25121.5 and HSC § 25120.5
- *Recycling*
 - HSC § 25143.2
 - HSC § 25143.2(e) and 22 CCR § 66261.2
 - HSC § 25143.9 and § 25143.10
- *Disposal*



WHAT IS A RETROGRADE MATERIAL?

HSC § 25121.5 and 22 CCR § 66260.10

HSC § 25120.5(e)

Not regulated by DTSC.

Not managed as a waste.

Must be unused.



RETROGRADE MATERIAL

22 CCR § 66260.10 AND HSC § 25121.5

"Retrograde material" means a hazardous material **that is not to be used, sold, or distributed for use in an originally intended or prescribed manner or purpose** and meets any of these criteria:

- 1) Has undergone changes (e.g., chemical or physical) due to the passage of time or the environmental conditions under which it was stored.
- 2) Has exceeded its shelf life.
- 3) Is banned (e.g., by law or regulation).
- 4) Cannot be used for reasons of economics, health or safety or environmental hazard.



RETROGRADE MATERIAL

22 CCR § 66260.10 AND HSC § 25121.5

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- 1) Has undergone changes (e.g., chemical or physical) due to the passage of time or the environmental conditions under which it was stored.
- 2) **Has exceeded its shelf life.**
- 3) Is banned (e.g., by law or regulation).
- 4) Cannot be used for reasons of economics, health or safety or environmental hazard.



WHEN A **RETROGRADE** MATERIAL BECOMES A **RECYCLABLE** MATERIAL

Remember HSC § 25120.5(e)
(Recyclable Material definition)

“Recyclable material” means a hazardous waste that is capable of being recycled, including, but not limited to, any of the following:

- [...]
- (e) Any retrograde material that has not been used, distributed, or reclaimed through treatment by the original manufacturer or owner by the later of the following dates:
 - (1) One year after the date when the material became a retrograde material.
 - (2) If the material has been returned to the original manufacturer, one year after the material is returned to the original manufacturer.



A RETROGRADE MATERIAL...

Is not a waste if used, sold, or distributed for use within one year of the date it became retrograde

OR

Is not a waste if used, distributed, or reclaimed through treatment by the original manufacturer within one year after returned to the original manufacturer

Is it regulated by DTSC?

No!



IT BECOMES A RECYCLABLE MATERIAL ...

And becomes a waste when it is not sent back to the original manufacturer within one year of becoming retrograde

OR

And becomes a waste if the original manufacturer has the material for more than one year.

Is it regulated by DTSC?

Yes!



REMEMBER

- Retrograde material is not a waste.
- If held by ABC Business, they only have one year after it attains retrograde status to do something with it.
- Retrograde material becomes a waste when returned to original manufacturer or owner and they fail to do anything beneficial after 1 year from receiving it.

(Only the original manufacturer gets the extra year.)



RECYCLING OF HAND SANITIZER

If not sent back to original manufacturer within 1 year, it's a hazardous waste that is potentially recyclable.

- HSC § 25143.2
- HSC § 25143.2 (e) and 22 CCR § 66261.2
- HSC § 25143.9 and HSC § 25143.10



RECYCLING OF HAND SANITIZER

- Send to a facility who can recycle the waste to recover the alcohol, which is then used to produce a product
 - Not a fuel (or contained in fuel)
 - Not applied to land (or contained in a product applied to land)
- Certain requirements regarding storage, labelling, transportation, and record-keeping or reporting for alcohol-based hand sanitizer that is to be recycled
 - Depends on where, when, and how much material is to be recycled



RECYCLING OF HAND SANITIZER

Can waste hand sanitizer (as D001) qualify for a non-RCRA hazardous waste exclusion or exemption under HSC § 25143.2?



FEDERAL DEFINITION OF SOLID WASTE

40 CFR § 261.2 (Table 1)

Secondary Materials	Use constituting disposal 1	Energy recovery/fuel 2	Reclamation 3	Speculative Accumulation 4
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	--	(*)
By-products (listed 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	--	(*)
Commercial chemical products listed in 40 CFR 261.33	(*)	(*)	--	--

Note: See 40 CFR for full table.



