

HMBP 201

TU-M1 & TU-M3

March 25th, 2025

Richard LeClair, Supervising Environmental Health Specialist Emma Rand, Environmental Health Specialist II County of San Diego Hazardous Materials Division (CUPA)





Overview

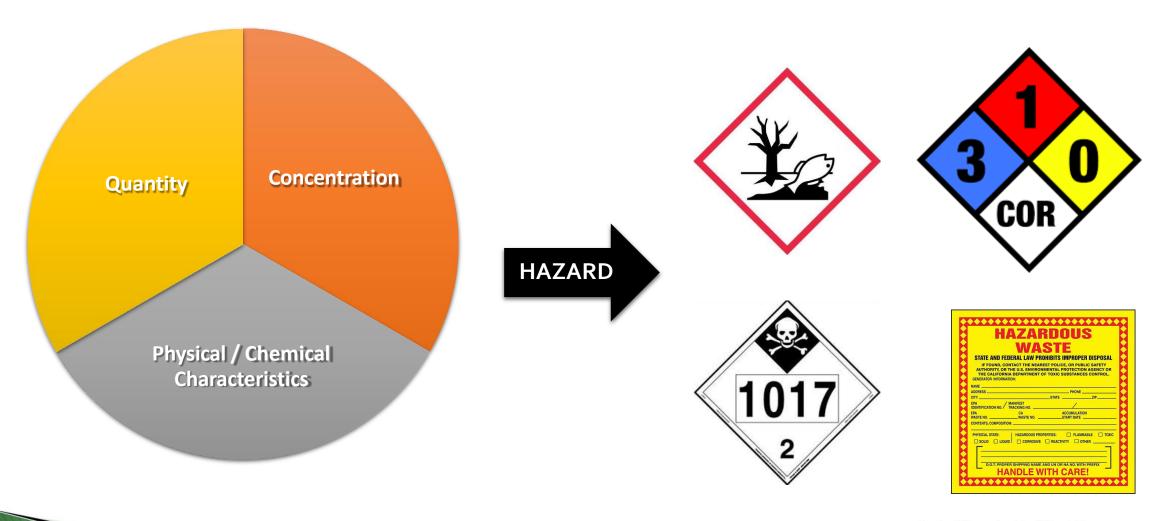
- Definitions
- Reporting Thresholds
- Compressed Gases

- Mixtures
- BatteryReporting
- Commercial Products

- Trade Secrets
- Farms & Remote Sites
- Previous HMBP Updates



What is a hazardous material?





Hazardous Materials include...

Materials for which the manufacturer is <u>required</u> to prepare a Safety Data Sheet (SDS) pursuant to the Hazardous Substances Information and Training Act or federal law/regulation

Radioactive materials listed by the Nuclear Regulatory Commission (NRC)

Listed by the Department of Transportation (DOT)

Listed as a hazardous substance in the California Code of Regulations (CCR)

Determined to be a hazardous waste per the Health & Safety Code (HSC)

Specified by a City or County ordinance



SDS Example

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Liquefied gas

GHS label elements

Hazard pictograms





Signal word

Hazard statements

Danger

: Extremely flammable gas.

Contains gas under pressure; may explode if heated.

May cause frostbite.

May displace oxygen and cause rapid suffocation.

May form explosive mixtures with air.



What are basic HMBP reporting thresholds?



55-gal of a liquid



500 lbs of solid



200 cubic feet of a compressed gas

Thresholds are evaluated at standard temperature and pressure.

Note: Not all materials are created equal! Hazards vary and the threshold may be <u>higher</u> or <u>lower...</u>





Extremely Hazardous Substances (EHS)

An EHS is reportable if it is equal to or greater than the Threshold Planning Quantity (TPQ)

- TPQs are listed in APPENDICES A & B of 40 CFR 355. Can be found on the EPA "List of Lists"
- TPQs can be less than 500 pounds
- Solid EHSs will have two TPQs (powder/solution)
- Must be reported in pounds in CERS

Common Examples:

Ammonia used in refrigeration systems or Chlorine used in wastewater treatment facilities.

