

Used Oil – ~~SB~~ AB 2928
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Disclaimer and Objective



- Today's presentation is not based on Department of Toxic Substances Control (DTSC) or CUPA guidance, Fact Sheets, FAQs, or interpretive letters - because to our knowledge, there aren't any yet.
- Objective: Examine the statute and **provoke discussion** about the opportunities it presents and interpretation issues that may need to be considered by regulators and the regulated community.
- Because AB 2928 was written to provide relief to generators, our focus is on the used oil generator standards, not standards for transporters, recyclers, etc.

Remind Ourselves: What is Used Oil?

- **Federal** [Code of Federal Regulations (CFR) Title 40, Section 279.1): *Any oil that has been refined from crude oil or any synthetic oil that has been used, and as a result of such use is contaminated by physical or chemical impurities.*
- **State** [CA Health & Safety Code (H&SC) 25250.1): *Oil that has been refined from crude oil, or any synthetic oil, that has been used, and, as a result of use or as a consequence of extended storage, or spillage, has been contaminated with physical or chemical impurities.*
- **Not** discussing “waste oil,” which has no legal definition in either the federal or state waste regulatory scheme.

Examples of Used Oil

- Spent lubricating fluids removed from engines, transmissions, gearboxes, etc. from engines for automobile, bus, truck, vessel, railroad engine, plane, heavy equipment, or machinery
- Used industrial oils, including compressor, turbine, and bearing oil
- Used hydraulic oil
- Used metalworking oil
- Used refrigeration oil



Used Oil Does Not Include H&SC 25250.1(a)(1)(C)

- Oil with flashpoint < 100°F or mixed with hazardous waste (HW) (except small amounts of fuel)
- Wastewaters subject to Clean Water Act (CWA) permits
- Used oil re-refining distillation bottoms that are used as feedstock to manufacture asphalt products
- Oil that contains PCBs at 5 ppm or greater
- Oil containing more than 1000 ppm total halogens (presumed to be a HW via mixture)

Can be rebutted – see H&SC and Title 22

Used Oil Does Not Include

- Brake fluid
- Diesel or gasoline fuels
- Solvents
- Vegetable or animal oils
- Antifreeze
- Wastewater with small amounts of oils (does not include substantial leaks/spills)



Used Oil Generators – Federal Approach

- 40 CFR 279 codifies federal requirements for used oil generators.
- Per the U.S. EPA website, it views these essentially as “good housekeeping” standards.
- 40 CFR 279.22 defines simple management measures for generators:
 - Tanks and containers must be in good condition.
 - Tanks, containers and transfer piping must be labeled “Used Oil.”
 - Stop, contain, and cleanup releases and repair or replace leaking tanks/containers.

Used Oil – California’s Historic Approach

California designated used oil be managed as a hazardous waste prior to the Federal used oil rule

- H&SC 25250.4(a) states “*Used oil shall be managed as hazardous waste,*” **unless:**
 - Meets HSC 25250.1(b) (Exempt Used Oil):
 - Not treated;
 - Not mixed with hazardous wastes;
 - Complies with notification and testing requirements; and
 - Meets all the requirements for “recycled oil;”

Used Oil – California's Historic Approach

- Can also be excluded under HSC 25143.2 [Excluded Recyclable Material (ERM) Statute] and not HW under federal program (noting that 25143.2 is narrow for used oil); and
- Dielectric fluids filtered and replaced in transformers are also exempt.



Non-Exempt Used Oil

- The 25250.4 “*shall be managed as hazardous waste*” directive is amplified under California’s used oil regulation, California Code of Regulations (CCR) Title 22, Division 4.5, Chapter 29 “Standards for the Management of Used Oil.”
- 22 CCR 66279.21 states:
 - Generators of used oil (separate from exempt used oil) shall comply with HW generator standards (22 CCR Div. 4.5, Chapter 12); and
 - Containers and fill pipes shall be clearly marked as “Used Oil.”

So What's the Problem With Managing Used Oil as HW?

- The Title 22 burden, that's what!
 - Container management standards
 - Generator status/waste accumulation time limits
 - Manifesting, recordkeeping, reporting, training;
 - HW tank standards, SB-14, etc.
- Equally crucial, regulatory burden = regulatory risk of CUPA/DTSC violations, enforcement actions, etc.
- Both drive up a generator's cost of compliance.



In Other Words...