STATE DEFINITION OF WASTE

22 CCR § 66261.2 (Table 1)

Secondary Materials	Use constituting disposal	Energy recovery/fuel	Reclamation	Speculative Accumulation
	1	2	3	4
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in § 66261.31 or 66261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	(**)	(*)
By-products (listed in § 66261.31 or 66261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	(**)	(*)
Commercial chemical products (listed in § 66261.33)	(*)	(*)	(**)	(**)



HSC § 25143.2(e)(1) TO (e)(7)

- Recyclable materials managed as fully regulated hazardous wastes
- Known as the (e) overrides

No matter what you think you have in (b), (c), or (d), if recycling in a certain way in (e), you don't get to take advantage of (b), (c), or (d).

Subdivisions (e)(1) through (e)(4) are red flags.
Subdivisions (e)(5) through (e)(7) apply to certain specific wastestreams.



HSC § 25143.9 AND § 25143.10

HSC § 25143.9

Documentation requirements for HSC § 25143.2(b) and HSC § 25143.2(d)

- Label as “Excluded Recyclable Material”
- HMBPs
- Secondary containment
- Export requirements (HSC § 25162.1)

HSC § 25143.10

Reporting requirements for HSC § 25143.2

- Recyclable Materials Report, if recycle more than 100 kg (220 lbs) per month
- Every two years report in CERS



DISPOSAL OF WASTE HAND SANITIZER

If there are no recycling options available, then the waste hand sanitizer must be disposed of as a fully regulated RCRA ignitable hazardous waste (waste code D001).



MANAGEMENT OPTIONS WASTE HAND SANITIZER

- Generator subject to all federal and state hazardous waste management requirements.
 - Cradle-to-grave
 - Active ID number
 - Storage and Management
 - [30-day extensions through DTSC](#)
- Registered HW Transporter using a HW manifest to a permitted TSDF



MANAGEMENT OF JEWELRY SWEEPS AS ERM

Management of waste generated from precious metals refining services

- Fine metal dust consisting of regulated metals such as silver, copper, zinc and nickel, and other precious metals which are not regulated, such as gold, palladium, and platinum. These metal particulates and scrap, referred to as jewelry sweeps, are generated during jewelry polishing operations.
 - The metal dust is excluded from the definition of scrap metal found in 22 CCR § 66260.10 because of its particulate size (under 100 μ m).
- The metal dust is collected and sent off-site for recycling.
- It is the responsibility of the generator of the waste to determine if their waste is a hazardous waste pursuant to 22 CCR § 66262.11.



MANAGEMENT OF JEWELRY SWEEPS AS ERM

How is the waste handled after being sent for recycling?

- Multiple processing steps including application of heat, grinding, separation, and melting.
- The processing steps all meet the legal definition of treatment found in HSC § 25123.5.

“...any method, technique, or process which is not otherwise excluded from the definition of treatment by this chapter and which is designed to change the physical, chemical, or biological character or composition of any hazardous waste or any material contained therein, or which removes or reduces its harmful properties or characteristics for any purpose.”

- Treatment of hazardous waste requires a permit or other form of authorization.



MANAGEMENT OF JEWELRY SWEEPS AS ERM

How is the waste handled after being sent for recycling?

- Certain treatment procedures are allowed under HSC § 25143.2(d)(5)(C) for recyclable materials.
 - (C) The material is not being treated except by one or more of the following procedures:
 - (i) Filtering.
 - (ii) Screening.
 - (iii) Sorting.
 - (iv) Sieving.
 - (v) Grinding.
 - (vi) Physical or gravity separation without the addition of external heat or any chemicals.
 - (vii) pH adjustment.
 - (viii) Viscosity adjustment.



MANAGEMENT OF JEWELRY SWEEPS AS ERM

Final Products from the recycling process

- Fine metal dust and other larger materials recovered by separation using a sieve.
- The fine metal dust is sent to a metal recycler to produce other metal products such as metal bars.
 - This dust cannot be managed as scrap metal.
- The larger materials, which are lower grade materials, are shipped to a facility that uses them for to produce various products, including products which are applied to the land.



MANAGEMENT OF JEWELRY SWEEPS AS ERM

Why do these jewelry sweeps not qualify to be managed as ERM?

- HSC § 25143.2(d)(5)(C) only allows for certain treatment procedures for the material to be recycled and managed as ERM when used or reused as an ingredient in an industrial process to produce a product.
- HSC § 25143.2(d)(5)(C) specifically excludes the addition of heat during the treatment process.
- The treatment process includes reclamation (i.e., processed to recover a usable product) and one of the end products of the recycling process is applied to the land
- HSC § 25143.2(e) states that a hazardous waste is not eligible to be managed as an ERM when the hazardous waste is used to produce a product that is placed on the land, burned for energy recovery, or accumulated speculatively.