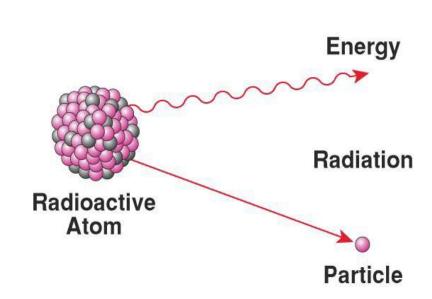




Radioactive Materials

Are reportable if handled at any one time during the reporting year in a quantity pursuant to:

Schedule C of Part 30, Part 40, or Part 70 of Chapter I of Title 10 CFR







Combustible Metals or Metal Alloys

The following hazardous materials in raw stock, scrap, or powder form are reportable in the following quantities:

PYROPHORIC or WATER-REACTIVE MATERIAL – ANY AMOUNT

Examples: Group I (Alkali) metals, zinc powder, calcium metal

COMBUSTIBLE DUST, FLAMMABLE SOLID, or MAGNESIUM – 100 POUNDS

Examples: Titanium dust, zirconium, magnesium alloys

EXPLOSIVE POTENTIAL (IN MOLTEN FORM) – 500 POUNDS

Examples: Molten Aluminum







27th California Unified Program Annual Training Conference March 24-27, 2025



Slido Question #1



Exemptions and Alternative Thresholds



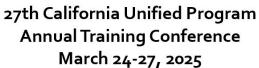


Refrigerant Gases for Comfort or Space Cooling

Refrigerant gases, other than ammonia or flammable gas, used for comfort cooling or space cooling for computer rooms

Any amount is exempt







Compressed Air for Emergencies

Compressed air in cylinders, bottles, and tanks, used by fire departments and other emergency response organizations for the purpose of emergency response and safety

Any amount is exempt







Treated Wood and Treated Wood Waste

Applies to:

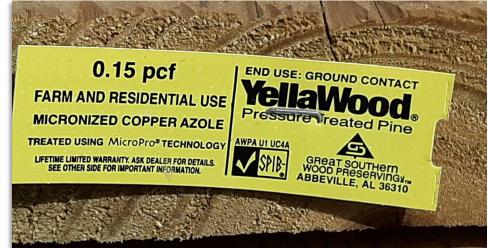
 Wood that is hazardous solely due to being treated with chemical preservative registered pursuant to the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. Sec. 136 et seq.).

Any amount is exempt

Does not apply to:

 Treated wood or wood waste that is subject to Tier I reporting under 42 U.S.C. 11022







Liquid or Gaseous Fuel in Tanks

Liquid or **gaseous** fuel in tanks on vehicles or motorized equipment.

Any amount is exempt

Fuel tank shall be integral to the operation of vehicle/motorized equipment.

This exemption does not apply to batteries in vehicles or motorized equipment.









Recycled Latex Paint

For PaintCare facilities that accept latex paint through the Architectural Paint Recovery Program (AB 1343)

Reporting threshold is **greater than or equal to**:

- 10,000 pounds for solids
- 1,000 gallons for liquids





Irritants & Sensitizers

Solid or liquid – classified solely as an irritant or sensitizer

Reporting threshold is greater than or equal to:

- 5,000 pounds for solids
- 550 gallons for liquids





Propane

Solely for the purpose of cooking, heating employee work areas, and heating water.

Reportable at more than 500 gallons







Fluid in a Hydraulic System or Oil-Filled Electrical Equipment

If the aggregate storage capacity of oil is < 1,320 gallons (not an APSA facility):

- A) Fluid in a hydraulic system
- B) Oil-filled electrical equipment that is not contiguous to an electric facility







Lubricating Oil

Exempt if:

Total volume ≤ 55 gallons for each oil type

AND

Total volume ≤ 275 gallons for all oil types combined

Note: For use in internal combustion crankcase, transmission, gearbox, differential, hydraulic system in machinery (several types).

