

RISK MANAGEMENT PLAN REQUIREMENTS

New York City's Community Right-to-Know Law was recently strengthened by Local Law 92 established in 1993 which requires facilities where extremely hazardous substances or regulated toxic substances are present at or above federally determined levels (Threshold Planning Quantity), to prepare and submit a Risk Management Plan to the Department of Environmental Protection on or before March first of every year. In situations where a substance is listed on both the extremely hazardous substance list and the regulated toxic substance list, the lower of the threshold planning quantities (TPQ) shall apply.

The purpose of the plan is to protect the surrounding communities, workers and emergency response personnel from the dangers associated with hazardous substances, extremely hazardous substances and regulated toxic substances by mitigating the harm posed by release of such substances.

There are three major elements that must be included in your Risk Management Plan (RMP): a Risk Assessment Program, a Risk Reduction Program and an Emergency Response Program. Please refer to the actual legal document for the exact requirements and the definitions of technical terms when completing your RMP. You can use the order form included in the appendix to get a copy of the RMP regulation package.

If you filed a RMP which was approved by DEP, you only need to submit an update of the plan. The update of the plan shall include the following:

- (1) a description of any change in a facility's process(es) or changes in the surrounding community that require that a facility amend its RMP to remain in compliance with this rule.
- (2) amendments to a facility's RMP.
- (3) if a facility has not amended its RMP, it shall submit to DEP a notarized letter to show that no changes occurred at a facility or in the community surrounding a facility, which required that the facility amend its RMP to remain in compliance with this rule.

Any business that fails to file a required RMP may be subject to penalties of up to \$10,000. Businesses that submit RMPs which contain misrepresentations or false statements or certifications are also subject to penalties.

§41-08 Risk Management Plan Preparation

The risk management plan shall be prepared by one or more of the following persons provided that a professional engineer shall be responsible for any portion of a plan which involves the practice of the profession of engineering as defined in Education Law §7206.

- (1) an industrial hygienist certified by the American Board of Industrial Hygienists;
 - (2) a professional engineer licensed pursuant to §7206 of the New York State Education Law;
 - (3) a safety professional certified by the Board of Certified Safety Professionals;
 - (4) an individual possessing a baccalaureate or graduate degree, issued upon completion of a course of study from an accredited college or university, with a major in one of the following areas; chemistry, chemical engineering, environmental and/or occupational health science, industrial hygiene, safety engineering; and three years of full time experience in the identification, evaluation and control of environmental and safety hazards for protection against exposure to harmful substances and/or hazardous conditions.
- (f) Proof of the credentials of the individual which prepared the risk management plan shall be submitted when the risk management plan is filed with the Department.

§41-09 Risk Management Plan Review. (a) Within thirty days after receipt of a risk management plan, the Commissioner shall determine whether such plan is complete. If the Commissioner determines that the plan is incomplete, then he or she shall notify the responsible party that the plan is incomplete and identify the respects in which the plan is incomplete. Within fifteen days after such notification, the responsible party shall file a revised plan consistent with the Commissioner's notification. Within fifteen days after receipt of such revised plan, the Commissioner shall determine whether the revised plan is complete.

(b) Within ninety days after the Commissioner's determination that the responsible party has filed a complete plan, the Commissioner shall approve or make modifications to the plan and shall notify the responsible party filing such plan in writing of his or her approval or modifications.

(c) If the Commissioner makes modifications to the responsible party's risk management plan, the responsible party shall incorporate such modifications into its risk management plan, provided, however that the responsible party may, within forty-five days after receipt of such modifications, submit alternative modifications to the Commissioner or explain *why* the Commissioner's modifications are not necessary. The Commissioner shall within forty-five days review the alternative modifications or explanation and shall: (i) require the responsible party to incorporate, by a date certain not to exceed forty-five days, either the Commissioner's modifications, the alternative modifications or a combination of such modifications into its risk management plan, (ii) approve the unmodified plan or (iii) disapprove the plan

§41-10, Risk Assessment Program. (a) The risk management plan shall include a risk assessment program.

