

TYPICAL HAZARDOUS MATERIALS INSPECTION VIOLATIONS

The following is a list of typical violations often found by inspectors and a generic solution. You can use this list to improve the safety of your facility, to prepare for an upcoming inspection, or to develop your own self-inspection program. Note that specific code requirements may vary somewhat from jurisdiction to jurisdiction, so if you have questions or would like to know the specific code sections, please contact your local agency. (The reference number is used to make it easier to identify specific items; it does not refer to a code or ordinance.)

I. TYPICAL PERMIT VIOLATIONS

No.	General Type	Description
1	Storage Permit	<ul style="list-style-type: none"> • Failure to obtain and keep current a Hazardous Materials Storage Permit. © Obtain a Hazardous Materials Storage Permit. A Hazardous Materials Business Plan or Registration form must be submitted as an application.
2	Installation/Repair Permit	<ul style="list-style-type: none"> • Failure to obtain a permit or approval for installation of or repair to a storage system or facility. © Submit plans and obtain a permit. © Discontinue use of storage system or facility until permits are obtained.
3	Closure Notice	<ul style="list-style-type: none"> • Failure to submit a closure notice for closure of a storage system or part of a storage facility © Submit a one page Closure Notice describing the closure and verifying that all hazardous materials have been properly disposed.
4	Closure Permit	<ul style="list-style-type: none"> • Failure to obtain approval for the closure of a storage facility. © The permit holder or applicant shall submit a plan to the Fire Department to terminate storage, dispensing, handling or use of hazardous materials at least 30 days prior to facility closure.
5	Upgrade	<ul style="list-style-type: none"> • Existing storage system is not in compliance with the hazardous materials storage. Ex: Secondary containment is not adequately sized. © Submit proposal to up-grade the storage system to comply hazardous materials storage requirements.

II. TYPICAL HMMP VIOLATIONS

No.	General Type	Description
50	Long-HMBP (HMMP)	<ul style="list-style-type: none"> • Failure to file a standard written Hazardous Materials Business Plan/Management Plan with the Fire Department.

		<ul style="list-style-type: none"> • HMBP is incomplete, out of date, or incorrect. © Prepare and submit a completed Hazardous Materials Business Plan/Management Plan to the Fire Department within 30 days.
51	Registration Form (Minimal hazmat Quantities)	<ul style="list-style-type: none"> • Failure to file a Hazardous Material/Waste Registration Form. © Prepare and submit a completed Hazardous Material/Waste Registration Form to the Fire Department within 30 days.

III. TYPICAL HMIS VIOLATIONS

No.	General Type	Description
100	HMIS	<ul style="list-style-type: none"> • Failure to file a Hazardous Materials Inventory Statement with the Fire Department, or, • Failure to file an updated Hazardous Materials Inventory Statement within thirty days of the storage of new hazardous materials. • HMIS is incomplete or out of date. • Hazardous materials not located as indicated in HMIS or on site map. © Prepare and submit a completed/updated Hazardous Materials Inventory Statement to the Fire Department within 30 days.

IV. TYPICAL SECONDARY CONTAINMENT VIOLATIONS

No.	General Type	Description
150	Repair	<ul style="list-style-type: none"> • Deterioration of secondary containment structure/coating observed. © Repair deterioration of the secondary containment structure.
151	Spill/Drainage Control	<ul style="list-style-type: none"> • Failure to provide adequate spill or drainage control for solid or liquid hazardous materials. © Rooms, buildings or areas used for the storage of solid and liquid hazardous materials shall be provided with a means to control spillage and to contain or drain off spillage and fire-protection water discharged in the storage area. © Rooms or areas where hazardous material liquids are dispensed, stored, or used, shall be provided with a means to control spills.
152	Secondary Containment	<ul style="list-style-type: none"> • Failure to provide secondary containment, or • Secondary containment not adequately sized. © Provide acceptable secondary containment for hazardous

		materials storage system.
153	Dry	<ul style="list-style-type: none"> • Failure to maintain containment area clean and dry. © Clean secondary containment. Review procedures to prevent future releases.
154	Spills	<ul style="list-style-type: none"> • Failure to clean up spills of hazardous materials. © All hazardous materials spills must be cleaned up immediately and recorded. Spills that escape secondary containment must be reported to Hazardous Materials Division. Spills that enter the storm sewer or pose a fire, explosion, or toxic gas release shall be reported to 911 immediately.

V. TYPICAL SEPARATION VIOLATIONS

No.	General Type	Description
200	Separation	<ul style="list-style-type: none"> • Failure to separate incompatible materials. © Separate incompatible materials by: <ol style="list-style-type: none"> 1. Segregating incompatible hazardous materials storage by a distance of not less than 20 feet, 2. Isolating incompatible hazardous materials storage by a noncombustible partition extending not less than 18 inches above and to the sides of the stored material, or 3. Storing in hazardous materials storage cabinets or gas cabinets. Materials which are incompatible shall not be stored within the same cabinet.
201	Oxidizer Storage/ Contamination	<ul style="list-style-type: none"> • Oxidizers shall not be stored on or against combustible surfaces. © Organic peroxides shall be stored in their original DOT shipping containers. © During storage, care shall be taken to prevent contamination.