NICOTINE AND E-CIGARETTES

- Nicotine delivery device
- Can often be disassembled
 - Electronic component
 - Nicotine container
 - Battery may be removable



NICOTINE AND E-CIGARETTES

Nicotine

- Nicotine is a listed acute hazardous waste (P075).
 - The listing can be found in 22 CCR § 66261.33(e).
- Any residuals left in an E-cigarette are a listed P075 waste.
 - This applies to the nicotine container unless the container is “empty” and the device itself.
 - Containers that held an acute hazardous waste must be triple rinsed, or cleaned using an alternative method that has been shown to achieve equivalent results in order to be considered empty, pursuant to 22 CCR § 66261.7(d).
 - The rinsate must be collected and characterized.



NICOTINE AND E-CIGARETTES

E-cigarettes

- The device could potentially be fully regulated hazardous waste if it is contaminated by nicotine.
- E-cigarettes contain circuit boards and other related electronic components, batteries, and nicotine.
- The device may be managed under the universal waste regulations if it meets the applicability requirements in 22 CCR § 66273.3.
- The batteries may be managed under the universal waste regulations if they meet the applicability requirements in 22 CCR § 66273.2.



NICOTINE AND E-CIGARETTES

E-cigarettes as household hazardous waste

- E-cigarettes used by households for their own personal use may be considered household hazardous waste when discarded.
 - Waste devices and non-empty nicotine containers must be relinquished to a hazardous waste facility that is authorized to accept P-listed acute hazardous waste, such as a household hazardous waste collection facility.
 - Nicotine containers may be made empty by removing all of the contents that can be removed using practices commonly employed to remove materials from that type of container, pursuant to 22 CCR § 66261.7(k).



NICOTINE AND E-CIGARETTES

Example: E-cigarettes confiscated or disposed of at schools.

- The school becomes the generator if they take ownership of them.
- The school does not qualify as a household, but may qualify under VSQG in order to dispose of the waste at a HHWCF.
 - HHWCFs are not required to accept VSQG waste and may limit the types and amounts of household hazardous waste that are accepted.
- Best to return to the parents if possible.



BREAK TIME



SPENT ABRASIVE BLASTING MEDIA

Can waste Spent Abrasive Blasting Media (SABM) qualify for as Excluded Recyclable Material under Health and Safety Code § 25143.2(b)(1) if it's used as an ingredient to make Portland Cement?

NEED MORE INFORMATION!



SPENT ABRASIVE BLASTING MEDIA

RCRA or Non-RCRA HW?

Any treatment of the SABM?



SPENT ABRASIVE BLASTING MEDIA

Non-RCRA HW

Yes, *sieving* to remove debris or trash.



FEDERAL DEFINITION OF SOLID WASTE

40 CFR § 261.2 (Table 1)

Secondary Materials	Use constituting disposal	Energy recovery/fuel	Reclamation	Speculative Accumulation
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Sludges (listed in 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	--	(*)
By-products (listed 40 CFR 261.31 or 261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	--	(*)
Commercial chemical products listed in 40 CFR 261.33	(*)	(*)	--	--

Note: See 40 CFR for full table.



STATE DEFINITION OF WASTE

22 CCR § 66261.2 (Table 1)

Secondary Materials	Use constituting disposal	Energy recovery/fuel	Reclamation	Speculative Accumulation
	1	2	3	4
Spent Materials	(*)	(*)	(*)	(*)
Sludges (listed in § 66261.31 or 66261.32)	(*)	(*)	(*)	(*)
Sludges exhibiting a characteristic of hazardous waste	(*)	(*)	(**)	(*)
By-products (listed in § 66261.31 or 66261.32)	(*)	(*)	(*)	(*)
By-products exhibiting a characteristic of hazardous waste	(*)	(*)	(**)	(*)
Commercial chemical products (listed in § 66261.33)	(*)	(*)	(**)	(**)



USE CONSTITUTING DISPOSAL

22 CCR § 66261.2(d)(1)(A)

Recycling is (or involves) “use constituting disposal” if the recyclable material is:

- Directly applied to or placed on the land, or is
- Indirectly applied to the ground such as products applied to, placed on, or otherwise contained in products applied to or placed on the land.



