

Hazardous Materials Business Plan HMBP 201

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Overview

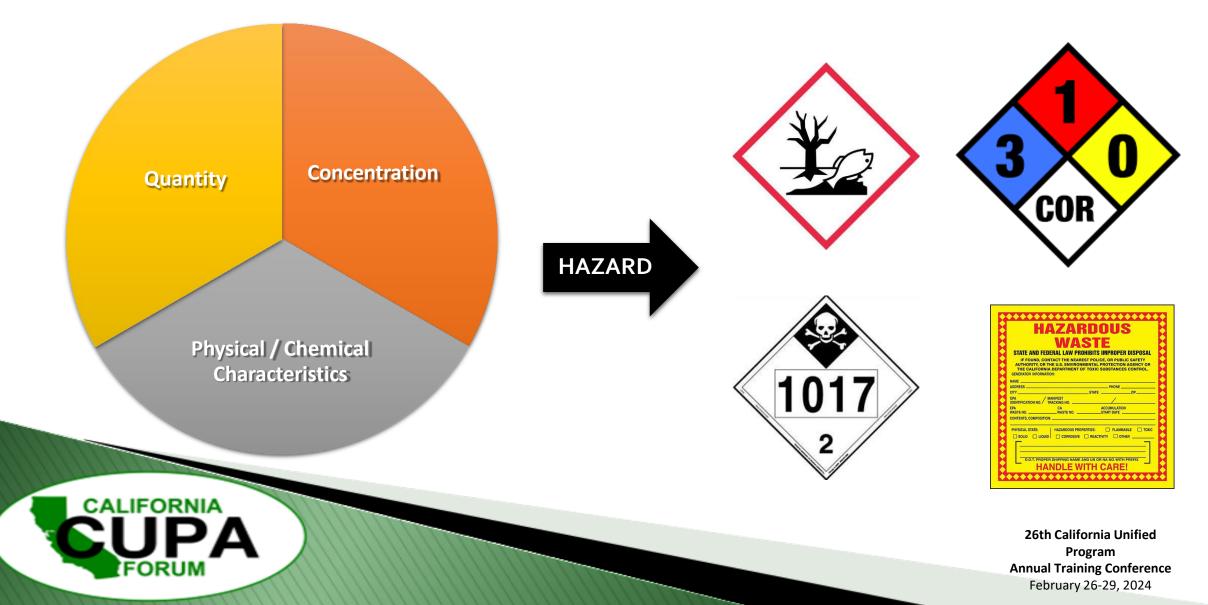
- Definitions
- Exemptions Trad
- Mixtures

- Batteries
- Trade Secret
- HMBP Updates



HSC 25501 (n)(1)

What is a hazardous material?



Hazardous Materials include...

A material in which the manufacturer is required to prepare a Safety Data Sheet (SDS)

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), Title 8

Listed as a hazardous waste in Health & Safety Code (HSC); regulated by DTSC as a hazardous waste per Title 22 CCR

Specified by a City or County ordinance



HSC 25507 (a)(1)(A)

What are the standard thresholds?

Reporting thresholds:

- ≥ 55 gallons LIQUID
- ≥ 500 pounds SOLID
- ≥ 200 cubic feet GAS



Materials are not created equal! Hazards vary and the threshold can be <u>higher or lower</u>...





HSC 25507 (a)(3)

Extremely Hazardous Substance (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".
- TPQ can be less than 500 pounds
- Solid EHS' will have two TPQ's (powder/solution)
- Must be reported in pounds in CERS

Common Examples: Ammonia used in refrigeration systems or Chlorine used in wastewater treatment facilities.