This does not apply to Used Oil.





Slido Question #2



BREAK TIME!



Thresholds for Compressed Gases





Noble Gases



Classified as hazardous due to simple asphyxiation or release of pressure

e.g., Argon, Helium, Nitrogen, Xenon, Krypton and Neon



Medical Gases

Oxygen, Nitrogen, and Nitrous Oxide maintained by a physician, dentist, podiatrist, veterinarian, pharmacist, or emergency medical service provider





Carbon Dioxide



Carbon dioxide or carbon dioxide mixed with simple asphyxiation gases that are classified as a hazard for purposes of Section 5194 of Title 8 of the California Code of Regulations

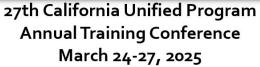
Ex. Argon, Helium, Nitrogen, etc.



Nonflammable Refrigerant Gases Used in Refrigeration Systems

As defined in the California Fire Code Ex. R134, R401A, R404A,







Gases in Fire Suppression Systems

Closed-loop fire suppression system Ex. Carbon Dioxide, Nitrogen, Argon, HFCs

Reportable at 1,000 cubic feet







Note for Compressed Gases...

If a hazardous material or mixture is determined to exceed threshold quantities at <u>standard temperature and pressure</u>, it shall be reported in the <u>physical state</u> at which it is stored.

Standard temperature and pressure: 1 atmosphere, 0 degrees Celsius (32 degrees Fahrenheit).



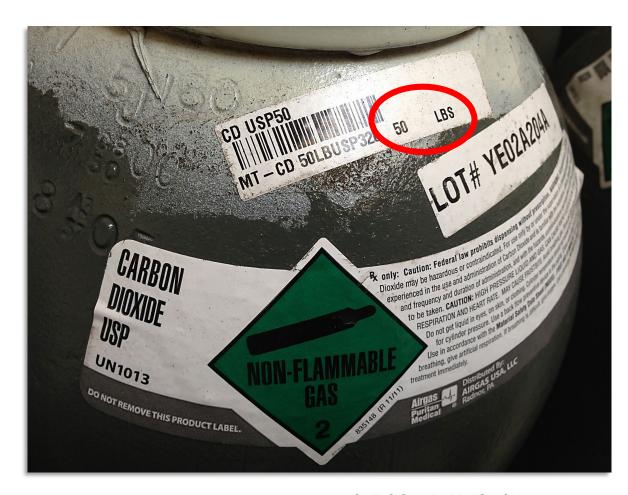


Gaseous Carbon Dioxide Conversion Example

- 50 lbs of Carbon Dioxide compressed gas
- 8.47 cu. ft/lb
- Confirm conversion factors with your local CUPA!

$$50 \text{ lb} * \left(\frac{8.74 \text{ cu. ft}}{1 \text{ lb}}\right) = 437 \text{ cubic feet}$$

1000 cu. ft. *
$$\left(\frac{1 \text{ lb}}{8.74 \text{ cu. ft}}\right)$$
 = **114.4 pounds**





<u>Liquid</u> Carbon Dioxide Conversion Example

- 400 lbs of Carbon Dioxide liquified gas
- 8.47 cu. ft/lb (per conversion table)
- Confirm conversion factors with your local CUPA!

400 lb *
$$\left(\frac{8.74 \text{ cu.ft}}{1 \text{ lb}}\right)$$
 = **3,496 cubic feet**

Reporting threshold is ≥ 1,000 cu.ft. Because the CO2 is a liquid, it must be reported in gallons.

