

Quick Reference Guides for RCRA Contingency Plans Tips & Tricks

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Taylor Wilson, P.E. – Managing Consultant & BCS Manager



trinityconsultants.com



Introduction

- ▶ Taylor Wilson, P.E.
 - Office Location: Kansas City
 - Contact Number: 913-731-1968
 - twilson@trinityconsultants.com
- ▶ Variety of project experiences
 - Multi-media auditing
 - RCRA
 - SPCC & FRP
 - TRI Reporting
 - SWPPP
 - CFATS

Agenda

1. Quick Reference Guide Background
2. Hazardous Wastes – Layman's Terms
3. Defining Special/Unique Exposures
4. Site Maps
5. Concluding Thoughts

But First – Today’s Theme!

- ▶ April 2022 Memo on Quick Reference Guide FAQs **mentions 22 times to coordinate with your local emergency response agencies**
 - The memo is **10 pages long!**
 - RO 14943



This balancing may come about as part of the collaborative relationship that EPA encourages LQGs to establish with their local emergency responders. In addition to the arrangements LQGs must make with their local authorities under 40 CFR 262.256, EPA encourages LQGs to collaborate with local emergency responders while originally developing their QRG and whenever updates to the QRG may be necessary. Consulting with local emergency responders during QRG development should ensure that the most appropriate information is included. When questions arise, LQGs should first seek input from their local emergency responders to determine what will be most useful for them. Maintaining communication with first responders for any QRG updates will keep these authorities aware of changes at the facility that may affect their approach or ability to respond to any incidents.

Quick Reference Guide - Background

- ▶ Generator Improvements Rule
 - Proposed September 25, 2015
 - Published November 28, 2016
 - Effective May 30, 2017
- ▶ Major generator changes:
 - Reorganization of regulations
 - Episodic generation provisions
 - Container labeling – hazards
 - **LQGs – Quick Reference Guides**
 - SQGs – renotifications
 - “Accurate” waste determinations

ENVIRONMENTAL PROTECTION AGENCY

40 CFR Parts 257, 258, 260, 261, 262, 263, 264, 265, 266, 267, 268, 270, 271, 273, and 279

[EPA-HQ-RCRA-2012-0121; FRL 9947-26-OLEM]

RIN 2050-AG70

Hazardous Waste Generator Improvements Rule

AGENCY: Environmental Protection Agency (EPA).

ACTION: Final rule.

SUMMARY: With this action, the United States Environmental Protection Agency (EPA) is finalizing revisions to the Resource Conservation and Recovery Act's (RCRA) hazardous waste generator regulatory program proposed on September 25, 2015. There are several objectives to these revisions. They include reorganizing the hazardous waste generator regulations to make them more user-friendly and thus improve their usability by the regulated community; providing a better understanding of how the RCRA hazardous waste generator regulatory program works; addressing gaps in the existing regulations to strengthen environmental protection; providing greater flexibility for hazardous waste generators to manage their hazardous waste in a cost-effective and protective manner; and making technical corrections and conforming changes to address inadvertent errors and remove obsolete references to programs that no longer exist. This final rule responds to the comments of EPA stakeholders, taking into consideration the mission of EPA and the goals of RCRA.

DATES: This final rule is effective on May 30, 2017. The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 30, 2017.

ADDRESSES: The EPA has established a docket for this action under Docket ID No. EPA-HQ-RCRA-2012-0121. All documents in the docket are listed on the <http://www.regulations.gov> Web site. Although listed in the index, some information is not publicly available, including:

FOR FURTHER INFORMATION CONTACT: Jim O'Leary, U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery, (MC: 5304P), 1200 Pennsylvania Ave. NW., Washington, DC 20460, (703) 308-8827, (oleary.jim@epa.gov) or Kathy Lett, U.S. Environmental Protection Agency, Office of Resource Conservation and Recovery, (MC: 5304P), 1200 Pennsylvania Ave. NW., Washington, DC 20460, (703) 605-0761, (lett.kathy@epa.gov).