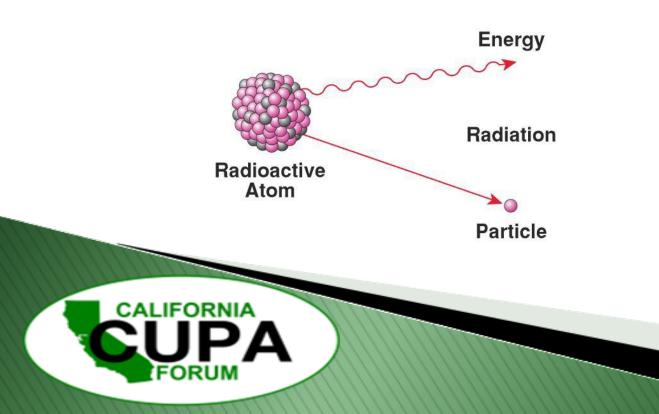
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Radioactive Materials

Handling 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





HSC 25507 (a)(6)

Quiz #1



More Exemptions...

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)
Farms	HSC 25507.1
Unstaffed Remote Facilities	HSC 25507.2





Irritant & Sensitizer

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





2 Hazard(s) identification

· Classification of the substance or mixture

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2A H319 Causes serious eye irritation.

· Label elements

· GHS label elements

The product is classified and labeled according to the Globally Harmonized System (GHS). • Hazard pictograms:



 Signal word: Warning
 Hazard statements: H315 Causes skin irritation. H319 Causes serious eye irritation.



Safety Data

Sheet (SDS)

Example

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





HSC 25507(a)(8)(A-C)



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







Cryogenic, Refrigerant, and Compressed Gases

Handling any of the following in a quantity of 1,000 cubic feet or more:

(A) Classified as hazardous due to **simple asphyxiation or release of pressure e.g.,** Argon, Helium, Nitrogen, Xenon, Krypton and Neon

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

(C) Carbon Dioxide or carbon dioxide mixed with simple asphyxiation gases

(D) Nonflammable refrigerant gas used in refrigeration system

(E) Gas used in closed fire suppression system



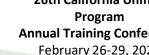
25th California Unified Program Annual Training Conference March 20-23, 2023













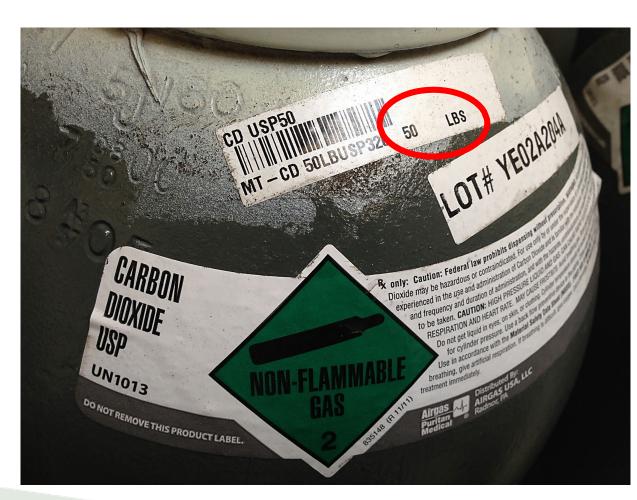
Carbon Dioxide Gas Conversion Example

50 lbs of Carbon Dioxide compressed gas

Approx. 8.741 cubic feet / lb

50 lb
$$\left(\frac{8.741 \text{ cuft}}{1 \text{ lb}}\right) = 437 \text{ cubic feet}$$

Reportable at 1,000 cubic feet!





Note for Compressed Gases...

• 25507 (a)(1) (B)

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.



Carbon Dioxide Liquid Conversion Example

- 400 lbs of Carbon Dioxide liquified gas
- 8.471 cubic feet/ 1 lb. from conversion table
- .11806 gal/lb of Carbon Dioxide- liquified gas

400 lbs. $\left(\frac{8.741 \text{ cuft}}{1 \text{ lb.}}\right) = 3,496 \text{ cubic feet}$

Reporting threshold is \geq 1,000 cu.ft. and it is stored in liquid form...

400 lbs.
$$\left(\frac{.11806 \text{ gal}}{1 \text{ lb.}}\right) = 47.2 \text{ gallons}$$

CERS reporting units = gallons!