(b) The risk assessment program shall include the following components:

- (1) Identification of the maximum amount of an EHS and/or regulated toxic substance that would be released to an off site area during a worst case release. To determine a worst-case release scenario, a

responsible party shall examine each covered process and assume that all mitigation systems fail to minimize the consequences of the release.

(2) Evaluation of the possibility and effects of a significant accidental release. A responsible party shall examine each covered process and identify the circumstances that may cause a significant accidental release, (e.g., pump failure, failure of controls, or operator error), evaluate the likelihood that such a release could occur, and perform a qualitative evaluation of the effects that a significant accidental release will have on public health and the environment.

(3) Submission of a form, prescribed by the Department, that lists each EHS and/or regulated toxic substance at or above its TPQ present at a facility, the amount of each substance, and the physical storage conditions for each substance.

(4) A hazard analysis of all equipment and covered processes, which shall include but not be limited to:

- (i) the identification of all significant accidental release(s) that occurred over the last five years; and
- (ii) identification of all engineering and administrative controls applicable to the hazards of a covered process, including the application of detection methods that provide early warning of release.

§41-11 Risk Reduction Program.

(a) The risk management plan shall include a risk reduction program.

(b) The risk reduction program shall include the following components:

(1) Consideration of the use of alternative substances and equipment to eliminate or reduce the use of EHS's or regulated toxic substances in a covered process(es). A facility that eliminates or reduces the use of EHS's or regulated toxic substances below the TPQ for such substances by implementing alternatives will not be required to comply with §§41-08 through 41-12 of this chapter.

(i) A responsible party shall make the following considerations with respect to the use of alternative substances and equipment;

(A) an assessment of the uses for EHS's and regulated toxic substances in a covered process(es);
(B) an examination of alternative substances and equipment to reduce or eliminate the use of EHS's and/or regulated toxic substances in a covered process(es);

(C) a timetable for implementing alternatives that are technically and economically feasible.

(ii) mechanisms to facilitate the use of alternative substances and equipment shall include but not be limited to the following:

(A) modification or redesign of production processes and/or products;

(B) changes in materials usage, handling and storage practices,
including improved inventory control, preventive maintenance and spill and leak prevention;

(C) use of closed-loop reclamation, reuse or recycling processes; (D) use of other on-site recycling techniques.

(iii) To verify compliance with this section, a responsible party shall submit a summary report demonstrating the consideration of the use of alternative substances and equipment.

(iv) A facility that has filed an approved toxic chemical reduction plan with the New York State

Department of Environmental Conservation (NYSDEC) in accordance with 6 NYCRR Part 378 for EHS's or regulated toxic substances shall be exempt from complying with this section. To qualify for this exemption, a responsible party shall submit certification of NYSDEC approval of the facility's toxic chemical reduction plan.

(2) A pre-start-up safety review of the design of new or modified equipment and/or covered processes prior to operating such equipment and/or processes at a facility. A pre-start-up review is not required for the replacement of equipment or covered processes, if such replacements have the same design specifications as the existing equipment or covered processes. A pre-start-up review shall include the following:

- (i) an evaluation of the construction of equipment to determine that the equipment meets manufacturer's design specifications;
- (ii) an evaluation to determine if safety procedures, operation and maintenance procedures, and emergency procedures for equipment and covered processes, are in place and are adequate. A responsible party shall replace any procedures that are determined to be inadequate.
- (iii) a review to ensure that for all new equipment and covered processes all recommendations made as a result of the hazard analysis required by §41-10(b)(4) of this chapter have been implemented.