• 8.46 lb/gal (per conversion table)

400 lb *
$$\left(\frac{1 \text{ lb}}{8.46 \text{ gal}}\right) = 47.3 \text{ gallons}$$



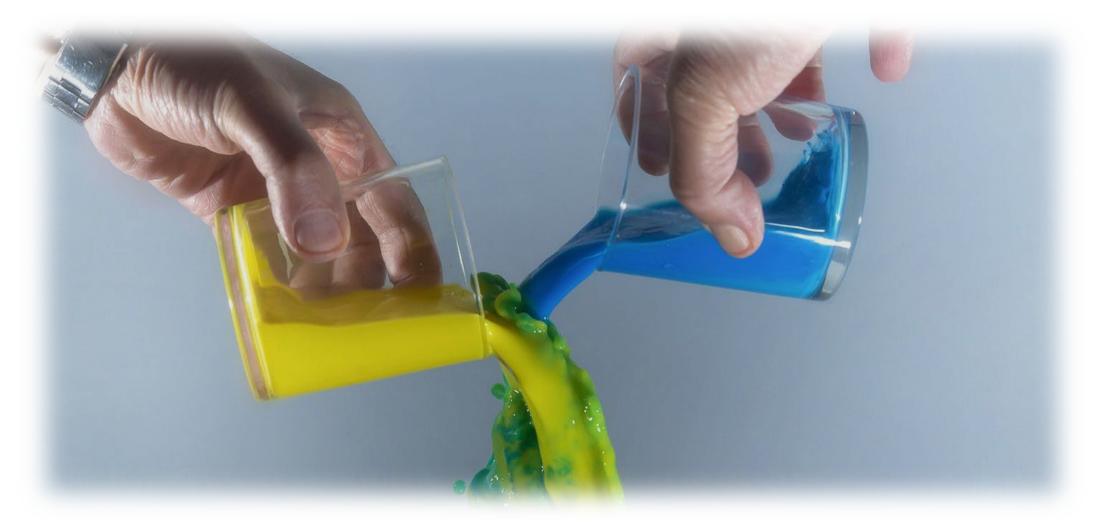




Slido Question #3



Hazardous Material Mixtures





Mixture Materials Reporting



- Any material containing a <u>mixture</u> of hazardous components handled at any one time during the reporting year in quantities at or above:
 - ≥55 gallons
 - ≥500 pounds
 - ≥200 cubic feet

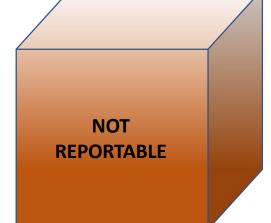
MUST REPORT!

 The physical state and quantity present of mixtures shall be determined by the physical state of the <u>mixture as a whole</u>, not individual components.

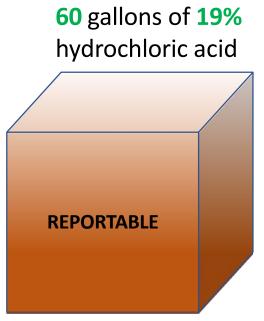


Mixture Materials Reporting

30 gallons of 38% hydrochloric acid



+ 30 gallons of water =





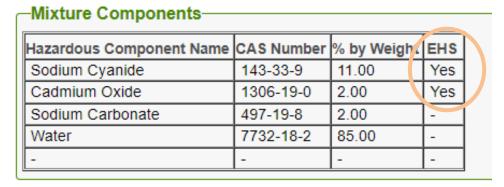
Mixture Materials Reporting

Example: Plating Shop – Process Tank



Check 'Pure' only if you provide a CAS Number.
Check 'Mixture' if the hazardous material contains
more than one component and is not a waste. Check
'Waste' for hazardous wastes.





