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EPCRA Reporting Requirements in Iowa

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AWMA Meeting

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EPCRA (Right-to-Know) Reporting

- > Section 302 Emergency Planning Notification
- > Section 311 MSDS Reporting
- > Section 312 Inventory (Tier I/II) Reporting
- > Section 313 (TRI) Toxic Release Inventory Reporting
- > Section 304 Emergency Release Reporting

The EPCRA Regs

- > *605 Iowa Administrative Code 104*
 - ❖ The reporting procedures for persons and businesses in Iowa to comply with the state and federal Emergency Planning and Community Right-to-Know Acts
- > *567 Iowa Administrative Code 131*
 - ❖ *Iowa Hazardous Condition Reporting*
- > *Federal Regulation 40 CFR 355*
 - ❖ The notification requirements for an amount of an EHS equal to or greater than the TPQ
 - ❖ The notification requirements for a release exceeding an RQ
- > *Federal Regulation 40 CFR 370*
 - ❖ The requirements apply to any facility that is required to prepare or have available a MSDS for a hazardous chemical under OSHA.
 - ❖ The MSDS Notification and Tier II report
- > *Federal Regulation 40 CFR 372*
 - ❖ The toxic release inventory report

Section 301-312 Reporting (Emergency Planning, MSDS, Tier II)

Emergency Planning Notification

(40 CFR 355)

- > Applicability -
 - ❖ Any amount of an EHS greater than or equal to the TPQ (40 CFR 355 Appendix A & B)
 - ❖ Designated by Governor, SERC, Indian Tribe
- > Notification due within 60 days after a facility becomes subject to the requirement
- > Development and implementation of State and local emergency response plans
- > One-time notification, update when:
 - ❖ Change in Facility Emergency Coordinator (LEPC & SERC)
 - ❖ Change relevant to emergency planning within 30 days (LEPC)

EHS Chemicals - Notification of Change 40 CFR 355.20(a) & 605 IAC 104.1(1)

- > A facility required to provide Tier II reports shall notify the IERC within 60 days following the acquisition of chemicals meeting the notification requirements.
 - ❖ Use Tier II Manager Software:
www.iowadnr.gov/InsideDNR/RegulatoryLand/EmergencyPlanningEPCRA/ChemicalInventoryReporting.aspx
- > Additional Fire Dept notification required per 875 IAC 140.5(89B)

EHS Aggregation § 355.14

- > You must aggregate (i.e., add together) the amounts of each EHS at your facility at any one time to determine if a TPQ is present
 - ❖ Add together the quantity of pure EHS, and
 - ❖ The quantity contained in all mixtures, regardless of location, number of containers, or method of storage
- > Do not have to count an EHS in a mixture if the concentration of that EHS is less than or equal to 1%

MSDS Reporting

40 CFR 370 Subpart B & 605 IAC 104.2(3)

- > Required to prepare or have available a MSDS for a hazardous chemical under OSHA (29 CFR 1910) and exceed its TPQ
- > Within 3 months submit a list of chemicals:
 - ❖ IERC (SERC)
 - ❖ Local LEPC
 - ❖ The fire department with jurisdiction over the facility
- > EPA has not issued a list of hazardous chemicals subject to this reporting. A substance is a hazardous chemical if it is required to have an MSDS and meets the definition of hazardous chemical under the OSHA regulations - 29 CFR 1910.1200(c)

MSDS Reporting TPQs § 370.10

- > The minimum threshold for reporting for EHS is 500 lbs (approximately 55 gallons) or the TPQ, whichever is less
 - ❖ The minimum threshold for reporting for gasoline (all grades combined) that was in tank(s) entirely underground, at a retail gas station is 75,000 gallons
 - ❖ The minimum threshold for reporting for diesel fuel (all grades combined) that was in tank(s) entirely underground, at a retail gas station is 100,000 gallons
- > The minimum threshold for reporting for all other hazardous chemicals is 10,000 pounds
- > If LEPC requests info, the TPQ is zero

MSDS Reporting

40 CFR 370.30

- > MSDS reporting is a one-time requirement.
- > However, you must update the information in all of the following ways:
 - ❖ Submit a revised MSDS after you discover significant new information concerning a hazardous chemical for which an MSDS was submitted
 - ❖ Submit an MSDS, or an updated Iowa Tier I report for any new hazardous chemical for which you become subject to these reporting requirements