VI. TYPICAL MONITORING VIOLATIONS

No.	General Type	Description
300	Monitoring	<ul style="list-style-type: none"> • Failure to provide monitoring for an existing storage system, storage facility, or secondary containment. © Provide a monitoring device for the hazardous materials storage system, or © Maintain a visual monitoring log, or © Begin performing inspections and documenting the results of the inspections.
301	Closure	<ul style="list-style-type: none"> • Failure to properly close a hazardous materials storage system

		© Provide a closure plan for the storage system.
302	Securing	<ul style="list-style-type: none"> • Failure to secure the storage system. © Secure hazardous materials storage area from public access.
303	Inspection Records	<ul style="list-style-type: none"> • Failure to maintain inspection records for three years. © Maintain all monitoring/inspections records for a minimum of three years.
30	Limit Controls	Liquid level, temperature and pressure limit controls shall be provided for hazardous materials storage, use and dispensing systems.

VII. TYPICAL STORAGE VIOLATIONS

No.	General Type	Description
401	704 Placarding	<ul style="list-style-type: none"> • Failure to provide 704 placarding or labeling in accordance with Uniform Marking Guidelines. © Provide 704 placarding and comply with Uniform Marking Guidelines.
402	Oil Spill	<ul style="list-style-type: none"> • Unauthorized discharge. © Petroleum products and other hazardous materials shall not be discharged to the ground. (oil spills are not permitted.)
403	Cabinets	<ul style="list-style-type: none"> • Flammable liquids not stored in cabinet © Provide approved flammable liquid cabinet for all class I, II, and III-A liquids over 10 gals.
404	Electrical Rooms	<ul style="list-style-type: none"> • Hazardous materials stored in boiler, mechanical, or electrical room(s). © No storage in boiler, mechanical, or electrical rooms.
405	Heating Unit	<ul style="list-style-type: none"> • Hazardous materials stored too near heating unit. © No storage within three feet of any heating unit.
406	Gas Cylinders Restraints	<ul style="list-style-type: none"> • Compressed gas cylinder(s) not secured to a wall or other fixed object. © All compressed gas cylinders must be secured with one or more noncombustible restraints to prevent falling.
407	Under Stairs	<ul style="list-style-type: none"> • Hazardous materials stored under stairs. © Storage under stairs shall not be permitted unless space is protected or enclosed by one hour wall.
408	Automatic Sprinkler Clearance	<ul style="list-style-type: none"> • Hazardous materials stored too close to automatic sprinkler heads. © Maintain an 18 inch clearance below automatic sprinklers, 24 inches below ceiling in non sprinkled buildings.
409	Riser Clearance	<ul style="list-style-type: none"> • Hazardous materials stored too near sprinkler riser. © Maintain 3 foot clearance from Sprinkler riser.

41	Fume Hood	<ul style="list-style-type: none"> • Failure to provide automatic fire-extinguishing system for Laboratory fume hoods and spray booths where flammable materials are used. <p>© Discontinue use of Laboratory fume hood/spray booth until an automatic fire-extinguishing system is installed.</p> <p>© Submit plans to install automatic fire-extinguishing system.</p>
411	Outside Storage	<ul style="list-style-type: none"> • Improper outside storage of hazardous materials. • Hazardous materials stored where spills could enter a storm drain. <p>© Outside storage shall be no higher than 20 ft. and 3 ft. from any wall or fence.</p> <p>© Exterior storage of hazardous materials shall not be within 20 feet of any building, property line, street, alley, public way or exit to a public way.</p> <p>© Storage areas shall be designed to prevent spills from discharging to a storm drain.</p>
412	Piping	<ul style="list-style-type: none"> • Piping installed without a permit. <p>© Submit plans to obtain permit.</p>
413	Piping Labels	<ul style="list-style-type: none"> • Piping not labelled. <p>© Label piping and tubing to identify contents every 20 feet and at changes in direction.</p>
414	Toxic & Highly Toxic Piping	<ul style="list-style-type: none"> • Piping does not meet code requirements. <p>© Submit plans for upgrade.</p>
415	Guard Posts	<ul style="list-style-type: none"> • Inadequate or missing Guard posts. <p>© Guard posts or other means shall be provided to protect exterior dispensing or use areas from vehicular damage.</p>
416	Noncombustible Floor	<ul style="list-style-type: none"> • Improper floor construction. <p>© Submit plans to upgrade floor.</p>
417	Liquid Tight Floors	<ul style="list-style-type: none"> • Floor not liquid-tight. <p>© Submit plans to line or upgrade floor.</p>
418	Cryogenic Storage	<ul style="list-style-type: none"> • Improper interior storage of cryogenic tank. <p>© Submit plans for approved storage location.</p>
419	Grounding/Bonding	<ul style="list-style-type: none"> • Improper or missing grounding/bonding for flammable liquids dispensing. <p>© Discontinue dispensing until adequate grounding/bonding is provided.</p>
420	MSDS	<ul style="list-style-type: none"> • Failure to provide material safety data sheet(MSDS). <p>© The material safety data sheet(MSDS) shall be readily available for all Hazardous Materials on site.</p>
421	Security	<ul style="list-style-type: none"> • Failure to secure the storage area or system from unauthorized access. <p>© The storage of hazardous materials shall be safeguarded with such protective facilities as public safety requires.</p>
422	Ignition	<ul style="list-style-type: none"> • Failure to restrict smoking Smoking in rooms where hazardous materials are stored or within 25 feet of outdoor