SUPPLEMENTARY INFORMATION:

I. Table of Contents

The information presented in this preamble is organized as follows:

- I. Table of Contents
- II. General Information
 - A. Does this action apply to me?
 - B. Incorporation by Reference
- III. Statutory Authority
- IV. What is the intent of this final rule?
- V. Background
 - A. History of the Hazardous Waste Generator Program
 - B. Hazardous Waste Generator Demographics
- VI. Reorganization of the Hazardous Waste Generator Regulations and Organization of the Preamble
 - A. Moving and Integrating Regulations From 40 CFR 261.5 Into 40 CFR Part 262
 - B. SQG and LQG Conditions for Exemption (40 CFR 262.16 and 262.17)
 - C. EPA Identification Number (40 CFR 262.12)
 - D. What changed since proposal?
 - E. Guidance and Implementation
- VII. Detailed Discussion of Revisions to 40 CFR Part 260—Hazardous Waste Management System: General
 - A. Generator Category Definitions (40 CFR 260.10)
 - B. Generators That Generate Both Acute and Non-Acute Hazardous Waste in the Same Calendar Month (40 CFR 260.10)
 - C. Definition of Central Accumulation Area (40 CFR 260.10)
- VIII. Detailed Discussion of Revisions to 40 CFR Part 261—Requiring Biennial Reporting for Owners or Operators of Facilities That Recycle Hazardous Waste Without Storing It (40 CFR 261.6(c)(2))
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 - B. What is EPA finalizing?
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 - A. Addition of Terms Used in This Part and Changes to Purpose, Scope and Applicability (40 CFR 262.1 and 262.10)
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- X. Addition to 40 CFR Part 262 for Generators That Temporarily Change Generator Category as a Result of an Episodic Event
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F. Revisions to Satellite Accumulation Area (SAA) Regulations for SQGs and LQGs (262.15)

G. Accumulation of Hazardous Waste by SQGs and LQGs on Drip Pads and in Containment Buildings

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J. Documentation of Inspections of Waste Accumulation Units

K. Allowing VSGQs To Send Hazardous Waste to LQGs Under the Control of the Same Person (40 CFR 262.14(a)(5)(viii) and 262.17(f))

L. EPA Identification Numbers and Re-notification for SQGs and LQGs (40 CFR 262.18)

M. Provision Prohibiting Generators from Disposing of Liquids in Landfills (40 CFR 262.14(b) and 262.35)

N. Clarification of Biennial Reporting Requirements (40 CFR 262.41, 264.75 and 265.75)

O. Extending Time Limit for Accumulation Under Alternative Requirements for Laboratories Owned by Eligible Academic Entities (40 CFR Part 262 Subpart K)

P. Deletion of Performance Track and Project XL Regulations

X. Addition to 40 CFR Part 262 for Generators That Temporarily Change Generator Category as a Result of an Episodic Event

A. Introduction

B. What is EPA finalizing?

C. What changed since proposal?

D. Major Comments

XI. Detailed Discussion of Preparedness, Prevention, and Emergency Procedures Provisions for SQGs (40 CFR 262.16) and LQGs (40 CFR 262.17 and 40 CFR Part 262 Subpart M)

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C. What is EPA finalizing with changes to proposed rule language?