HSC § 25143.2(b)(1)

Use or Reuse exclusion

- Used or reused as an ingredient in an industrial process to make a product if the material is not being reclaimed.
- Subject to the management standards in 25143.9 and reporting requirements in 25143.10.
- RCRA or non-RCRA hazardous waste



HSC § 25143.2(d)(5)

Use or Reuse exclusion

- Used or reused as an ingredient in an industrial process to make a product and meets all requirements of exclusion including specific treatment processes
- Subject to the management standards in 25143.9 and reporting requirements in 25143.10.
- Only non-RCRA hazardous waste



HSC § 25143.2(d)(5)(C)

(C) The material is not being treated, except by one or more of the following procedures:

- (i) Filtering.
- (ii) Screening.
- (iii) Sorting.
- (iv) Sieving.
- (v) Grinding.
- (vi) Physical or gravity separation without the addition of external heat or any chemicals.
- (vii) pH adjustment.
- (viii) Viscosity adjustment.



HSC § 25143.2(d)(5)(C)

(C) The material is not being treated, except by one or more of the following procedures:

- (i) Filtering.
- (ii) Screening.
- (iii) Sorting.
- (iv) Sieving.
- (v) Grinding.
- (vi) Physical or gravity separation without the addition of external heat or any chemicals.
- (vii) pH adjustment.
- (viii) Viscosity adjustment.



DOES THE SABM QUALIFY FOR AN EXCLUSION?

Does not qualify for HSC § 25143.2(b)(1)

- No reclamation allowed

Possibly qualifies for HSC § 25143.2(d)(5)

- Sieving is one of the allowable procedures

Is it out under subdivision (e)?



THE (e) OVERRIDES

Recyclable materials managed as fully regulated hazardous wastes.

No matter what you think you have in (b), (c), or (d), if recycling in a certain way in (e), you don't get to take advantage of (b), (c), or (d).



HSC § 25143.2 (e)(2) - UCD

(2) **Materials that are a non-RCRA hazardous waste**, as defined in Section 25117.9, and used in a manner constituting disposal or used to produce products that are applied to the land as a fertilizer, soil amendment, agricultural mineral, or an auxiliary soil and plant substance. The department may adopt regulations to exclude materials from regulation pursuant to this paragraph.

****See 22 CCR § 66266.21****




22 CCR § 66266.21

- Requirements for recyclable materials placed on the land
- May be eligible for exclusion or exemption in HSC § 25143.2 and not regulated pursuant to HSC § 25143.2(e)(2) if certain requirements are met.
- For non-RCRA hazardous waste only.



USE CONSTITUTING DISPOSAL

- Wastestream specific
- Please see all requirements but a few to highlight from 22 CCR § 66266.21
 - Does it pass the WET?
 - Show you didn't pass it by dilution (see calculation)
 - Engineer or other qualified person's certification that product produced from the recyclable material meets applicable standards
- [US EPA October 2019 alert](#)  US EPA Regional Directors
(Recycling of spent blast media)



PAINT AND LEDs

Paint Waste Classification

- There are no regulations or statutes specifically stating that wet paint is a hazardous waste and how to dispose of it.
- HSC § 25217.1 states that liquid latex or oil-based paint may not be disposed of in the land or waters.
- Latex paint is to be treated the same as any other waste:
 - First, the generator must determine that they have a waste.
 - Then, they must use generator knowledge or testing to determine whether or not their waste is a hazardous waste, per 22 CCR § 66262.11.



PAINT AND LEDs

Paint Disposal in Residential Garbage Cans

- Waste classification of paint depends largely on the properties or characteristics of the paint. Some contain hazards such as VOC's and metals. Because of this, we advise residents to take any unused paint (dry or wet) to their local Household Hazardous Waste Collection Facility (HHWCF), or a paint recycling program.
- The only other option would be if they choose to have the waste tested and if it is found to be non-hazardous, and it is a solid, then it can go into the solid waste.



PAINT AND LEDs

Can you dry paint for disposal?

- Intentionally drying paint for the purposes of disposal is considered treatment and therefore prohibited unless the generator has a permit from us or other form of authorization from their local CUPA.
- Treatment is defined in HSC § 25123.5.
 - “...any method, technique, or process which is not otherwise excluded from the definition of treatment by this chapter and which is designed to change the physical, chemical, or biological character or composition of any hazardous waste or any material contained therein, or which removes or reduces its harmful properties or characteristics for any purpose.”
- Dried paint chips that are being disposed of are still a waste and must follow the same hazardous waste determination as other dried paint.