		<p>storage areas.</p> <p>© Smoking shall be prohibited in rooms where hazardous materials are stored or within 25 feet of outdoor storage areas.</p> <p>© Open-flame and other heat-producing equipment shall be located a safe distance from areas where temperature sensitive materials, flammable materials and compressed gases are dispensed, used or handled.</p>
423	Light Sensitive	<ul style="list-style-type: none"> • Failure to store light sensitive materials in containers designed to protect them for exposure to light. <p>© Materials which are sensitive to light shall be stored in containers designed to protect them from such exposure.</p>
424	Mechanical Ventilation	<ul style="list-style-type: none"> • Inadequate ventilation for indoor hazardous materials storage areas and storage buildings. <p>© Indoor hazardous materials storage areas and storage buildings shall be provided with mechanical exhaust ventilation.</p>
425	Emergency Alarm System	<ul style="list-style-type: none"> • Failure to provide an emergency alarm system for hazardous materials. <p>© Submit plans to install an emergency alarm system.</p>
426	Waterproof Room	<ul style="list-style-type: none"> • Improper storage of water-reactive solids or liquids. <p>© Submit plans to upgrade the room or storage area.</p>
427	Exhaust Scrubber	<ul style="list-style-type: none"> • Failure to maintain exhaust scrubber. <p>© Exhaust scrubbers or other systems for the processing of highly toxic liquid vapors or gases shall be properly maintained and serviced at least annually.</p>
428	Defective Containers	<ul style="list-style-type: none"> • Defective container, cylinder or tank. <p>© Defective containers, cylinders and tanks shall be removed from service, repaired or disposed of in an approved manner.</p>
429	Static Accumulation	<ul style="list-style-type: none"> • Static electricity danger. <p>© When process or conditions exist where flammable mixture could be ignited by static electricity, means shall be provided to prevent the accumulation of a static charge.</p>
430	Dispensing	<ul style="list-style-type: none"> • Improper dispensing of hazardous materials from tank or drum. <p>© When liquids having a hazard ranking of 3 or 4 are dispensed from tanks or drums, dispensing shall be only by approved pumps taking suction from the top.</p> <ul style="list-style-type: none"> • When gases, liquids or solids having a hazard ranking of 3 or 4 are dispensed or used, mechanical exhaust ventilation shall be provided to capture fumes, mists or vapors at the point of generation. <p>© When liquids having a hazard ranking of 3 or 4 in accordance with U.F.C. Standard 79-3 are dispensed from tanks or drums, dispensing shall be only by approved pumps taking suction from the top.</p>
431	Labeling	<ul style="list-style-type: none"> • Containers inadequately labeled. <p>© Provide proper labels for all containers.</p>

432	Flammable Liquids	<ul style="list-style-type: none"> • Flammable liquids not stored in appropriate safety containers or cabinets. © Provide approved containers and cabinets for storing flammable liquids.

VIII. TYPICAL EMERGENCY RESPONSE VIOLATIONS

No.	General Type	Description
550	ER Equipment	<ul style="list-style-type: none"> • Failure to test and maintain emergency equipment, or • Absence of emergency equipment specified in Hazardous Materials Business Plan (HMBP) or Emergency Contingency Plan (ECP). © Perform necessary tests and maintenance of all emergency equipment. © Provide proper emergency equipment or modify HMBP or ECP.
551	ER Procedures	<ul style="list-style-type: none"> • Failure to post emergency procedures. © Post emergency procedures in an easily accessible location.
552	ER Plan	<ul style="list-style-type: none"> • Failure to prepare an emergency response plan and emergency procedures in the event of an emergency. © Prepare and maintain an emergency response plan on-site. Note, this is a required component of the Hazardous Materials Business Plan.
553	Training	<ul style="list-style-type: none"> • Failure to document annual training for all new employees, including refresher training, for all employees in safety procedures. © Provide and document emergency and safety training for all employees.
554	Reportable Discharge	<ul style="list-style-type: none"> • Failure to report an unauthorized hazardous materials discharge to the Fire Department. © Prepare and submit a report to the Fire Department explaining the cause of the discharge and how future discharges will be prevented.
555	Recordable Discharge	<ul style="list-style-type: none"> • Failure to document a recordable unauthorized hazardous materials discharge. © Begin documenting all unauthorized recordable discharges.
556	Corrective Action	<ul style="list-style-type: none"> • Failure to implement all actions necessary to remedy the effects of an unauthorized discharge. © Develop plan and implement proposed remediation actions to prevent future discharges.