Quiz #2



HSC 25507 (a)(5)(D)

Nonflammable Refrigerant Gases Used in Refrigeration Systems

Reportable at 1,000 cubic feet





Gases in Fire Suppression Systems

Closed-loop fire suppression system

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• Common gases: Carbon Dioxide, Nitrogen, Argon, HFCs

Reportable at 1,000 cubic feet





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

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







HSC 25507 (b)(3)(A)

Lubricating Oil

Total volume \leq 55 gallons for any oil type

<u>AND</u>

The total volume of all types \leq 275 gallons

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

This does not apply to Used Oil.





Fluid in a Hydraulic System or Oil-Filled Electrical Equipment

If the aggregate storage capacity 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







Quiz #3





BREAK TIME!



HSC 25507 (b)(5)

Hazardous Material which meets the consumer product definition

• Handled at and found in, a retail establishment and intended for direct sale to the end user.



- Shall not apply to the following:
 - Manufacturer of product
 - Distribution/Warehouse
 - Dispensing on the retail premises



"Consumer Product" definition

- OLD "Consumer product" means a product or part of the product that is used, brought, or leased for use by a person for any purposes
- NEW "Consumer product" means a commodity that is used for personal, family, or household purposes, or that is present in the same form, concentration, and quantity as a product prepackaged for distribution to a consumer for personal, family, or household purposes. A product that is not sold for personal, family, or household use is not a "consumer product."



"Retail Establishment" definition

- OLD "Retail establishment" means a business that sells consumer products prepackaged for distribution to, and intended for use by, the general public....
- NEW "Retail establishment" means a business that sells consumer products <u>prepackaged for direct distribution</u> to, and intended for use by, <u>the end user</u>.





Dispensing on premises

Consumer Product exemption does not apply in these cases.



Distribution/Warehouse/Manufacturing



"Consumer Product" Exemption

EXCEPTION #1

A consumer product handled at a facility that manufactures that product, or a separate warehouse or distribution center where there are no direct sales to consumers, or where a product is dispensed on the retail premises.



"Consumer Product" Exemption

EXCEPTION #2

A consumer product sold at a retail establishment that has a National Fire Protection Association or "NFPA" or Hazardous Materials Identification System or "HMIS" rating of 3 or 4 and is stored, at any time, in quantities equal to, or greater than, 165 gallons for a liquid, 600 cubic feet for a gas, and 1,500 pounds for a solid...



"Consumer Product" Exemption

EXCEPTION #3

...If a unified program agency determines that a consumer product stored at a retail establishment is stored at or above a reportable threshold listed in subdivision (a), and poses a significant potential hazard, the unified program agency may require the product to be reported in accordance with this chapter.



AB2059 – Retail Exemption Amendment

- Approved 9/13/2022
 - Effective 1/1/2023



<u>3 Main Changes to Chapter 6.95</u>

- 1st Narrows the definition of a "Consumer Product" and "Retail Establishment"
- 2nd Establishes reporting thresholds for some "Consumer Products"
- 3rd Requires "Suppliers" to provide up to 1 year of sales records to the CUPA upon request (HSC 25507.5)



Quiz #4

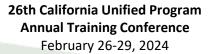


Newly Reportable Materials



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- PROPANE exchanges
- POOL CHEMICAL exchanges
- BUTANE in smoke shops



HSC 25507(b)(6)

Propane

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

Reportable at more than 500 gallons





HSC 25507(b)(7)

Liquid or Gaseous Fuel in Tanks

Liquid or **gaseous** fuel in tanks on vehicles or motorized equipment are exempt from reporting.

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

This exemption does not apply to lithium ion or lead acid batteries.