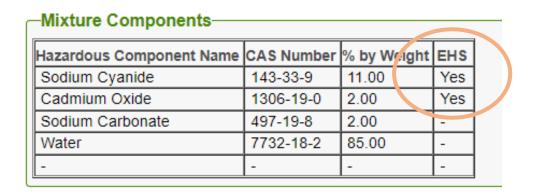
Use the EHS box in the Mixture Components
Section if it's a mixture of EHS and non-EHS
chemicals



Mixture Materials Reporting

- If a mixture, select "mixture" and complete the Mixture Components Section
- If an EHS within mixture, select "No" to EHS under Chemical Hazard
 Classification and select "Yes" in the Mixture Components Section







Mixture Materials Reporting

- Use highest percentage in the range (CERS will not accept the dash)
- Total can be over 100%

-Mixture Components-			
Hazardous Component Name	CAS Number	% by Weight	EHS
Antimony	7440-36-0	5	Yes No
Electrolyte (Sulfuric Acid)	7664-93-9	44	Yes No
Lead and lead compounds (inorganic)	7439-92-1	70	OYes ⊙No

Chemical name	CAS number	% by wt.
Antimony	7440-36-0	3 - 5
Electrolyte (Sulfuric acid)	7664-93-9	20 - 44
Lead and lead compounds (inorganic)	7439-92-1	43 - 70



Mixture Materials Reporting

1% Rule

Mixtures consisting of less than 1% of a hazardous material, or 0.1% for carcinogens, do not need to be reported.





Lead-Acid Batteries

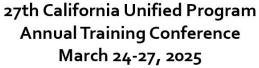


Reporting Lead-Acid Batteries

- Reportable if the facility has ≥55-gallons of the hazardous material
- The hazardous material is the liquid electrolyte = sulfuric acid
- Obtain the battery specification sheet from manufacturer
 - Look for gallons of electrolyte per battery.

Example: 25 batteries \times 1.50 gallons per battery = 37.5 gallons







If the specification sheet/manufacturer does not provide the gallons of electrolyte...do an estimate!

Example: 50 batteries that weigh 30 lbs each. Are they reportable?

Obtain the total battery weight, specific gravity, and % hazardous material

Composition: 40% sulfuric acid Specific Gravity = 1.285 Density of Water = 8.34 lbs/gal

Electrolyte volume =
$$\frac{\left(\frac{\text{% sulfuric acid}}{100}\right) \text{(Weight of battery)}}{\text{(Specific gravity)(Density of water)}} = \frac{\left(\frac{40}{100}\right) \text{(30 lbs)}}{\text{(1.285)(8.34 }\frac{\text{lbs}}{\text{gal}})} = 1.12 \text{ gal}$$

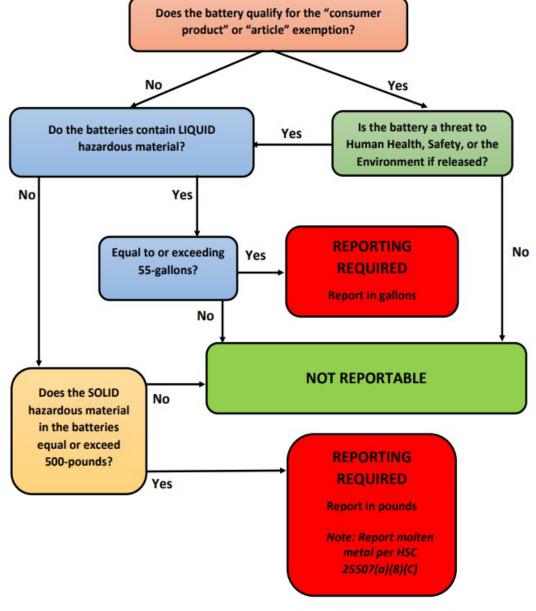
Total Electrolyte Volume = $1.12 \text{ gal} \times 50 \text{ batteries} = 56 \text{ gallons}$





Battery Reporting

Battery Reporting Guidance for UPAs



27th California Unified Program Annual Training Conference March 24-27, 2025



Slido Question #4



BREAK TIME!



Consumer Products and Trade Secrets





Consumer Product Exemption

Exempt from reporting if:

- Used for personal, family, or household purposes
- Handled at and found in, a retail establishment and intended for direct sale to the end user.