D. What is EPA not including in the final rule?

XII. Technical Corrections and Conforming Changes to 40 CFR Parts 257, 258, 260 Through 265, 270, 273, and 279

A. What is EPA finalizing?

B. What changed since proposal?

C. Major Comments

XIII. Electronic Tools To Streamline Hazardous Waste Reporting and Recordkeeping Requirements

A. Waste Determination Tools

B. Emergency Response Executive Summary App

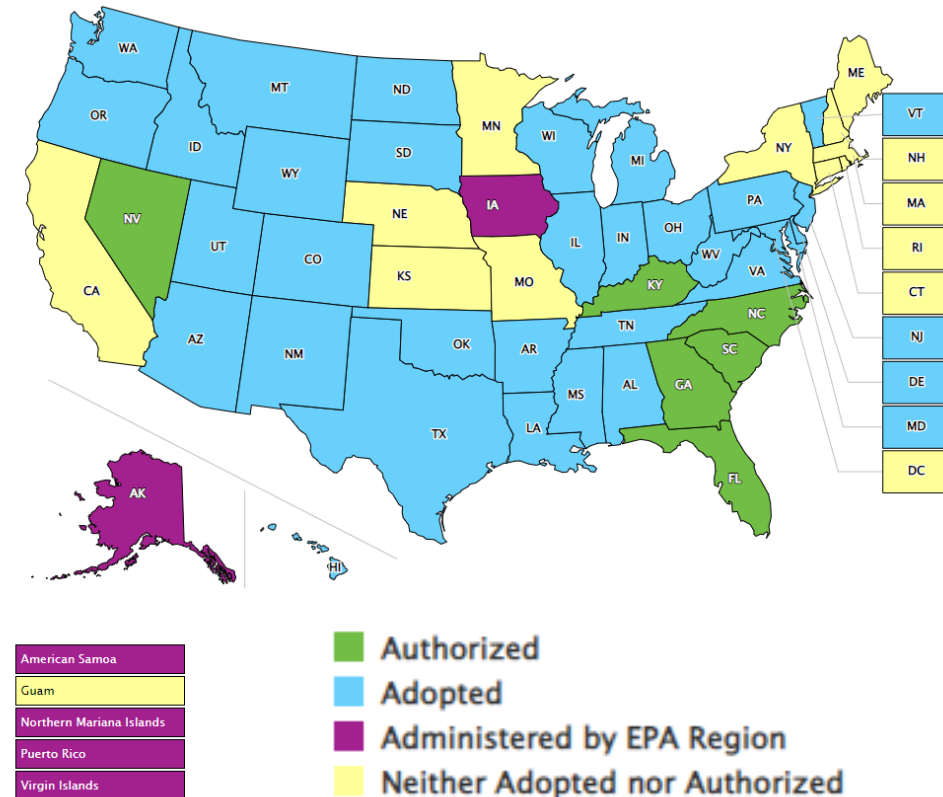
C. Recordkeeping and Reporting Tools

D. Analysis of Comments

XIV. Enforceability

Quick Reference Guide - Background

- ▶ Iowa – immediately adopted
 - Effective 2017
- ▶ Missouri – not yet adopted (~18 months)
- ▶ Kansas – targeting 2023 for formal proposal of adopting regulations
 - 2022 – targeting draft of regulations and economic impact statement for informal review
- ▶ Nebraska – not yet adopted (TBD)



Source: <https://www.epa.gov/hwgenerators/where-hazardous-waste-generator-improvements-rule-effect>

Quick Reference Guide – Required Elements

40 CFR 262.262(b)

- (1) The types/names of hazardous wastes in layman's terms and the associated hazard associated with each hazardous waste present at any one time (e.g., toxic paint wastes, spent ignitable solvent, corrosive acid);
- (2) The estimated maximum amount of each hazardous waste that may be present at any one time;
- (3) The identification of any hazardous wastes where exposure would require unique or special treatment by medical or hospital staff;
- (4) A map of the facility showing where hazardous wastes are generated, accumulated and treated and routes for accessing these wastes;
- (5) A street map of the facility in relation to surrounding businesses, schools and residential areas to understand how best to get to the facility and also evacuate citizens and workers;
- (6) The locations of water supply (e.g., fire hydrant and its flow rate);
- (7) The identification of on-site notification systems (e.g., a fire alarm that rings off site, smoke alarms); and
- (8) The name of the emergency coordinator(s) and 7/24-hour emergency telephone number(s) or, in the case of a facility where an emergency coordinator is continuously on duty, the emergency telephone number for the emergency coordinator.

Quick Reference Guide (QRG) – Why Is This Needed?

80 FR 57959

- ▶ Contingency plans are too long to be useful in practice (at least for initial responses)
 - “QRGs should contain enough detail to be useful without being unwieldy” – April 2022 FAQ Memo
- ▶ Need a concise summary that emergency responders can utilize quickly
- ▶ Recall today’s theme: **coordinate with your local emergency responders!**

In discussions with EPA, emergency management professionals indicated that the length of the facility contingency plans prevents first responders from being able to fully review a facility’s contingency plan when responding to an emergency.⁸⁹ Instead, they need readily available information that describes what they must confront when they arrive at the scene. Once the incident is under control, the first responders can then review the detailed contingency plan to determine their next steps, if applicable. Thus, the Agency believes that a shorter document, such as an executive summary of the contingency plan would be more effective for an emergency responder when responding to an incident at a facility accumulating hazardous waste. As currently happens in practice, once the incident is under control, then the emergency responders can review the more detailed contingency plan if necessary for long-

⁸⁹ Notes from discussion with Phil Oakes and Jim Narva, International Association of Fire Marshalls, concerning Contingency Planning and Emergency Response Regulations, July 2012.

Types/Names of HWs in “Layman’s Terms”

40 CFR 262.262(b)(1) & (2)

- ▶ Need to identify the types/names of hazardous waste in layman’s terms and the associated hazards; also need maximum onsite
 - “Toxic paint wastes, spent ignitable solvent, corrosive acid”
- ▶ FAQ #7 – regulations **do NOT require specifying the SAA** associated with these HW descriptions (i.e., frequent changes in SAA waste accumulation types should not result in frequent QRG updates)

In addition, the regulations require that the QRG identify the wastes and associated hazards of the hazardous wastes that may be present in the facility overall, not in each SAA independently. **That is, generators are not required to link each hazardous waste to a given location in the QRG,** though some generators may choose to do so. For example, an LQG that accumulates the spent ignitable solvents ethyl ether and methanol at various locations across its facility would be considered in compliance for reporting the total quantity of spent ignitable solvents accumulated facility-wide in its QRG.