MSDS & Inventory Reporting Mixtures

§ 370.14

- > For each mixture, the reporting option must be consistent for both MSDS and Tier II, unless not possible
 - ❖ If you report a specific mixture as a whole for MSDS reporting, then report that mixture as a whole for inventory reporting
 - ❖ If EHS and exceeds TPQ, then must report EHS separately
- > Do not count a hazardous chemical present in a mixture if the concentration is less than or equal to 1%, or less than or equal to 0.1% for a carcinogenic chemical

Inventory (Tier II) Reporting

40 CFR 370 Subparts B & C

- > TPQ is the same as for MSDS Reporting
- > By March 1 every year you must submit inventory information (Tier II) regarding any hazardous chemical present at your facility at any time during the previous calendar year in an amount equal to or in excess of its TPQ to:
 - ❖ SERC (IERC)
 - ❖ Local LEPC
 - ❖ The fire department with jurisdiction over the facility

Exclusions from Tier II

- > Any food, food additive, drug, or cosmetic regulated by FDA
- > Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal use
- > Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product used by the general public
- > Any substance used in a research laboratory or medical facility under the direct supervision of a technically qualified individual
- > Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer
- > OSHA regulations, Section 1910.1200(b), stipulate exemptions from the requirement to prepare or to have available an MSDS

TIER II Reporting § 370.42

- > Tier II reports provide specific information on amounts and locations of hazardous chemicals present during the previous calendar year
- > Certification under penalty of that all information included in the Tier II submission is true, accurate, and complete
- > Emergency contact name, title, and phone number(s)
- > You must provide an emergency phone number where such emergency information will be available 24 hours a day, every day

TIER II Reporting § 370.42

- > For each hazardous chemical you report, you must include:
 - ❖ Provide the chemical or common name of the chemical and its Chemical Abstract Service (CAS) registry number
 - ❖ Indicate whether the chemical is: pure or mixture; solid, liquid, or gas; and whether the chemical is or contains an EHS
 - ❖ Indicate which of 5 hazard categories apply, § 370.66
 - ❖ Estimate (using range codes) the average daily and one day maximum amount present the previous calendar year, § 370.43
 - ❖ The maximum number of days the hazardous chemical was present on-site
 - ❖ Provide a brief description of the precise locations of the hazardous chemical or a site plan that notes chemical locations or coordinates, and
 - ❖ A description of the manner of storage, including container type, temperature and pressure, using the storage codes in § 370.43 for each location

Five (5) Hazard Categories

- > **Immediate (acute) health hazard**, including highly toxic, toxic, irritant, sensitizer, corrosive, or other hazardous chemicals causing an adverse effect to a target organ usually occurring rapidly as a result of short term exposure
- > **Delayed (chronic) health hazard**, including carcinogens or other hazardous chemicals causing adverse effects to a target organ as a result of long term exposure
- > **Fire hazard**, including flammable, combustible liquid, pyrophoric, and oxidizer
- > **Sudden release of pressure**, including explosive and compressed gas
- > **Reactive**, including unstable reactive, organic peroxide, and water reactive

Iowa TIER II Report

- > Tier II Manager Software
- > www.iowadnr.gov/InsideDNR/RegulatoryLand/EmergencyPlanningEPCRA.aspx
- > Facilities log into the database by clicking on "Section 311/312 (Tier II)"
- > EPCRA requires submissions be sent to the SERC, the LEPC, and the local fire department.
- > Iowa DNR will handle submissions to the LEPC on behalf of facilities.
- > Questions?? Call Elonda Bacon, IDNR EPCRA Coordinator, 515/725-0302

Section 313 Reporting (TRI)

Toxic Release Reporting (TRI)

- > 40 CFR Part 372 – Toxic Chemical Release Reporting: Emergency Planning & Community Right to Know Act
- > 605 Iowa Administrative Code 104.2(2)
- > Provides information on releases and transfers of toxic chemicals to the public & Environmental Groups

TRI Applicability

- > Covered Primary SIC Code(s) [North American Industry Classification (NAICS) codes] or Federal Facilities
 - ❖ SIC to NAICS conversion website:
 - ◆ www.epa.gov/tri/lawsandregs/naic/ncodes.html
 - ❖ On Forms R & A due annually on July 1st
- > At least 10 employees (20,000 hours equiv.)
- > Has a covered chemical on site (~600)
- > Exceeds the Manufacture, Process or Otherwise Use Thresholds (MPOU)