Exemption shall not apply to:



Manufacturer of product



Distribution/Warehouse with no direct sales to consumers



Product dispensed on the retail premises



Materials with NFPA or HMIS ratings of 3 or 4, stored at quantities equal to or greater than 165 gallons, 600 cubic feet, or 1,500 pounds



Consumer Product Exemption does not apply to:



Dispensing on Premises



Distribution/Warehouse/Manufacturing



27th California Unified Program Annual Training Conference March 24-27, 2025

Common Hazardous Materials that <u>do not</u> meet the consumer product exemption:



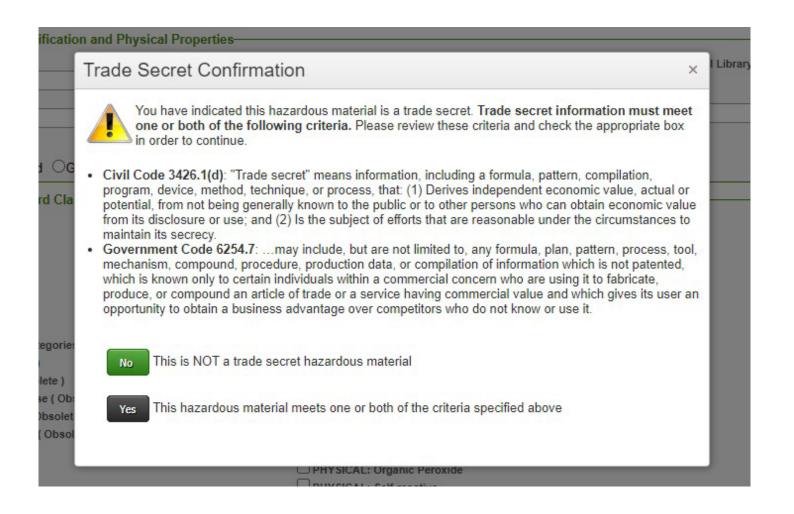
- Propane
- Pool Chemicals
- Butane



Slido Question #5









What is Considered a Trade Secret?

Civil Code 3426.1(d)

- Formula that:
 - Derives economic value from not generally being known to the public/persons who can obtain economic value from its disclosure
 - The subject of efforts that are reasonable to maintain secrecy

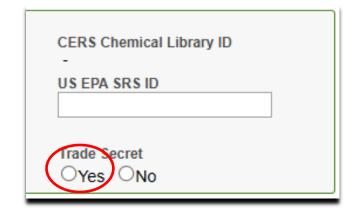
Government Code 6254.7

- Not public records
- Gives the business advantage over competitors who do not know or use it



How do I Disclose Trade Secrets?

- If the business believes the material is considered a trade secret, they shall nevertheless disclose the material to the unified program agency.
- Shall notify the unified program agency in is a trade secret by:
 - Checking off the <u>trade secret box in CERS</u>
 - Only required to report via CERS:
 - Chemical name
 - Amount
 - Appropriate hazard class code
 - Submitting a <u>Trade Secret Disclosure Form</u> for each item.
 - If the facility subject to <u>EPCRA</u>, they are also required to submit a "Substantiation to Accompany Claims of Trade Secrecy" form to the US EPA.