EPA Region 7 Example

Not technically required per FAQ



Hazardous Waste Information:

Name of Waste	Waste Codes/Hazards	Location Accumulated	Maximum Amounts Present	Response Notes	Special Notes to Hospital/Treatment personnel
Paint Related Wastes (liquid)	D001 (ignitability, flash point <140 °F); F003, F005 (Benzene, Methyl Ethyl Ketone, Toluene, Toxicity)	NW corner of Warehouse, hazardous waste storage area	Five, 55-gallon drums (2,065 pounds)	If personnel come into direct contact with material, decontamination at the hospital may be required prior to treatment.	None
Paint Related Wastes (liquid)	D001 (ignitability, flash point <140 °F); F003, F005 (Benzene, Methyl Ethyl Ketone, Toluene, Toxicity)	Two Satellite Accumulation Areas as noted with blue asterisks on the attached map.	One, 55-gallon drum (440 pounds)	If personnel come into direct contact with material, decontamination at the hospital may be required prior to treatment.	None
Off-specification 2, 4-D, a herbicide, (brand name is Amine 4) (liquid)	D016 (toxicity); Flashpoint 190 °F.	SW corner of warehouse near new product storage of Amine 4.	Off-Spec – 1 tank, 1,000 gallons New product – 1 tank (same tank as off-spec), 1,000 gallons	Use PPE to prevent contact with skin and eyes. Immediately prevent spills from entering drains and waterways. Prevent sources of ignition and open flames.	Contact Chemtrac for emergency medical treatment information at 1-800-424-9300. If in eyes, wash eyes for several minutes.



UN & ERG numbers helpful

Significant non-RCRA hazard

Recall the ERG Flowchart

- ▶ **Ultimate goal** – determine the guide number to determine response procedures
 - **UN/NA number** is helpful

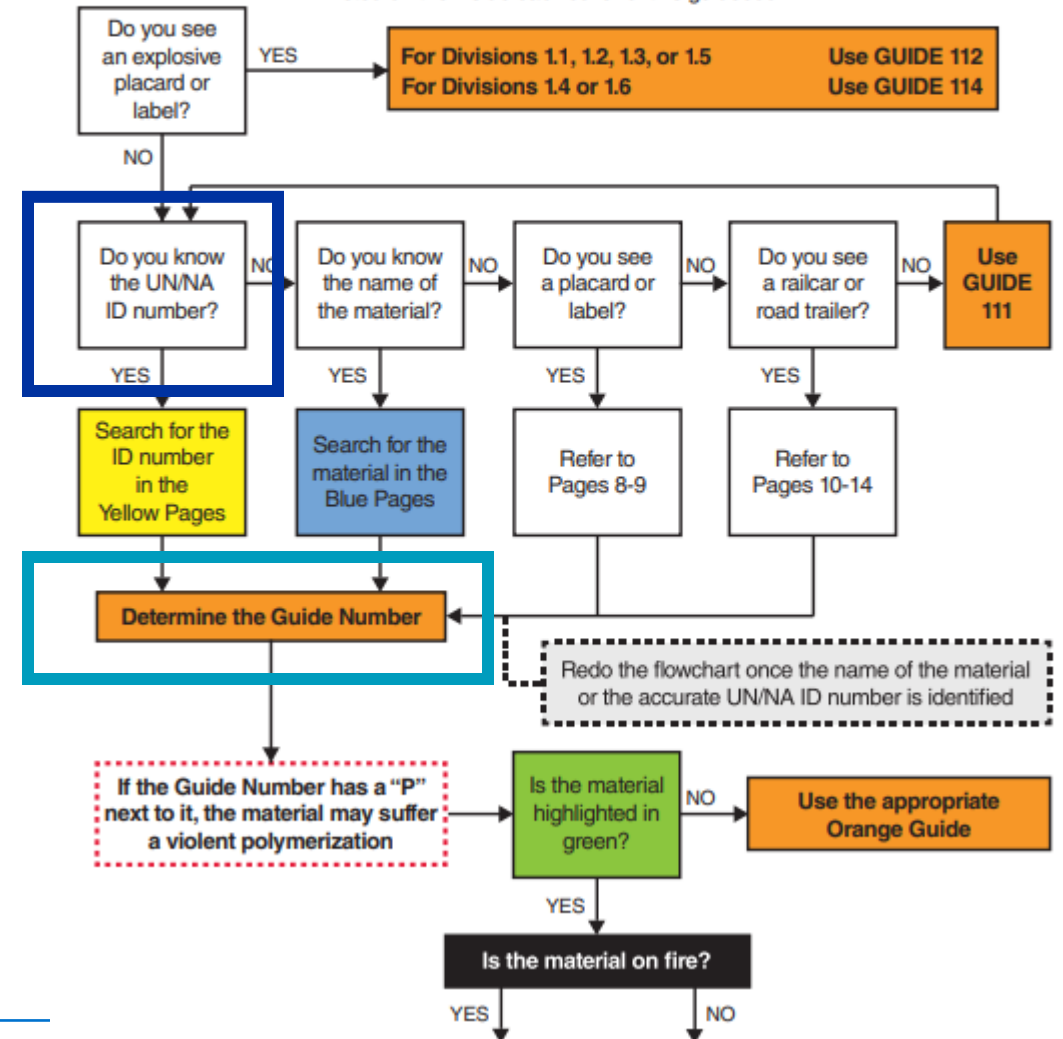
Source: 2020 Emergency Response Guidebook (DOT, PHMSA)