PAINT AND LEDs

Does it matter how much dried paint is in the container?

- Yes! Paint containers follow the same regulations as other hazardous waste containers.
- Empty Container Standards:
 - For containers that held a material that can be readily poured, all material must be removed by any practicable means (including draining, pouring, pumping or aspirating) before the container can be considered empty.
 - For containers that held a material that can be readily poured, all material must be removed by any practicable means (including draining, pouring, pumping or aspirating) before the container can be considered empty.
 - Empty container regulations are found in [22 CCR § 66261.7](#) and also on the following fact sheet: <https://dtsc.ca.gov/managing-empty-containers/>.
- Containers that once held a hazardous waste and meet the empty container standards do not have to be managed as a hazardous waste as long as they are managed properly (**recycled, reclaimed, refilled**, sent to an appropriate solid waste facility if under 5 gallons, etc.). If the container is not “empty” then it must be managed as a fully regulated hazardous waste.



PAINT AND LEDs

Are LEDs a hazardous waste?

- Currently, we do not have toxicity data specifically on light emitting diodes (LEDs). LEDs do not contain mercury, but they may contain nickel, lead, and trace amounts of arsenic.
- LEDs are to be treated the same as any other waste:
 - First, the generator must determine that they have a waste.
 - Then, they must use generator knowledge or testing to determine whether or not their waste is a hazardous waste, per 22 CCR § 66262.11.



PAINT AND LEDs

Management of LEDs under universal waste and household hazardous waste regulations

- LEDs are not explicitly included or excluded from the definition of lamps in 22 CCR § 66273.9, but the broad language provided in the definition allows LEDs to be included. Therefore, LEDs may be managed under the less restrictive UW regulations.
- Households are not required to test their waste, but they must dispose of household hazardous waste (HHW) through a HHW collection program. HHW is not to be disposed of down the drain, municipal waste, or on land. LEDs are considered HHW and must be managed accordingly.



PAINT AND LEDs

Conclusion

- Paint and LEDs are both often misclassified and therefore mismanaged hazardous wastes.
- Paint may be hazardous, and in many cases it is, so we advise that it is recycled or handled as hazardous waste when it is to be disposed of (unless the generator wants to test their waste).
- LEDs are believed to contain hazardous metals, and hazardous waste characterization requires further investigation by DTSC. It is ultimately the responsibility of the waste generator.



PROPANE CYLINDERS

Non-empty cylinders

- If the valve is closed and the cylinder has pressure, the cylinder is not empty.
- Be cautious when discarding any remaining contents of the cylinder because they may be a hazardous waste.
 - You must collect and characterize the contents.
- The cylinders are not a waste if returned for refilling.
- Households should take them to a HHWCF.



PROPANE CYLINDERS

Empty cylinders

- The cylinders are considered empty when the pressure inside the cylinder reaches atmospheric pressure.
- Empty cylinders should be recycled.
- Some recyclers require that the cylinder is cut in half, punctured, or the valve be removed.
- This information can be found on DTSC's website at:
[https://dtsc.ca.gov/management-of-compressed-gas-cylinders/.](https://dtsc.ca.gov/management-of-compressed-gas-cylinders/)



PROPANE CYLINDERS

Example: Unstaffed collection containers

- These collected cylinders must be empty.
- If non-empty cylinders are collected, the collection container owner now becomes a hazardous waste generator.
- The cylinders are not considered household hazardous waste for this scenario because the collection containers are not a household.
 - Households are defined in 22 CCR § 66260.10 as single detached residence or single unit of a multiple residence unit and all appurtenant structures.
 - Households do not include other structures listed in 40 CFR, such as ranger stations, campgrounds, or picnic grounds.