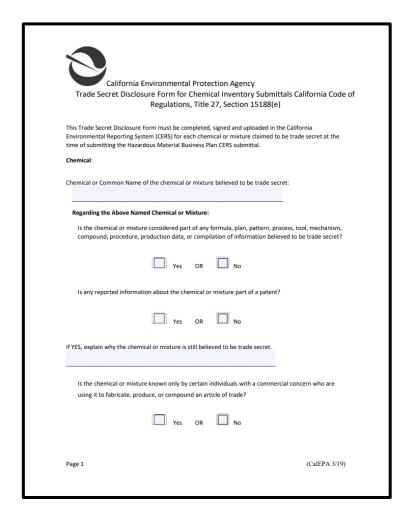


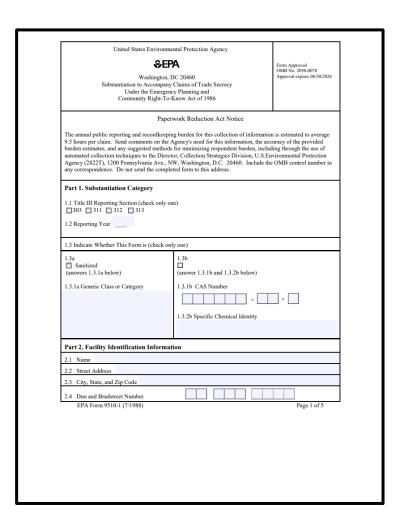
Trade Secret

How Do I Disclose?

California Environmental
Protection Agency Trade Secret
Disclosure Form

Substantiation to Accompany Claims of Trade Secrecy under EPCRA







Sites with Alternative Reporting Requirements





27th California Unified Program Annual Training Conference March 24-27, 2025

Farms

Exempt from submitting the Emergency Response and Training Plan section of CERS if:

- Annually submit the Facility Information, Inventory, and Site Map
- Post signs on each building storing hazmat indicating hazmat inside (pesticides, petroleum fuels/oils, fertilizers)
- Provide annual training to employees





Unstaffed Remote Facilities

Only required to make a one-time submittal of the Facility Information and Hazardous Materials Inventory (including Site Map), if the following conditions are met:

- The facility is secured and not accessible to the public.
- Warning signs are posted and maintained for hazardous materials pursuant to the California Fire Code.
- Located at least one-half mile from the nearest occupied structure.
- Types and quantities of materials onsite meet the requirements listed in 25507.2

Unstaffed Remote Facilities must still update the HMBP within 30 days of any changes, and are subject to inspection by the local UPA upon submittal of the HMBP.



Unstaffed Remote Facilities – Inventory Limitations



1,000 cubic feet of compressed inert gases (asphyxiation and pressure hazards only).



500 gallons of combustible liquid used as a fuel source.



Corrosive liquids, not to exceed 500 pounds of extremely hazardous substances, used as electrolytes, and in closed containers.



500 gallons of lubricating and hydraulic fluids.



1,200 gallons of hydrocarbon gas used as a fuel source.



Any quantity of mineral oil contained within electrical equipment, if a spill prevention control and countermeasure plan has been prepared for quantities that meet or exceed 1,320 gallons.



Slido Question #6



BREAK TIME!





Effective 1/1/2024

- Site maps must include loading areas, internal roads, storm and sewer drains, and emergency shutoffs only if they are present on the site.
- Clarification added to HSC 25507 (b)(1) to exempt refrigerant gases used <u>for comfort cooling for occupancies or space cooling for computer rooms.</u>
- HSC 25507 (b)(7) has been added to exclude <u>treated wood and treated wood</u> waste from HMBP requirement unless required by Title 42 of US Code.



Effective 10/9/2021

- Modifies the reporting requirement for threats or actual releases of HM, HW, or hazardous substances.
 - Facility subject to HMBP- must report to CUPA immediately upon discovery
 - Facility not subject to HMBP- reporting required upon discovery of actual release that results in an emergency response.
- Gives the CUPA authority (must consult local Health Officer) to issue an order to suspend or discontinue the activity causing or contributing to the release, spill, escape, or entry of the HM, HW or hazardous substances.
 - The order can remain in effect until the CUPA determines that the imminent and substantial endangerment to public health has been abated or the order is overturned via an appeal.



Effective 1/1/2020

- Handlers not subject to EPCRA and APSA requirements:
 - Must still provide annual certification
 - May Certify their business plan every year and submit every three years.
- Handlers subject to EPCRA or APSA requirements:
 - Must submit their business plan annually.