Covered SIC Codes

Industrial Sector	Primary SIC Code
Manufacturing	20-39
Metal Mining	10 (except 1011, 1081, and 1094)
Coal Mining	12 (except 1241)
Electrical Utilities	4911, 4931, and 4939 with specific limitations
Treatment, Storage, and Disposal facilities	4953 facilities regulated under RCRA
Solvent Recovery Services	7389 with limitations
Chemical Distributors	5169
Petroleum Bulk Terminals	5171

Toxics Release Inventory (TRI)

- > Annual report for each EPCRA Section 313 chemical exceeding an activity threshold
 - Manufacture (25,000 lbs)
 - Process (25,000 lbs)
 - Otherwise Use (10,000)
 - Persistent, Bioaccumulative and Toxic (PBT) have lower thresholds
- > Submit to USEPA & SERC/IDNR
- > File: TRI-ME Web (on-line)



TRI-MEweb

- > No software download. Access via internet
- > Has quicklists to customize the questionnaire to areas of the TRI forms that are applicable
- > Automatically populates forms based on last year's data
- > Determines whether Form A or Form R is required
- > EPA provides instant e-mail confirmation of submission
- > Register with the Central Data Exchange (CDX) prior to being able to certify TRI-MEweb forms.
 - ❖ Registration includes creating an electronic signature agreement (ESA) to the TRI data processing center
 - ❖ Process takes a minimum of 5 business days
 - ❖ *For a new certifier, suggest submitting ESA before June*
 - ❖ Submission of the ESA is one time only as long as the certifier represents the facility

EPCRA Section 313 Chemicals

- > Current list exceeds 600 chemicals and *chemical categories*
 - ❖ *Lead Compounds, Mercury Compounds*
- > Full list available at 40 CFR Part 372.65
- > Persistent, Bioaccumulative, and Toxic (PBT) Chemicals - Special (lower) thresholds and reporting considerations
- > Qualifiers - subject only in specified form

107-05-1	Allyl chloride
7429-90-5	Aluminum (fume or dust)
20859-73-8	Aluminum phosphide
1344-28-1	Aluminum oxide (fibrous forms)

TRI Process - 2 Part Process

Applicability and Threshold Determinations

Identify Section 313 Chemicals Manufactured, Processed, or Otherwise Used (MPOU)

Determine quantity of chemical and classify as MPOU for the reporting year

If Thresholds Exceeded

Identify total releases and off-site transfers

Identify other waste management practices 

Identify pollution prevention activities

Release and Waste Management Reporting

Complete Forms R or A

Review report for accuracy

Submit to EPA and State

PBT Reporting Thresholds

- > The reporting threshold is 100 pounds per year for chemicals that are PBT
- > For a subset of PBT chemicals that are highly persistent and highly bioaccumulative, the reporting threshold is 10 pounds per year
- > For dioxins and dioxin-like compounds, there is a separate reporting threshold of 0.1 grams per year

Metals and Metal Compound Category

- > Elemental metals and metal compound categories are separately listed chemicals under Section 313
 - ❖ Separate activity threshold determinations
 - ❖ Report for each listing (e.g., nickel or nickel compound) only if the threshold for each listing is exceeded
 - ❖ If threshold exceeded for both the elemental metal and metal category compound (e.g., nickel and nickel compound), you have options to report separately or file one combined report

Manufacture, Process, Otherwise Use (1/3)

- > *Manufacture* - produce, prepare, import
 - ❖ On-site use/processing
 - ❖ For sale/distribution outside facility
 - ❖ As a byproduct or impurity
 - ❖ Intermediates
 - ❖ Do not overlook coincidental manufacture!
 - ❖ 25,000 lbs

Manufacture, Process, Otherwise Use (2/3)

- > *Process* - incorporate 313 chemical into a product for further distribution in commerce
 - ❖ As a reactant
 - ❖ As a formulation component
 - ❖ Article component
 - ❖ Repackaging
 - ❖ Impurity
 - ❖ Sent off-site for recycling
 - ❖ 25,000 lbs

Manufacture, Process, Otherwise Use (3/3)