HOW TO USE THIS GUIDEBOOK

RESIST RUSHING IN!

**APPROACH INCIDENT FROM UPWIND, AND UPHILL AND/OR UPSTREAM
STAY CLEAR OF ALL SPILLS, VAPORS, FUMES, SMOKE, AND POTENTIAL HAZARDS**

WARNING: DO NOT USE THIS FLOWCHART if more than one hazardous material/dangerous good is involved. Immediately call the appropriate emergency response agency telephone number listed on the inside back cover of this guidebook.



“Unique” or “Special” Treatment

40 CFR 262.262(b)(3)

- ▶ Need to identify any hazardous wastes where exposure requires “unique” or “special” treatment by medical or hospital staff
- ▶ FAQ #2 – specifies three factors to consider when making this determination:
 - Are first responders and/or medical facilities **likely to have the required treatment in their inventories**? (e.g., hydrofluoric acid burns require calcium compounds that ambulances and some hospitals do not keep in stock)
 - Will local emergency responders **need special PPE** (e.g., respirators, hazmat suits, etc.) to **enter the facility**, treat a patient, or otherwise respond to any incidents?
 - Could an exposed patient or first responder **spread contamination to outside locations or other personnel** when transported away from the scene? (e.g., chemical weapons decommissioning facility may need to notify hospitals of decontamination procedures)

EPA Region 7 Example

Not technically required



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Work with local responders to properly complete

“Unique” or “Special” Treatment Interpretation

- ▶ Remains tricky to decipher – **coordination through local responders remains the best path**
 - Check SDSs
 - Check DOT/PHMSA ERG
- ▶ Best practice? – including response and treatment procedures for all hazardous waste types
 - Negative – removes emphasis from “unique” or “special” treatment (separate column alleviates this)
 - Positive – thorough



“Unique” or “Special” Treatment – Example

- ▶ DOT/PHMSA ERG Example – “do not perform mouth-to-mouth resuscitation if victim ingested or inhaled the substance”
 - ERG 111, 117-119, 123-125, 131-132, 134, 137, 139, 142, 144, 151-157, 173
 - ◆ Arsenic (various) (D004)
 - ◆ Barium Compounds, N.O.S. (D005)
 - ◆ Cadmium Compounds (D006)
 - ◆ Carbon Tetrachloride (D019)
 - ◆ Chloroform (D022)
 - ◆ Chromium oxychloride, but NOT chromium trioxide (anhydrous) (D007)
 - ◆ Etc...
 - NOT included: acetone, xylenes, methylene chloride, et. al.