Farms

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

- Annually submit the Facility Information, Inventory, and Site Map
- Each building storing hazmat must post signs (pesticides, fuels/oils, fertilizers)
- Provide annual training to employees







Unstaffed Remote Facilities

Facility Requirements

Facility is located at least one-half mile from the nearest occupied structure

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

One time submittal in CERS of Facility Information, Inventory and Site Map

This one-time business plan submittal is subject to a verification inspection by CUPA

Material Limitations

1000 cubic feet of compressed inert gases (asphyxiation and pressure hazards only)

500 gallons of combustible liquid (Diesel) used as a fuel source

500 pounds of EHS (corrosive liquids), used as electrolytes, and in closed containers

500 gallons of lubricating and hydraulic fluids

1200 gallons of hydrocarbon gas (LPG) used as a fuel source

Any quantity of mineral oil if SPCC has been prepared for quantities that meet or exceed 1,320 gallons



Mixture

HSC § 25507(a)(1)

Mixture Rule: Definition

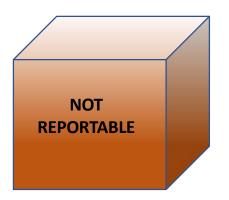


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- Any <u>mixture</u> containing a hazardous material with a quantity at any one time during the reporting year of:
 - ≥55 gallons
 - ≥500 pounds
 - ≥200 cubic feet
 - **MUST REPORT!**
- The physical state and quantity present of mixtures shall be determined by the physical state of the mixture as a whole, not individual components.

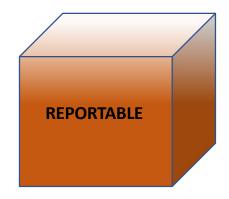
Mixture Rule: Determination

30 gallons of 38% hydrochloric acid



+ 30 gallons of water =

60 gallons of **19%** hydrochloric acid



 $30 \text{ gal} \times .38 \text{ HCl } \% = 11.4 \text{ gallons } 100\% \text{ HCl}$

 $11.4 \text{ gal} \div 60 = .19 \text{ HCl} \times 100 = 19 \% \text{ HCl}$



Mixture Rule: CERS Reporting

• Example: Plating Shop – Process Tank

-Chemical Identification and Physical Properties					
Chemical Name					
Common Name		CAS Number			
Cyanide Plating Bath Tank 2					
Physical State OSolid OGas	Hazardous Material Type 🛙 OPure OMixture OWaste				

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.





—Mixture Components-

Hazardous Component Name	CAS Number	% by W	ight	EHS
Sodium Cyanide	143-33-9	11.00		Yes
Cadmium Oxide	1306-19-0	2.00		Yes
Sodium Carbonate	497-19-8	2.00		-
Water	7732-18-2	85.00		-
-	-	-		-

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



Common Tasks



Start Facility Submittal or Certification CERS will help walk you

your facility(s).



Add Facility If you are new to CERS, or must add new facility(s), the Add Facility pages will ensure you get started correctly!



People/Users

You can allow/manage other people in your business who need to view or edit your facility reporting.



Contact Your Local Regulator(s)

Find contact information for your facility's local regulator(s).

Mixture Rule: CERS 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



Common Tasks



Add Facility

If you are new to CERS, or must add new facility(s), the Add Facility pages will ensure you get started correctly!



People/Users

You can allow/manage other people in your business who need to view or edit your facility reporting.



Contact Your Local Regulator(s)

Find contact information for your facility's local regulator(s).

Mixture Rule: CERS Reporting

Use highest percentage in the range (CERS will not except the dash)

□ Total can be over 100%



your facility(s).

26th California Unified Program Annual Training Conference February 26-29, 2024

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Mixtures Guidance

1% Rule

Mixtures consisting of less than 1% by weight of a hazardous material or 0.1% for carcinogens do not need to disclose.





Lead-Acid Batteries



Reporting Lead-Acid Batteries

- The hazardous material is the **liquid electrolyte = sulfuric acid**
- Obtain the battery specification sheet from manufacturer
 - Look for gallons of electrolyte per battery.