- > *Otherwise Use* - any use of a 313 chemical not covered by *manufacture* or *process*
 - ❖ Chemical processing aid (catalysts, solvents)
 - ❖ Manufacturing aid (coolants, lubricants)
 - ❖ Ancillary or other use (fuel, degreasers)
 - ❖ Management of waste from off site
 - ❖ 10,000 lbs
- > Thresholds are mutually exclusive

MPOU Threshold Guidance

- > For threshold determinations, the definitions of “manufacture”, “process” and “otherwise use” currently do not include Section 313 chemicals that are:
 - ❖ Remediated (chemicals coincidentally manufactured must be considered)
 - ❖ Treated in wastes generated on site
 - ❖ Stored
 - ❖ Recycled on-site for use on-site, unless recycled for use as part of a different threshold activity
 - ❖ Transfers sent off-site for further waste management (not including recycling)

De Minimus Exemption (1/2)

- > De minimus applies to:
 - ❖ Non-PBT chemicals in mixtures
 - ❖ Processed or otherwise used
 - ❖ Only 2 manufacturing activities:
 - ◆ Coincidentally manufactured as impurity remaining in product
 - ◆ Imported in mixtures
 - ❖ Concentration in mixture <1% by weight
 - ❖ Concentration <0.1% by weight (OSHA defined carcinogen)
 - ❖ Not required to include in threshold determinations, release or other waste management determinations

De Minimus Exemption (2/2)

- > De minimus does not apply to:
 - ❖ Manufacturing chemicals (in most cases)
 - ❖ Manufacturing chemicals as by-products
 - ❖ Wastes received from off-site
 - ❖ PBT chemicals
- > Once the limit has been met, the exemption cannot be claimed

Article Exemption

- > Article - manufactured item:
 - ❖ Formed to specific shape or design; and
 - ❖ End use function dependent on shape or design; and
 - ❖ Does not result in a release of 313 chemical during normal use
- > Article - can be tricky!
 - ❖ Metal machined, cut or ground is not applicable
 - ❖ Does not apply to manufacture of articles
 - ❖ Releases of 0.5 lbs or less are not considered a release
- > Lead-acid batteries will typically not meet the article exemption per EPA

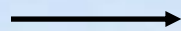
More Exemptions

- > Specified Use
 - ❖ Structural component of facility
 - ❖ Routine janitorial or grounds maintenance
 - ❖ Products for personal use
 - ❖ Motor vehicle maintenance
- > Laboratory Activities
 - ❖ Research & quality control
- > Owner of Leased Property
 - ❖ Operator required to report
- > NAICS specific
 - ❖ Coal mining extraction activities
 - ❖ Metal mining overburden

Mixtures

- > Individually listed chemicals are separately reported
- > % by wt. Chemical x weight of mixture
- > Guidelines for reporting:

Upper bound concentration



Use upper concentration

Concentration Range



Use midpoint of range

Lower bound conc.



Two ways:

**(1) Calculate midpoint
assuming upper
concentration of 100%**

**(2) Subtract percentages of other
known constituents to determine
upper bound, then use midpoint**

TRI Reporting

- > Amount in lbs released to media
 - ❖ Air Emissions - Fugitive and Point Sources
 - ❖ Discharges to Surface Waters
 - ❖ Underground Injection
 - ❖ Land Disposal On-Site
 - ❖ Discharge to POTW
 - ❖ Transfers to Off-Site Locations
 - ❖ On-Site Waste Treatment, Energy Recovery, Recycling
 - ❖ Source Reduction and Recycling Activities
- > If <1000 lbs, can use range codes
- > Specify basis of estimate code
- > Treatment codes and Handling codes
- > Chemical specific activity ratio (RepYr/PrevRepYr)

Zero vs. NA

- > Use “not applicable” when no possibility of the TRI chemical being released to media or managed as waste (facility has no on-site landfill)
- > Use “0” when <0.5 pound of a non-PBT chemical is directed towards that medium
- > Examples:
 - ❖ If a facility uses nitric acid and the wastes are neutralized to a pH of 6 or above before discharge, then the facility reports a release of zero, not NA.
 - ❖ The facility does not landfill the waste, use NA.
 - ❖ A facility has no underground injection well, use NA.