(3) Written standard operating procedures that provide clear instructions for the safe operation of all equipment and covered processes, which shall include the following:

- (i) the initial start-up procedures for each operating phase;
- (ii) the normal operating procedures for each operating phase;
- (iii) procedures for the normal shutdown of each operating phase;
- (iv) emergency shutdown procedures including the condition under which emergency shutdown will be required, and the assignment of shutdown responsibility to qualified operators;
- (v) procedures for start-up following a turnaround or after an emergency shutdown;
- (vi) procedures for emergency operation-during each operating phase;
- (vii) the consequences of deviating from the standard operating procedures;
- (viii) a list of steps required to restore normal operation following deviation from the standard operating procedures;
- (ix) the precautions necessary to prevent exposure to EHS and regulated toxic substances including engineering controls and the use of personal protective equipment;
- (x) the control measures that will be taken if an individual experiences physical contact or airborne exposure to an EHS or regulated toxic substance;
- (xi) a list of any special or unique hazards;
- (xii) the availability of standard operating procedures to employees who work with or maintain a process;
- (xiii) regular review of standard operating procedures to ensure that they conform with this section;

(xiv) development and implementation of safe work practices such as lock out/tag out devices, confined space entry, opening of equipment or piping, and controls over the entrance into a facility by maintenance workers, contractors, laboratory workers, and other support personnel;

(xv) description of type, location, and purpose of all safety relief devices, interlocks, alarms, detectors, controls, and activation points;

(xvi) development of a table of contents and record of change in standard operating procedures; and

(xvii) schedule of operator attendance at all times during the operation of a covered process, including off shifts, weekends, and turnarounds.

(4) A training program for operators of a covered process that ensures that personnel involved with EHS and/or regulated toxic substances understand the standard operating procedures developed in accordance with subdivision (b)(3) of this section. The training program shall include the following:

(i) instruction in emergency operation and emergency shutdown procedures;

(ii) informing employees of the safe work practices developed in accordance with subdivision (b)(3)(xiv) of this section; and

(iii) the owner must provide a formal written training program. The written program shall include descriptions, qualification procedures, reference materials, training methods; and trainer qualifications. The program shall include instructions for recordkeeping as well as procedures and a schedule for evaluating training effectiveness;

(iv) refresher training that must be conducted at least once every three years.

(5) A preventive maintenance program for equipment. A responsible party shall develop a list of equipment and controls the failure of which could result in a significant accidental release. The list shall include pressure vessels, storage tanks, piping systems including valves, relief and vent systems and devices, emergency shutdown systems, controls such as monitoring devices, sensors, alarms, and interlock devices and pumps.

(i) a maintenance schedule for equipment shall be developed based upon manufacturers' recommendations where applicable or the experience of facility operators.

(ii) a record of routine maintenance, inspection, testing, and equipment repairs shall be logged at the facility, and shall include the action taken, the date of the action, and who performed the action. Such records shall be kept on the premises for five years.

(6) Implementation of accident release investigation procedures for identifying the causes of releases including fires and explosions. Accident investigation procedures shall be initiated as promptly as possible, but not later than 48 hours following a significant accidental release. Such procedures shall include the following:

(i) a responsible party shall develop a list containing a history of significant accidental releases at a facility including a chronicle of significant accidental releases of *EHS's* and regulated toxic substances, the reporting history of significant accidental releases of *EHS's* and regulated toxic substances, and a record of the community response and interaction related to any significant accidental releases;

(ii) preparation of the accident investigation report which shall include:

(A) time and location of the accidental release;

(B) identity, amount, and duration of the release;

- (C) equipment, materials, procedures, and personnel involved;
- (D) determination as to whether the accidental release was caused by human error, a procedural inadequacy, or equipment failure;
- (E) detailed description of the accident, including the number of evacuees, injuries, and fatalities, and the impact on the community;
- (F) recommendations for preventing a recurrence, including retraining or reassignment of employees determined to be lacking in knowledge or operating procedures and safety practices; and
- (G) signatures and position titles of the investigators.

(7) Safety audits shall be conducted at least once every three years in order to certify that a facility is in compliance with these rules.

- (i) a report of the findings of the audit shall be developed and submitted to the Department as part of the risk management plan;
- (ii) as part of the report, a responsible party shall record any response taken as a result of the findings of the audit.
- (iii) the two most recent safety audit reports shall be retained at the facility.

(8) Management of change procedures that shall consist of written procedures which address the following considerations prior to any changes in a covered process.