REGULATORY STATUS OF TRANSMIX



Advisory on the management of spent fuels

[https://dtsc.ca.gov/wp-content/uploads/sites/31/2021/12/DTSC-Advisory-on-the-Management-of-Spent-Fuels_12202021_V7-Final a.pdf](https://dtsc.ca.gov/wp-content/uploads/sites/31/2021/12/DTSC-Advisory-on-the-Management-of-Spent-Fuels_12202021_V7-Final_a.pdf)



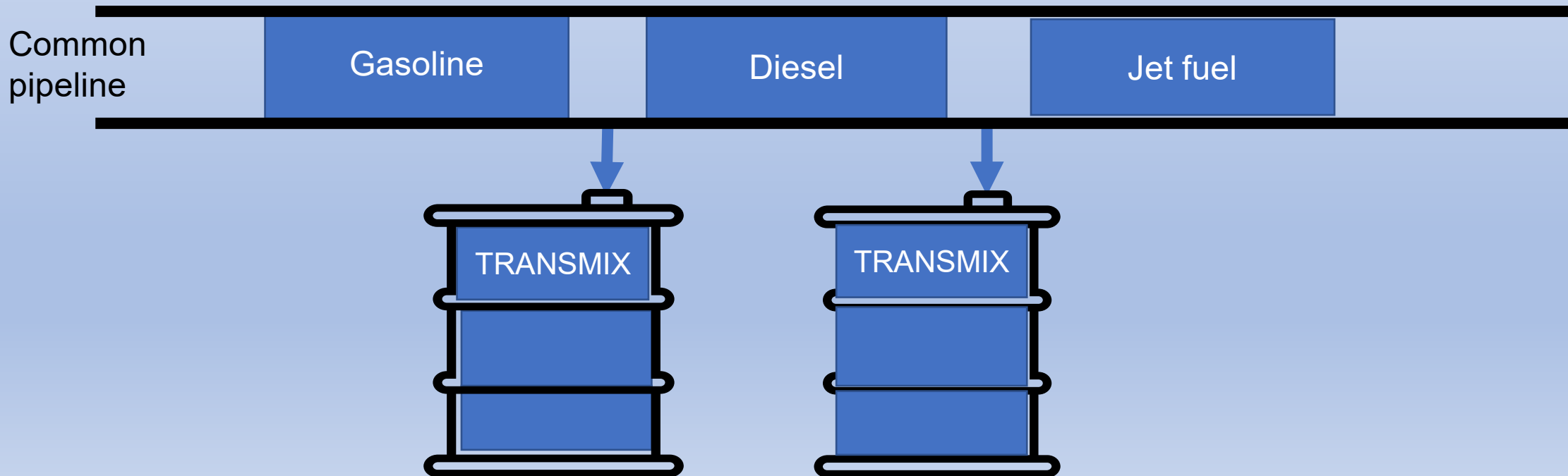
TOPICS

- Transmix
 - Regulatory status
 - Scenarios
- Intentional mixture of fuels: regulatory status



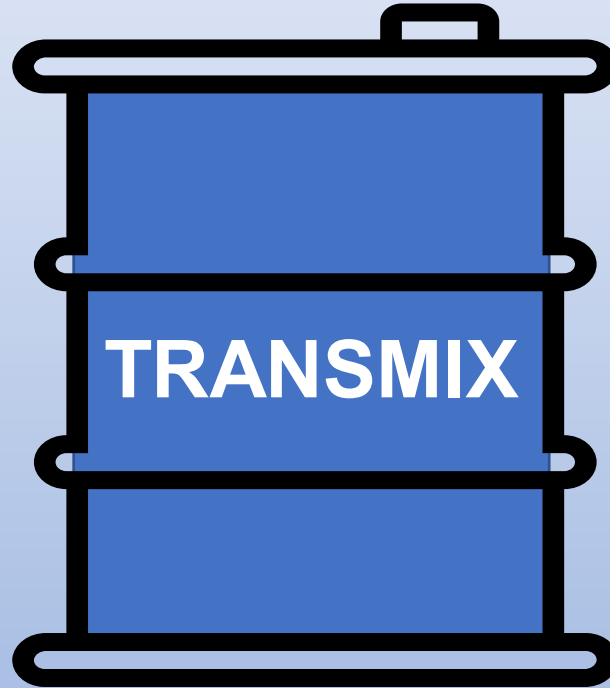
TRANSMIX

- “Transmix” (transportation mix) is a blend of gasoline, diesel, and jet fuel that forms when the products are transported through a common pipeline.



**EXCLUDED RECYCLABLE MATERIAL?
HSC § 25143.2(d)(2)(D)**

**EXCLUDED RECYCLABLE MATERIAL?
HSC § 25143.2(d)(2)(C)**



**RETROGRADE MATERIAL EXEMPTION?
22 CCR § 66260.10**

HAZARDOUS WASTE?