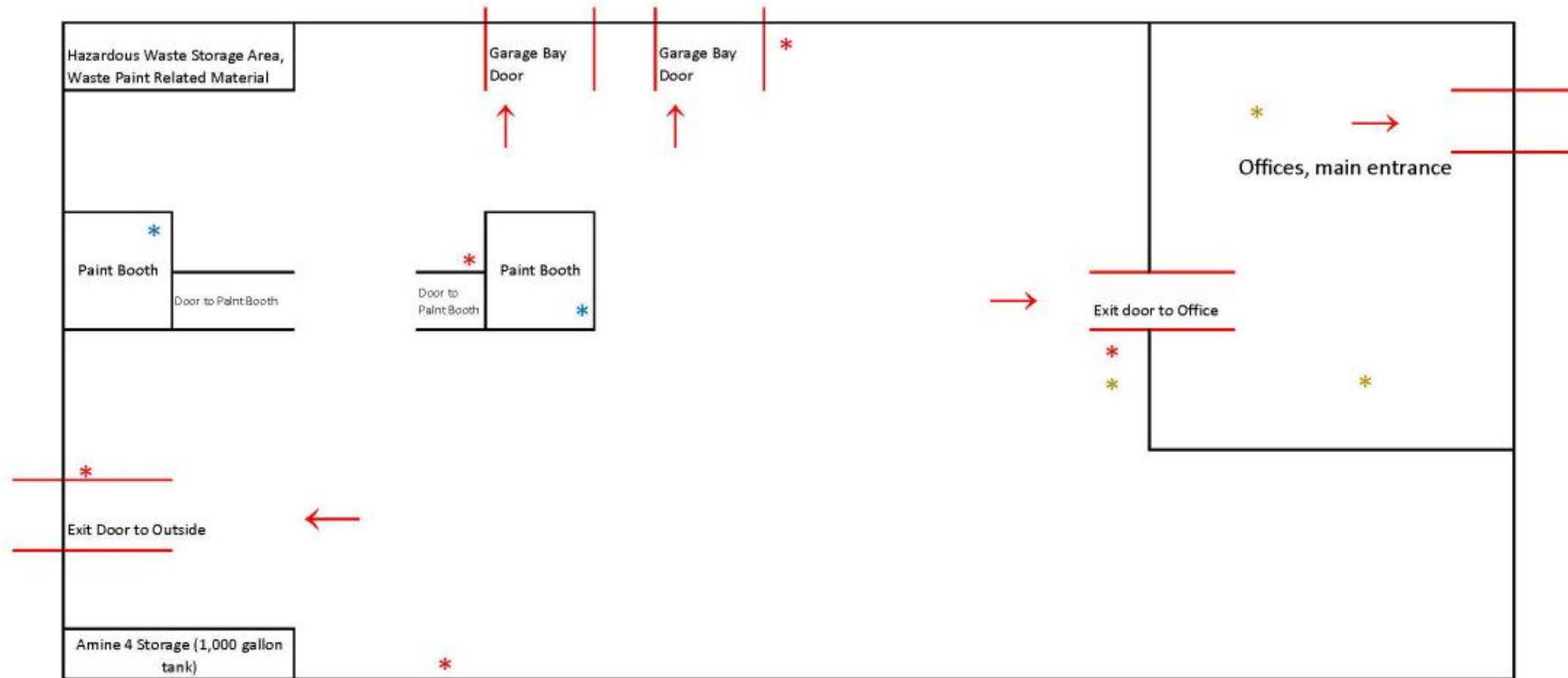
Map of Hazardous Waste Locations

40 CFR 262.262(b)(4)

- ▶ Need a map showing where hazardous wastes are generated, accumulated, and treated AND routes for accessing these wastes
 - Satellite Accumulation Areas (SAAs), Central Accumulation Areas (CAAs), Treatment Units
- ▶ FAQ #4 – radius (size) of the maps will **depend on the size and complexity of the generator site** (the map should help first responders identify and access areas where hazardous waste is likely to be present)
- ▶ FAQ #6 – temporary SAAs and CAAs **MUST** be included on the map
- ▶ FAQ #8 – SAA locations that change frequently may be able to mark the general region or buildings they are located (coordinate with local emergency responders)

EPA Region 7 Example

- ▶ Can we improve?
 - North arrow
 - Reference to outside (parking)
 - More facility internal identifiers?
 - Amounts of HW?