- Other than filtered dielectric oil or ERM, you would have to test all used oil generated before transportation to show that it meets the standards for “recycled oil,” i.e., it meets the “purity standards” and is not HW.
- This gets expensive and complex because it can be easily argued that each “type” of used oil and each “generation event” can produce oil with different chemical characteristics.
- And, because used oil from different sources at a generator site is routinely mixed in tanks and containers, each container could conceivably have different characteristics...so this gets complex to manage.

The Bottom Line Prior to January 1, 2019

- Unless a generator is willing to repeatedly test its various used oil streams and maintain the characterization records in good order...
- ...which ends up being a somewhat expensive, but equally important, drain on human resources, brain power, and one's patience...
- ...most used oil generators throw up their hands and say "Forget it, I'll manage it as a HW"...
- ...which was made somewhat simpler by California's consolidated manifesting scheme.

So...Let's Dig Into What's Changed by AB 2928



AB 2928 History

- Sponsored by State Assemblyman Phillip Chen, R – 55th District (Brea, Chino Hills, Diamond Bar, Industry, and nearby cities)
- Bill authored and pushed by several industry folks working through environmental lobbying group
- DTSC leadership did not oppose
- Mid-2018, the bill advanced rapidly and passed unanimously in both houses
- Signed by Governor September 17, 2018
- Statute changes effective January 1, 2019



Bill Components



- Placed concept of “highly controlled used oil” (HCUO) into H&SC 25250.19(b)(3)
- If specified pre-conditions are met by the HCUO generator, and some continuing requirements are met...
- ...the HCUO can then be managed as a recycled oil, which does not have to be managed as HW.
- **Bill did not specify development of any new or revised regulations in Title 14, 22, or anywhere else** – So, the sole reference is H&SC Article 13, Chapter 6.5, Division 20... unless there is a future effort by DTSC to justify writing a regulation.

Bill Components



- Is a regulation needed to provide details?
- Or just some good guidance?
- There's pros and cons:
 - Statute provides some flexibility of interpretation which is sometimes good...
 - ...but can cut both ways depending on your position as a regulator or regulated entity...
- Office of Administrative Law usually has an opinion

The Three Key Criteria of the HCUO Concept

- 1. Generator Qualification Criteria** – Defines HCUO, the type of used oil generator eligible to designate their oil as HCUO, and how the state recognizes a generator as a HCUO generator.
- 2. Oil Chemical Criteria** – Purity and other standards the used oil must meet in order to be managed as HCUO.
- 3. Operational Criteria** – Continuing operational requirements the HCUO generator must follow.

Let's discuss each...

Generator Qualification

25250.19(b)(3)(B): “Generator of highly controlled used oil” or “generator” means a generator of used oil for whom all of the following apply:

- (i) The generator services, repairs, and maintains equipment **owned and operated only by the generator.**

For most operations, this seems like a simple test. However, consider:

- *Operated but technically not “owned”* – Long-term rented or leased equipment located at a manufacturing facility
- *Owned but not exclusively operated* – An equipment rental company or car rental company that maintains its equipment and operates it occasionally, but rents/leases it to others

Generator Qualification

25250.19(b)(3)(B):

- (ii) The generator **does not derive revenue** from the activities described in clause (i).
 - Seems clear that “*activities*” refers to “*services, repairs and maintains.*” Discussion and analysis of the bill in the legislative record show that the clause was intended to exclude operations providing oil changing as a service, e.g., an oil change or repair facility that can’t “control” the used oil generating process.
 - Presumes “*activities*” does not refer to “*owned and operated*” – e.g., an equipment rental company derives revenue from “owning.”

Generator Qualification

25250.19(b)(3)(B):

- (iii) The used oil is generated from the generator's equipment and that **equipment is of similar types that are used under similar operating conditions.**
 - “*Similar types*” could be open to a lot of interpretation. Is a truck “similar” to a car or to a snow machine? Is a diesel-fired generator engine “similar” to a gasoline-fired generator engine? Is hydraulic oil from an elevator “similar” to hydraulic oil from an airplane?
 - “*Similar operating conditions*” means exactly what?
 - Not discussed in legislative record
 - If dissimilar, does it disqualify site, or do you just keep HCUO streams separate?₂₁

Generator Qualification

25250.19(b)(3)(B):

- (iii) The used oil is generated from the generator's equipment and that **equipment is of similar types that are used under similar operating conditions.**
 - If the facility has dissimilar equipment, does it disqualify site, noting that the certification sent to DTSC is focused on a generator or generator location, not specific used oil streams?
 - Or is simply a matter of keeping HCUO streams separate from each other, and from non-HUCO used oil?