The "Certify" button will be enabled if ALL the following conditions are true:

- No active HMBP submittal element in "draft"
- Facility has a completed submittal in CERS
- Last HMBP submittal status is either Submitted, Under Review, or Accepted
- Last HMBP submitted within last 36 months
- APSA submittal element reporting requirement is <u>not</u> set to "Applicable"

Annual HMBP Certification (AB 1429)

This feature allows a business owner/operator to annually certify that the information in their last HMBP submittal in CERS is complete, accurate, and complies with EPCRA, if applicable. This option may only be used for facilities that meet the eligibility requirements for annual certification, and that are not subject to EPCRA reporting or APSA requirements. Please click here to review eligibility requirements. It is strongly advised that you carefully review your last HMBP submittal for accuracy before certifying.





More information:

CERS Portal Change and New
Feature – Hazardous Materials
Business Plan Annual
Certification (AB1429)

The thresholds for Tier II EPCRA can be found in 40 CFR Part 370, and are summarized as:

EPCRA Tier II Reporting Chemicals	EPCRA Reportable Thresholds	
Extremely Hazardous Substances (EHSs, EPCRA Section 302)	500 pounds or the threshold planning quantity, whichever is lower (40 CFR Part 355, Appendices A and B, or "List of Lists")	
Gasoline in underground storage tanks at retail gas stations	75,000 gallons (all grades combined)	
Diesel fuel in underground storage tanks at retail gas stations	100,000 gallons (all grades combined)	
All other hazardous chemicals for which Safety Data Sheets are required	10,000 pounds	



HSC 25507 Reference Guide

Description	Reference
Irritant or Sensitizer	HSC 25507(a)(4)(A)
Combustible Metal or Metal Alloy	HSC 25507(a)(8)(A-C)
Recycled Latex Paint	HSC 25507 (a)(4)(B)
Cryogenic, Refrigerant, and Compressed Gases	HSC 25507(a)(5)(A-E)
Refrigerant Gases for Comfort Cooling	HSC 25507(b)(1)
Compressed Air Used in Emergency Response	HSC 25507(b)(2)
Lubricating Oil: Motor, Hydraulic, ATF, Gear	HSC 25507(b)(3)(A)
Fluid in a Hydraulic System or Oil-Filled Electrical Equipment	HSC 25507(b)(4)(A-B)
Consumer Products Containing Hazardous Material	HSC 25507(b)(5)
Propane	HSC 25507(b)(6)
Vehicle fuel in tanks or motorized equipment	HSC 25507(b)(7)
Treated wood and treated wood waste	HSC 25507(b)(8)
Farms	HSC 25507.1
Unstaffed Remote Facilities	HSC 25507.2



Resources

- EPA List of Lists: https://www.epa.gov/system/files/documents/2022-12/List of Lists Compiled December%202022.pdf
- <u>Battery Reporting Guidance for UPAs: https://calcupa.org/CMS15/dropbox/Business Plans/upaag-battery-reporting-guidance-for-upas-2022-03-10.pdf</u>
- California Environmental Protection Agency Trade Secret Disclosure Form:
 https://calepa.ca.gov/wp-content/uploads/2019/04/Trade-Secret-Disclosure-Fillable-PDF-Form-Accessible-4-4-19.pdf
- CERS Portal Change and New Feature Hazardous Materials Business Plan Annual Certification (AB1429): https://cers.calepa.ca.gov/wp-content/uploads/sites/11/2020/09/CERS-Business-Portal-Help-NEW-Feature-AB1429-Self-Certification-9.15.20.pdf
- CalEPA Unified Program Policy for Hazard Classification (Sensitizers): <u>CalEPA UP Memorandum</u> <u>Policy UP-11-07</u>





Any Questions?

Richard LeClair, Supervising Environmental Health Specialist, County of San Diego CUPA

Richard.LeClair@sdcounty.ca.gov

Emma Rand, Environmental Health Specialist II, County of San Diego CUPA

Emma.Rand@sdcounty.ca.gov



27th California Unified Program Annual Training Conference March 24-27, 2025