Form A

- > Simplified reporting process vs. Form R
- > Form A may not be used to report PBT chemicals
- > May submit Form A for some chemicals and Form R for other chemicals
- > Includes an annual certification statement
- > May use Form A for non-PBTs if
 - ❖ Total amount of chemical MPOU is less than 1,000,000 lbs and
 - ❖ Reportable amount is 500 lbs or less (annual reportable amount is equal to the combined total quantities released at the facility (the total of releases & other waste management))

TRI Data Quality Errors - Trigger Enforcement Action

- > Failure to estimate releases entering each environmental media or off-site transfers
- > Failure to identify all categories of chemical use
- > Failure to identify the waste treatment or disposal methods employed
- > Failure to use all readily available information necessary to calculate as accurately as possible releases or off-site transfers

Section 304 Reporting (Emergency Release Reporting)

EPCRA Release Reporting

40 CFR 355 Subpart C

- > Applies to any facility:
 - ❖ At which there is release of a reportable quantity (RQ) of any EHS or CERCLA hazardous substance unless exempt per 40 CFR 355.31
- > Release Notification does not apply to:
 - ❖ Releases with only on-site exposures
 - ❖ Federally permitted releases
 - ❖ Pesticides or Radionuclides
 - ❖ Releases of NO and NO₂ to the air from combustion if <1,000 lbs/24 hrs

EPCRA Release Reporting

40 CFR 355.40(a) & 60

- > Owner/Operator shall immediately notify the LEPC and SERC
 - ❖ Chemical name or identity
 - ❖ EHS status
 - ❖ Estimate of release quantity
 - ❖ Time and duration of the release
 - ❖ Impacted media
 - ❖ Known or anticipated health risks & advice regarding medical attention for exposed persons
 - ❖ Proper precautions to take, including evacuation
 - ❖ Name and phone number of contact person
- > Immediately means not to exceed 15 minutes
- > If no LEPC, then local emergency response agency (FD)
- > Only contact NRC if a CERCLA hazardous substance (40 CFR 302.4)

EPCRA Release Reporting

40 CFR 355.40(b)

- > A follow-up written report due as soon as practicable (within 7 calendar days) that Includes:
 - ❖ Oral Report info
 - ❖ Actions taken to respond to and contain the release
 - ❖ Known or anticipated health risks
 - ❖ Advice regarding medical attention for exposed persons
- > Written report may be updated with new info

EPCRA Continuous Release

40 CFR 355.32 & 33

- > The continuous release of a hazardous substance above the RQ over 24 hrs
- > Reduced reporting if stable and continuous.
- > Follow CERCLA Notification Procedures § 302.8:
 - ❖ Initial telephone notification to the NRC
 - ❖ Initial written notification to EPA Region within 30 days of the initial telephone notification
 - ❖ Follow-up notification to EPA Region within 30 days of the first anniversary date of the initial written notification.
 - ❖ Notify if change in composition, or statistically significant increase, change in normal range
- > Notify every LEPC & SERC likely to be affected

Iowa Hazardous Conditions

567 IAC 131

- > Report Hazardous Conditions:
 - ❖ Any situation involving the actual, imminent, or probable spillage, leakage, or release of a hazardous substance onto the land, into a water of the state or into the atmosphere which, because of the quantity, strength and toxicity of the hazardous substance, its mobility in the environment and its persistence, creates and immediate or potential danger to the public health or safety or to the environment.
- > Verbal report: Notify as soon as possible but not later than 6 hours after occurrence or discovery:
 - ❖ Department (515) 281-8694
 - ❖ IDNR will assign spill number
 - ❖ Local police department or office of sheriff
- > Written report: Due within 30 days
 - ❖ Submit to Department
IDNR Emergency Response Unit
502 E 9th Street
Des Moines, IA 50319-0034

Iowa Hazardous Conditions

567 IAC 131

- > Written report must contain:
 - ❖ Exact location of hazardous condition
 - ❖ Time and date of onset or discovery
 - ❖ Name of material, manufacturer, volume
 - ❖ Medium (land, water, air) impacted
 - ❖ Name, address, telephone number of responsible party
 - ❖ Time and date of verbal report
 - ❖ Weather conditions at time of onset
 - ❖ Name, mailing address, telephone number of person reporting
 - ❖ Name and telephone of person closest to scene of hazardous condition who can be contacted for further info
 - ❖ Any other info as needed: circumstances leading to hazardous condition, visible effects, containment measures

For Help Contact

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