Generator Qualification

25250.19(b)(3)(B):

- (iv) **The generator does not use or store halogenated solvents or any products containing halogenated solvents in the same location at the site at which the used oil is generated or stored.**
 - Halogenated solvent (TCE, Perc, chloroform, methylene chloride) use is becoming more infrequent, but has not disappeared by any means, and could be part of an aerosol product or other mixture.
 - “*Same location at the site*” is vague. Is it the same building? Same room?

Generator Qualification

25250.19(b)(3)(B):

- (v) The generator provides a **signed certification statement** at the time that the generator notifies the department pursuant to subdivision (c) of Section 25250.1 stating that the statements in clauses (i) to (iv), inclusive, are true **and that the generator employs management practices that prevent halogenated solvents and polychlorinated biphenyls from coming into contact with, or commingling with (the HCUO).**
 - “Management practices” is pretty straightforward.

Generator Qualification

25250.19(b)(3)(B):

- (v) The generator provides a **signed certification statement...**
 - *Presumption* is that this is done per generator site, as opposed to for an entire company or for individual HUCO streams.
 - No DTSC form for certification statement, although, there is one for recycled oil that could be adapted.
 - Some early HCUO adopters are just sending a letter to DTSC.
 - No specific guidance as of yet – DTSC has advised sending notice to DTSC-Chatsworth, where the recycled oil forms go.
 - Could certification statement be added to CERS? This would also signal to CUPA that facility is a HCUO generator.
 - What is status of certification if facility is sold but oil generating processes don't change?

Oil Chemical Criteria

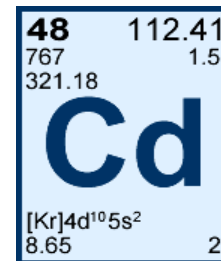
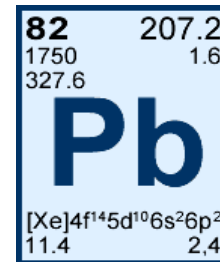
25250.19(b)(3)(A)

Used oil from a generator of highly controlled used oil is required to be tested only once per year for the purpose of determining whether the used oil meets the condition in subparagraph (B) of paragraph (1) of subdivision (b) of Section 25250.1. A generator may use the results of that test and any prior tests of the same kind to certify that the used oil meets the condition in subparagraph (B) of paragraph (1) of subdivision (b) of Section 25250.1 and does not exhibit any other characteristic of a hazardous waste pursuant to Chapter 11 (commencing with Section 66261.1) of Division 4.5 of Title 22 of the CCR, or any successor regulations.

Oil Chemical Criteria

25250.19(b)(3)(A): Annual testing for the recycled oil purity standards specified in H&SC 25250.1:

- Flash point – at least 100°F
- Total lead ≤ 50 mg/kg
- Total arsenic ≤ 5 mg/kg
- Total chromium ≤ 10 mg/kg
- Total cadmium ≤ 2 mg/kg
- Total halogens $\leq 3,000$ mg/kg
- Total PCBs ≤ 2 mg/kg

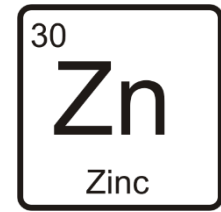


- *Note that 25250.19 requires EPA SW-846 test method or approved equivalent, but doesn't specify use of an ELAP laboratory)*

Oil Chemical Criteria

- **25250.19(b)(3)(A): A generator may use the results of that test and any prior tests of the same kind to certify that the used oil...does not exhibit any other characteristic of a HW.**
 - Per the definition of recycled oil at 25250.1(b)(1)(B), recycled oil cannot designate as hazardous for any “characteristic or constituent” other than those listed in the purity standards.
 - So, for example, HCUO meets the recycled oil purity standards even if it has a flashpoint below the Title 22 ignitability characteristic threshold of 140 °F, as long as the flashpoint is at least 100 °F.