REMINDERS: HSC § 25143.2(d)(2)

- Non-RCRA hazardous waste
- Requirements and conditions
- Prohibitions: “e” overrides

HSC § 25143.2(d)(2)(C)

SUMMARY OF HSC § 25143.2(d)(2)(C):

- **Oily waste**, used oil, or spent nonhalogenated solvent that is managed by the owner or operator of a refinery.
- **Requirements:**
 - i. Material is burned in an industrial boiler, an industrial furnace, an incinerator or a utility boiler.
 - ii. Material is managed at the site where it was generated; managed at another site owned or operated by the generator, a corporate subsidiary of the generator.
 - iii. Material does not contain constituents, other than those for which the material is being recycled, that render the material hazardous.

HSC § 25143.2(d)(2)(D)

- The material is a fuel that is transferred to, and processed into, a fuel or other refined petroleum product at a petroleum refinery, as defined in paragraph (4) of subdivision (a) of Section 25144, and meets one of the following requirements:
 - (i) The fuel has been removed from a fuel tank and is contaminated with water or nonhazardous debris, of not more than 2 percent by weight, including, but not limited to, rust or sand.
 - (ii) The fuel has been unintentionally mixed with an unused petroleum product.

22 CCR § 66260.10

"Retrograde material" means a hazardous material that is not to be used, sold, or distributed for use in an originally intended or prescribed manner or purpose AND meets any of these criteria:

- 1) Has undergone changes (e.g., chemical or physical) due to the passage of time or the environmental conditions under which it was stored.
- 2) Has exceeded its shelf life.
- 3) Is banned (e.g., by law or regulation).
- 4) Cannot be used for reasons of economics, health or safety or environmental hazard.

SCENARIO

A refinery handles unused fuel products that it receives via pipeline or trucks. These unused fuel products result from various operations including:

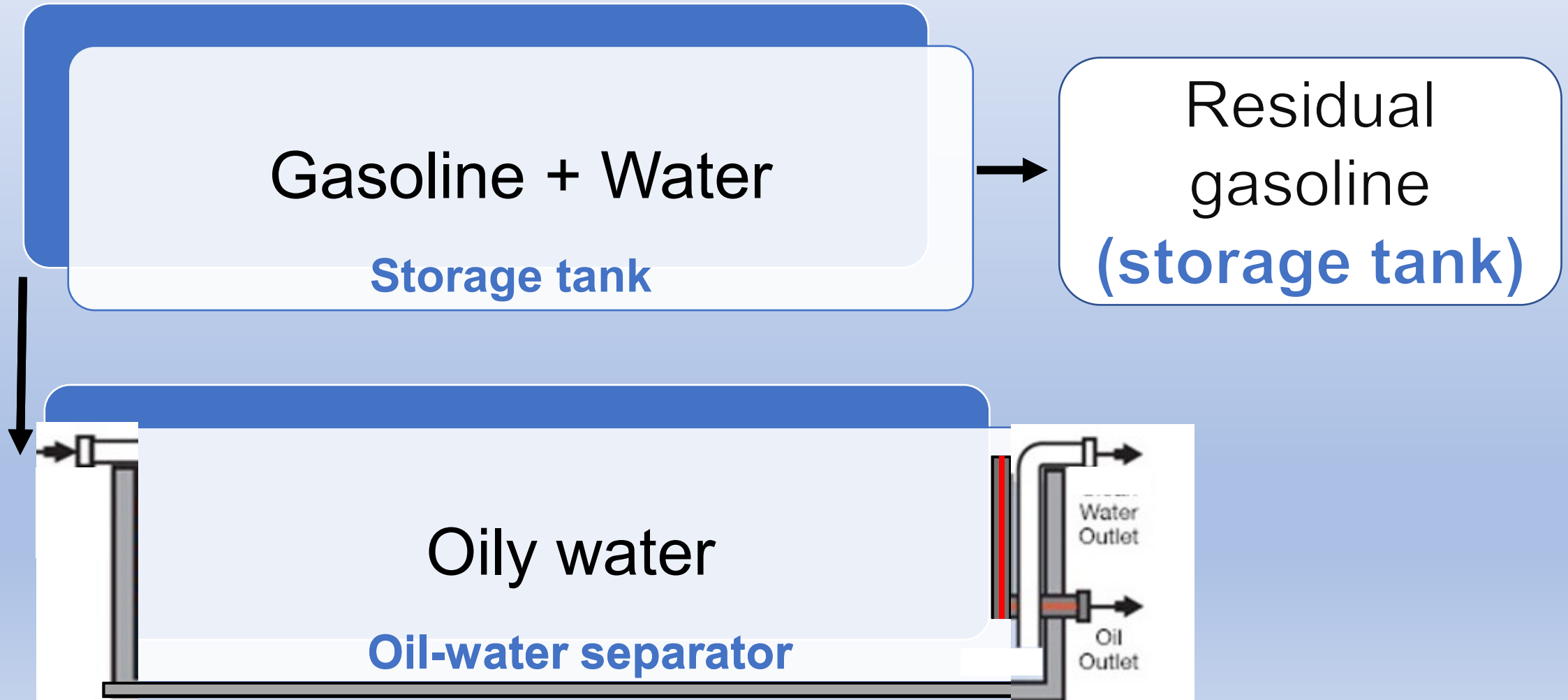
Operation #1: Cuts in the pipeline (switching over from one fuel to another).