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



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

Obtain the total battery weight (from spec sheet) and the SDS

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

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

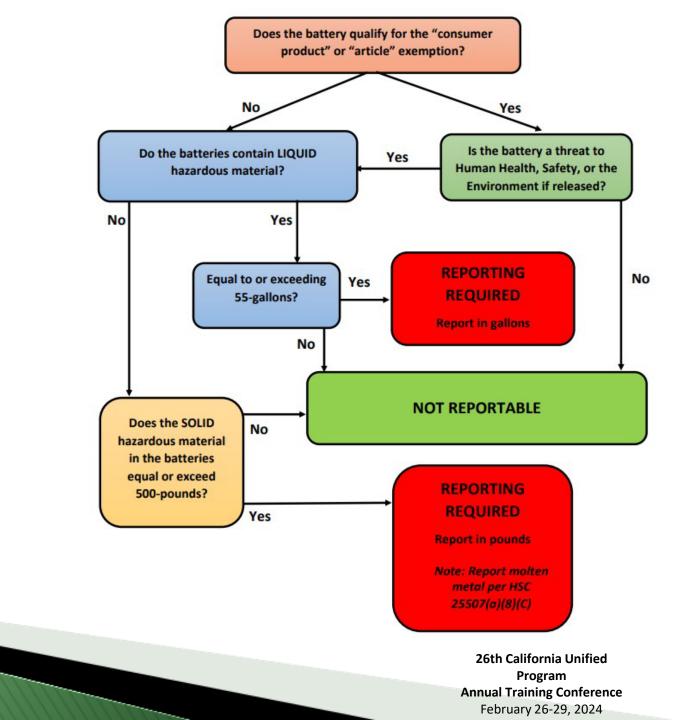
Elecrolyte Volume =
$$\frac{\left(\frac{\% \text{ of sulfuric acid}}{100}\right) (\text{Weight of battery })}{(\text{Specific gravity})(\text{water density})} = \frac{\left(\frac{40}{100}\right)(30)}{(1.285)(8.34)} = 1.12 \text{ gal}$$

Total Electrolyte Volume = 1.12 gal \times 50 batteries = 56 gallons

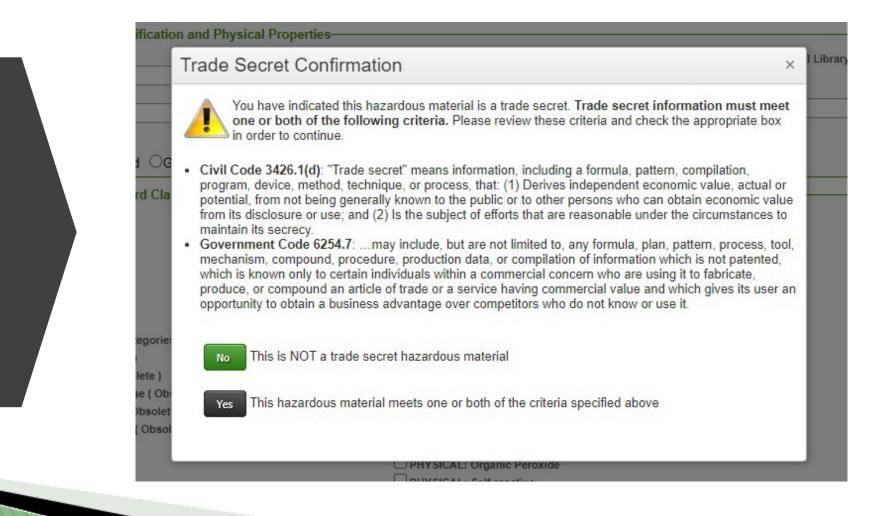


Battery Reporting

Battery Reporting Guidance for UPAs







Trade Secret

What is Considered a

Trade Secret?

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Trade Secret

HSC § 15188(e) HSC § 25512

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

HSC § 15188(e) HSC § 25512

Trade Secret

How Do I Disclose?

Information disclosed in electronic format is subject to public right to know and will be provided upon records requests.



HSC § 15188(e) HSC § 25512

Trade Secret

How Do I Disclose?