Oil Chemical Criteria



- **25250.19(b)(3)(A): ...certify that the used oil...does not exhibit any other characteristic of a HW**
- Any further testing does not have to address the purity standards parameters, e.g., metals, flashpoint, etc.
- So, the question is: are there other possible contaminants in the oil that would designate it as a federal or California HW?
 - Contain benzene or cresol (TCLP)?
 - Contain zinc (STLC/TTLC)?
 - Exhibit acute aquatic toxicity (Title 22 bioassay)?

Oil Chemical Criteria

- Note that although purity standard testing is required annually, that is **not specified for the HW criteria**.
- Results of “*any prior tests of the same kind*” can be used for the HW criteria...
- ...as could generator knowledge, because per 22 CCR 66261.10 and 66262.11, generator knowledge is an equally acceptable method of characterizing hazardous waste as testing.
 - *Note that future changes to waste characterization recordkeeping driven by Generator Improvement Rule up the ante on generator knowledge documentation.*

Operational Criteria

25250.19(b)(3)(A): A generator shall include a signed certification statement **with each shipment of used oil that the generator claims is exempt from regulation pursuant to paragraph (1) of subdivision (b) of Section 25250.1.**

- The specific form/content/wording of this “certification statement” is not specified.
- No DTSC form as of yet.
- Safety Kleen, as part of an SOP for HCUO, has generated a certification form.
- Presumably, the generator would need to make and keep a copy to show it is accompanying the shipping document.

Operational Criteria

25250.19(b)(3)(A): The generator shall maintain **with the certification statement records of the tests on which the certification is based, which shall be subject to audit and verification by the department, the unified program agency, or the Department of Resources Recycling and Recovery.**

- Odd construction to say maintain “with” certification statement.
- Text raises interesting question: Because HCUO is a non-HW, do CUPAs have jurisdiction over management, or just over the HW determination process and records, and CalRecycle addresses other aspects?

Operational Criteria

25250.19(c): (HCUO generators) shall record in **an operating log** and retain for 3 years the information specified in paragraphs (1) to (5), inclusive, of subdivision (a) **of Section 25250.18** on each shipment of recycled or exempted oil.

(d) Operating logs required in subdivision (c) are **subject to audit and verification by the department, the unified program agency, or the Department of Resources Recycling and Recovery.**



Operational Criteria

25250.18(1)-(5) was actually written as requirement for a certification form for each shipment. Requires name and address of the generator and receiving facility, quantity of oil delivered/shipped and date, and cross-reference to the records and documentation required under Section 25250.1.

- Definition of “operating log” not clear, presumably could be a written logbook or a spreadsheet
- Requirement seems duplicative of keeping copies of shipping documents. Although recordkeeping is not a specified requirement in the statute, would copies constitute as a “log?”
- Again, note reference to DTSC, CUPA, and CalRecycle.

So, What Are the Potential Impacts of the HCUO Statute?

Total Yearly Tonnage by Waste Code

Selection Criteria:

Ship Year: 2018
Sorted By: Tonnage
Display: All
City: N/A
County: N/A
CUPA: N/A

Calif. Code	Total Tons	Waste Code Name
181	590556.09322	OTHER INORGANIC SOLID WASTE
611	479286.46735	CONTAMINATED SOILS FROM SITE CLEAN-UP
221	299589.97717	WASTE OIL AND MIXED OIL
352	67220.04128	OTHER ORGANIC SOLIDS
223	52410.28888	UNSPECIFIED OIL-CONTAINING WASTE

So What Are the Potential Impacts of the HCUO Statute?

- Reasonable to conclude:
 - A fair number of hazardous waste generators are only generators because they generate HW used oil;
 - A high percentage of all HW generators generate HW used oil, in addition to any other HW they might generate;
 - A significant portion of the regulatory burden on HW generators, and therefore a significant portion of the HW requirements inspection and enforcement effort put forth by regulators, is associated with HW used oil.

Therefore, the HCUO Opportunity Could Mean...

- There could be somewhat fewer HW generators.
- Many LQGs would become SQGs.
- The overall HW regulatory burden on many HW generators could be reduced.
- The overall inspection and enforcement burden on the part of CUPAs and DTSC could drop.
- HW violation counts could drop.
- The total amount of used oil generated doesn't change at all.
- Used oil transporters and recyclers are minimally affected.