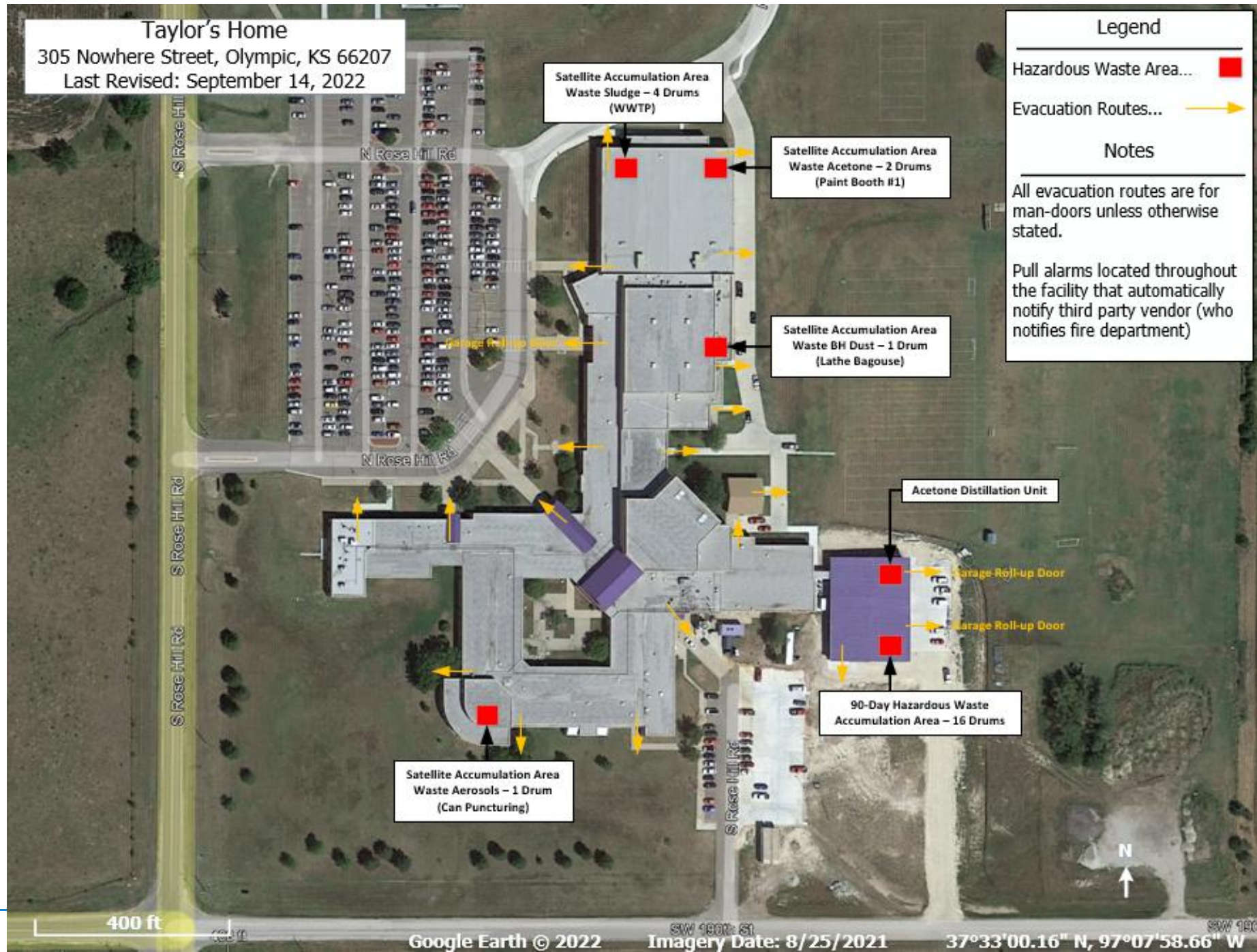


- * Satellite Accumulation Area for Paint Related Waste Material (D001, F003, F005)
- * Fire Alarms (ring on-site only, there are no fire alarms that notify off-site personnel)
- * Telephone for off-site notification of emergency
- Indicates evacuation route out of the building.

Note 1: Hazardous waste (paint related waste) is generated and accumulated inside each of the two paint booths, and is accumulated in the hazardous waste storage area. Amine 4 can be a hazardous waste if it is off-specification and it is generated and accumulated in the SW corner at the Amine 4 tank.

Note 2: Smoke detectors are located throughout the office and main warehouse on the ceiling, in a grid about every 25 feet. Smoke detectors are connected to an automatic sprinkler system.