- If Trade Secret should be marked, electronic Disclosure via CERS should only have the chemical name, amount, and appropriate hazard class code.
- Business must submit a complete hardcopy disclosure to the CUPA.
- If Federal Regulated Facility (EPCRA), must submit a "Substantiation to Accompany Claims of Trade Secrecy" Form to USEPA



Trade Secret

How Do I Disclose?

California Environmental Protection Agency Trade Secret Disclosure Form

California Environmental Protection Agency Trade Secret Disclosure Form for Chemical Inventory Submittals California Code of Regulations, Title 27, Section 15188(e)	California Environmental Protection Agency Trade Secret Disclosure Form for Chemical Inventory Submittals California Code of Regulations, Title 27, Section 15188(e)
This Trade Secret Disclosure Form must be completed, signed and uploaded in the California Environmental Reporting System (CERS) for each chemical or mixture claimed to be trade secret at the time of submitting the Hazardous Material Business Plan CERS submittal. Chemical: Chemical or Common Name of the chemical or mixture believed to be trade secret:	If YES, explain why the chemical or mixture is still believed to be trade secret. Explain how your business is making reasonable efforts to maintain the secrecy of the chemical or mixture. Certification:
Regarding the Above Named Chemical or Mixture: Is the chemical or mixture considered part of any formula, plan, pattern, process, tool, mechanism, compound, procedure, production data, or compilation of information believed to be trade secret? Yes OR No Is any reported information about the chemical or mixture part of a patent? Yes OR No If YES, explain why the chemical or mixture is still believed to be trade secret. If yes, or mixture is still believed to be trade secret.	I certify under penalty of law that I have personally examined the information submitted in this and all attached documents. Based on my inquiry of those individuals responsible for obtaining the information, I certify that the submitted information is true accurate, and complete, and that these portions of this form claimed as confidential would, if disclosed, reveal the chemical or mixture being claimed as trade secret, or would reveal other confidential business or trade secret information. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. Printed Name: Signed Name:
Does the chemical or mixture derive independent economic value, commercial value, or a business advantage, actual or potential, in the process it is used?	
Yes OR No If NO, explain why the chemical or mixture is still believed to be trade secret.	
Is the chemical or mixture generally known to the public or to other persons who can obtain economic value from its disclosure or use?	
Page 1 (CalEPA 8/18)	Page 2 (CalEPA 8/1

HMBP UPDATES

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 *for comfort cooling for occupancies or* space cooling for computer rooms.
- HSC 25507 (b)(7) has been added to exclude treated wood and treated wood 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 **constant** 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 <u>here</u> to review eligibility requirements. It is strongly advised that you carefully review your last HMBP submittal for accuracy before certifying.





More information:

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



Resources

- <u>EPA List of Lists: https://www.epa.gov/system/files/documents/2022-</u> 12/List of Lists Compiled December%202022.pdf
- <u>Gas Conversion Table: https://fire.lacounty.gov/wp-</u> content/uploads/2019/08/Gas Conversion Chart.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: <u>https://calepa.ca.gov/wp-content/uploads/sites/6/2018/08/Trade-Secret-Disclosure-Fillable-PDF-Form.pdf</u>
- 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



Resources

- Paint Recovery:
- <u>Gas Conversion Table: https://fire.lacounty.gov/wp-</u> content/uploads/2019/08/Gas Conversion Chart.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: <u>https://calepa.ca.gov/wp-content/uploads/sites/6/2018/08/Trade-Secret-Disclosure-Fillable-PDF-Form.pdf</u>
- 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



Resources

- <u>Paint Recovery: https://calrecycle.ca.gov/paint/program/</u>
- <u>Gas Conversion Table: https://fire.lacounty.gov/wp-</u> content/uploads/2019/08/Gas Conversion Chart.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: <u>https://calepa.ca.gov/wp-content/uploads/sites/6/2018/08/Trade-Secret-Disclosure-Fillable-PDF-Form.pdf</u>
- 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





Questions?

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