But Statewide Impacts May Depend on Several Factors

- The number of generators which meet the generator qualification criteria discussed above
- The degree to which HW used oil generators become aware of the AB 2928 changes
- The degree to which HW used oil generators are willing to use the opportunities afforded by AB 2928 as opposed to business as usual, which will likely be based on 1) does it save me money? 2) does it save me time? 3) does it reduce my risk?
- Note: as far as anyone can see to date, the cost charged by transporters/recyclers is not changing.

Other Impacts

- Other Title 22 requirements disappear along with the standard generator requirements:
 - Hazardous waste tank standards – P.E. certifications and operating standards appear to no longer apply if used oil HW is managed as HCUO
 - H&SC 25250.12 maintenance operation consolidation no longer applies, e.g., the 55-gallon volume limit
 - SB-14 no longer applies when non-vehicle oil is no longer a HW
 - Tiered permitting
 - Manifest fees/taxes
 - Etc.?



Other Impacts

Management of Used Oil Filters

- 22 CCR § 66266.130 defines used oil filters as “*filters which contain a residue of used oil (as defined in H&SC 25250.1(a))...*”
- Because HCUO is an exempt used oil, filters contain a residue of an exempt oil, which is not subject to Title 22 requirements, and therefore, neither are the oil filters.
- So, the relaxed used oil filter management methods (accumulate for one year, label containers), as well as DTSC’s recent guidance regarding liquids accumulating in used oil filter containers, become moot.
- In fact, even a non-drained HCUO filter is no longer regulated as HW.

Other Impacts/Questions

- The revised statute does not address container management or labeling for HCUO
- Default to the federal used oil standards at 40 CFR 279 might be reasonable but labeling a container or tank simply as “used oil” per Part 279 likely invites confusion.
- Best practice may be using a Non-Hazardous Label with “Highly Controlled Used Oil” at minimum, possibly adding reference to H&SC 25250.19.
- Containers in good conditions, no visible leaked material

Other Impacts/Questions

- HCUO contaminated debris, e.g., rags, absorbents – what is its status? HW oily debris is also a large waste stream!
- Contaminated debris itself is not HCUO, so it needs to be characterized like any other waste.
- But if the oil was tested and deemed to be HCUO, does any other testing need to be performed on the debris? Clearly, the debris would represent a diluted waste stream, i.e., lower metals concentrations.
- No chance the debris could fail the Title 22 bioassay unless there is something toxic about the “underlying debris” component.

Challenges



- HCUO concept oriented towards generators of large quantities of specific oil types; diverse used oil sources will require more testing, management oversight, etc.
- Larger hazardous waste management firms starting to develop knowledge and internal procedures for disposing of HCUO as non-hazardous waste...
- ...but smaller firms not aware or possibly reluctant? – no real upside for them
- Risk and regulatory burden benefits, but not likely any significant cost reductions – recycling methods and disposal pricing won't change

Challenges

- Despite executive-level support for AB 2928, the DTSC is slow to even recognize the change in the statute now that no regulatory changes are mandated.
- DTSC very slowly developing FAQs/guidance to 1) raise consciousness among generators and regulators and 2) address interpretation questions.
- CUPAs do not seem broadly aware of statute change
- Once a HCUO, do CUPAs have jurisdiction, as opposed to CalRecycle?
- HCUO labeling and container management requirements are not clearly referenced – presume standard is 40 CFR 279, since HCUO is a used oil?

Key Questions for Generators

- Adopt now or wait for further guidance/clarity on the various questions?
- Is my preferred transportation/disposal vendor prepared to support the HCUO concept?
- How do I determine when used oil should be tested for other hazardous characteristics, or can I just use generator knowledge?
- How will my CUPA react when I suddenly start managing my used oil stream(s) as HCUO? Should I tell them in advance or just start doing it?
 - How will I identify HCUO and what are the management standards?

Final Thoughts



- Overdue change to CA hazardous waste management – and probably little environmental risk overall
- Relatively few early adopters of the concept
- Can't hurt to test waste oil streams versus purity standards and other hazardous waste characteristics and see where you stand
- Is outreach needed to transportation/ disposal vendors, i.e., the little waste oil guys?

Final Thoughts

- Remember that HCUO is still a hazardous material – requires CERS disclosure.
- HCUO still needs to be properly recycled even though regulatory consequences of improper disposal might be lessened (i.e., because it is a non-HW).
- California release reporting standards for a hazardous material still apply.
- Transportation – is it clear who can legally transport HCUO? Does 25250.23 require HCUO transporters be a HW hauler - or not?

Questions?

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