Transmix?

Operation #2: Residual gasoline resulting from water draws from storage tanks after the water draw is routed to an oil/water separator which gravitationally separates the incidental volumes of gasoline.

Transmix?

Operation #2



SCENARIO

For both operations #1 and #2:

QUESTION: Since all these fuels are unused, can they be added to a tank containing transmix and the resulting volume be managed under HSC section 25143.2(d)(2)(D)?

SCENARIO

For operation #2:

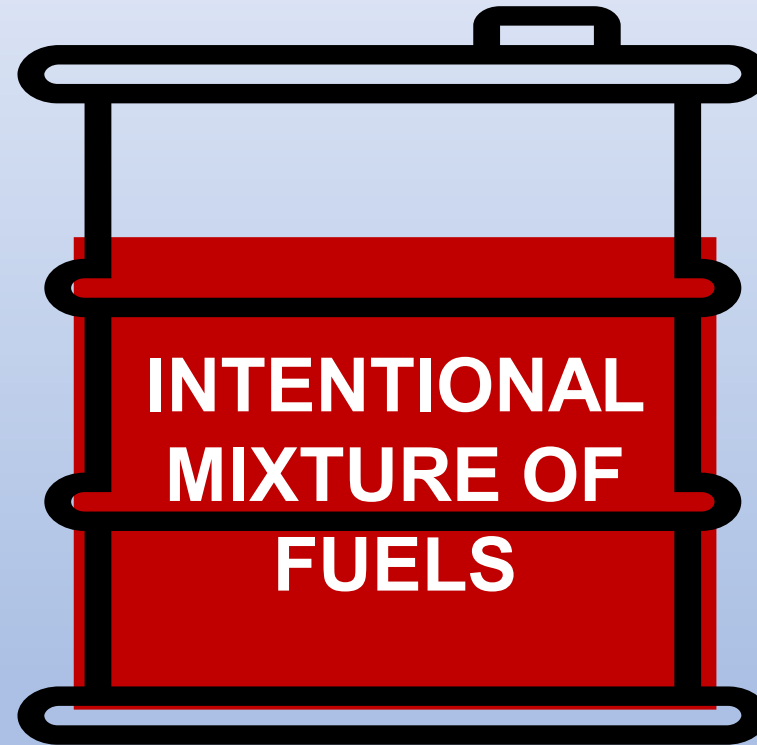
QUESTIONS:

#1: Is sending tank water draws through a gravitational oil-water separator considered a reclamation?

#2: The draining of water from a tank is a routine and necessary practice to prevent water in the fuel products. In this case, what is the point of generation?

~~EXCLUDED RECYCLABLE MATERIAL?
HSC § 25143.2(d)(2)(D)~~

~~EXCLUDED RECYCLABLE MATERIAL?
HSC § 25143.2(d)(2)(C)~~



RETROGRADE MATERIAL EXEMPTION?
22 CCR § 66260.10

HAZARDOUS WASTE?
Permitted facility (TSDF)

2022 Training Resource



HOT TOPICS IN WASTE CLASSIFICATION AND RECYCLING

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**24th California Unified Program
Annual Training Conference**
March 24, 2022

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**25th California Unified Program
Annual Training Conference**
March 20-23, 2023



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