Taylor's "Home" Example



Street Map of Surrounding Area & Water Supply

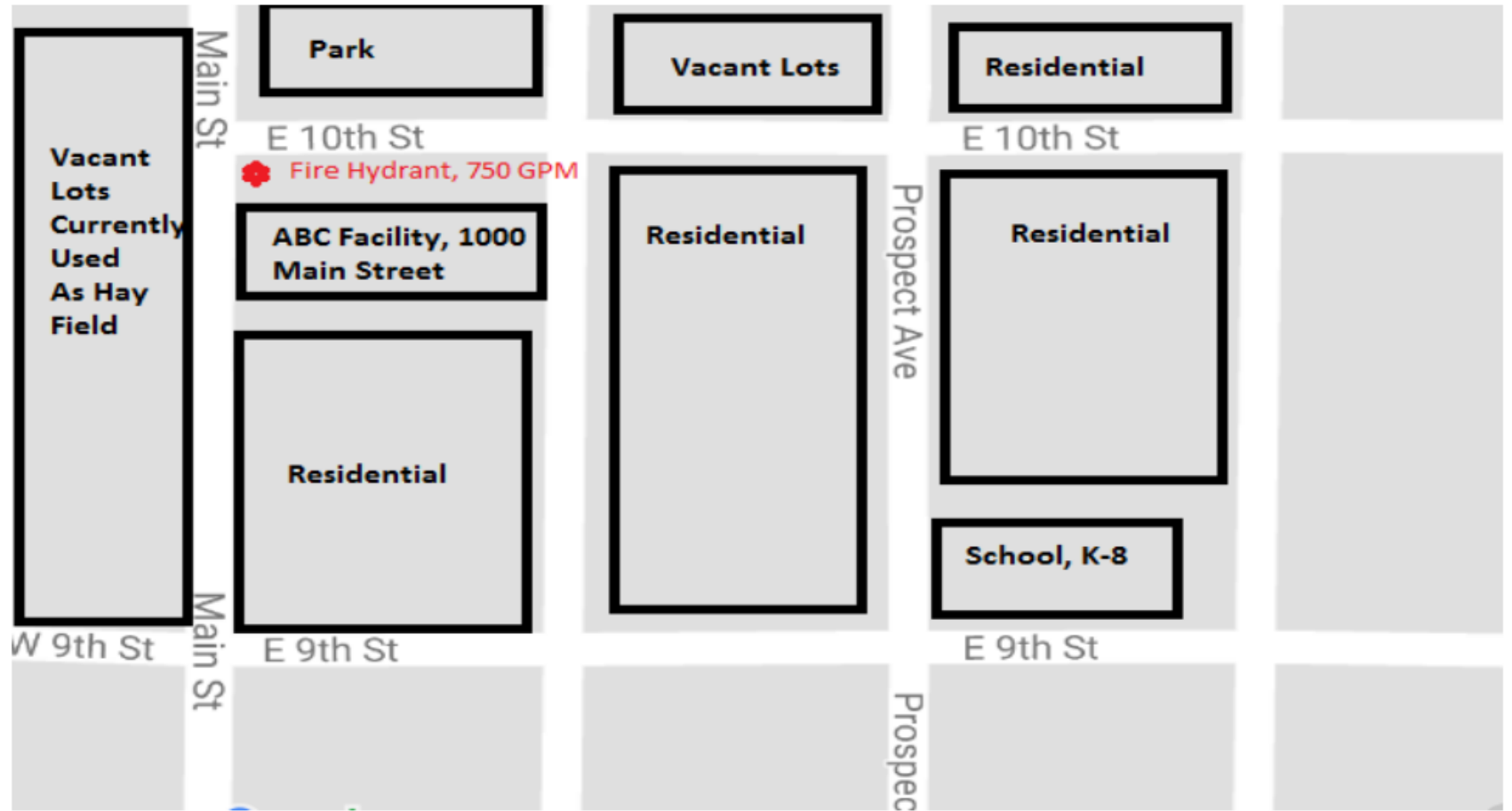
40 CFR 262.262(b)(5) & (6)

- ▶ Need a street map showing the facility in relation to surrounding businesses, schools, and residential areas
 - Locations of water supply (fire hydrants and flow rates) also commonly shown
- ▶ FAQ #5 – radius (size) of the street maps will **depend on the size and complexity of the generator site** (the map should help first responders understand the facility’s local context)
 - Urban vs. rural considerations
 - Consider “expected mobility of any environmental releases and anticipated minimum evacuation distances”
 - ◆ DOT/PHMSA ERG

EPA Region 7 Example

Street Map

- ▶ Can we improve?
 - North arrow
 - Aerial Imagery
 - Location of Fire Dept.
 - Name & Phone of Businesses



Random Tips & Tricks

- ▶ Have an Intern prepare the site maps
- ▶ FAQ 10B – opening a new SAA does not necessarily require an update to the QRG (not considered a “material increase” in the risk posed by hazardous waste)
 - New hazards from new hazardous waste streams would trigger an update
- ▶ Watch out for changes to emergency response coordinators
- ▶ Need emergency response equipment **and their capabilities** in Contingency Plan



Source: Contingency Plans and the Quick Reference Guide, John Dotterweich (NJDEP)

Concluding Thoughts

- ▶ Quick Reference Guides are coming to KS, NE, and MO (IA already)
- ▶ Coordinate with your local emergency responders for an effective guide (and RCRA Contingency Plan)

Helpful Links

- ▶ Final Rule, History, Links to Resources, etc.
<https://www.epa.gov/hwgenerators/final-rule-hazardous-waste-generator-improvements>
- ▶ State Adoption of Generator Improvements Rule
<https://www.epa.gov/hwgenerators/where-hazardous-waste-generator-improvements-rule-effect>
- ▶ Generator Improvements Rule – EPA Presentation
<https://www.epa.gov/hwgenerators/presentation-slides-workshop-hazardous-waste-generator-improvements-rule>
- ▶ FAQs on Rule Implementation
<https://www.epa.gov/hwgenerators/frequent-questions-about-implementing-hazardous-waste-generator-improvements-final>
- ▶ April 2022 Memo on Quick Reference Guide FAQs (RO 14943)
<https://rcrapublic.epa.gov/rcraonline/details.xhtml?rcra=14943>

Questions & Discussion



Taylor Wilson, P.E.

Managing Consultant – BCS Manager

Trinity Consultants – Kansas City

23600 College Blvd, Suite 203

Olathe, KS 66061

twilson@trinityconsultants.com

(913) 731-1968