- (i) the impact of the proposed change on the likelihood of a significant accidental release;
- (ii) the necessary modifications to standards operating procedures as a result of the proposed change;
- (iii) informing and training of employees that are involved in a process that will be affected by a proposed change prior to the start-up of the change; and
- (iv) updating of any part of the risk management plan required by this regulation if a change is implemented.

§41-12 Emergency Response Program. (a) The risk management plan shall include an emergency responses program.

(b) The emergency response program shall contain the following components:

(1) A general site plan which shall consist of a general site map layout. A general site map example and list of map symbols is set forth in Appendix A of this rule. If it becomes necessary to use any other symbol on such map, the preparer shall include a reference of the symbol. Colors shall not be used on the site map. For sites with more than one building, a general layout on one page and separate map pages for floor or area shall be used. An 8 1/2 by 11" size map on grid paper shall be used only. The following elements shall be included as part of the general site map layout:

- (i) outline of buildings and areas within the property including parking lots, internal roads, alleys, and streets adjacent to a facility;

- (ii) designation of all adjacent property uses such as commercial or residential, and a list of the exact street address of all public institutions (e.g. hospitals, health care facilities, day care centers, schools, hospices, places of assembly), within one-half mile of the facility;
 - (iii) a layout of all storage areas for EHS's and regulated toxic substances, and turn-off valves for water, electricity, and gas;
 - (iv) directional orientation (north arrow);
 - (v) water supplies to include the nearest fire hydrants, size of mains and cross connects, pressure/gravity tanks, suctions from rivers or bodies of water;
 - (vi) all sewers, transformer vaults, high voltage lines, air conditioning intakes, tunnels, bridges, railroads, and subways within 200 feet of the facility.
- (2) An individual site plan which shall consist of an individual facility/building map layout. A specific floor or area map is required for each building in accordance with the 8 1/2 x 11 map grid provided in Appendix B of this chapter. Colors shall not be used on the map grid. An individual facility/building map shall include the following elements:
- (i) outline of building including the height, area, and type of construction areas;
 - (ii) fire rated corridors within the building, if known;
 - (iii) location of each building with respect to the street;
 - (iv) location of all areas where EHS's and regulated toxics substances are stored or used.
- (3) A responsible party shall appoint an emergency response coordinator who shall be knowledgeable about EHS's and regulated toxic substances and shall be knowledgeable about all facility operations and the layout of a facility. The emergency response coordinator shall be on duty during normal working hours or when otherwise required by the Department. The emergency response coordinator shall have the following responsibilities:
- (i) coordinate emergency response efforts with the emergency response agencies on a 24-hour basis. The emergency response coordinator shall maintain a list at a facility of the names, titles, and office and home telephone numbers of contacts in each emergency response agency;
 - (ii) review the emergency response plan with each facility employee, upon its completion and approval each year the plan is submitted to the department, upon the initial assignment of emergency response duties, and when the emergency response plan is changed in accordance with subdivision (b)(5)(xiii) of this section;
 - (iii) maintain a log of all reviews required by this section. These logs shall be available for inspection for three years;
 - (iv) critique the facilities response in follow-up to an accidental release of an EHS or regulated toxic substance within thirty days of such a release. Such critique shall be written and copies retained at the facility for three years;

(v) identify a deputy emergency response coordinator who shall perform the duties of the emergency response coordinator when he or she is not present at the facility. The deputy emergency response coordinator must meet the qualification requirement set forth in subdivision (b)(3) of this section.

(4) An emergency response plan which shall include:

(i) a list of all employees' designated response duties in the emergency response plan, including a description of such duties.

(ii) a list of emergency response, personal protective, and mitigation equipment, and the location of such equipment at the facility. The list shall include portable monitoring equipment for detecting EHS's and regulated toxic substances. Such equipment shall be placed in a location that will reduce the likelihood of its damage, inoperability or inaccessibility, should an accidental release occur;

(iii) written procedures for the use of emergency response equipment and for the inspection, testing, and maintenance of such equipment by facility personnel. The maintenance of such equipment shall be recorded in a log book. Such log books shall be kept on the premises for a three-year period and be readily available for inspection;

(iv) training of employees given response duties in the emergency response plan in emergency response procedures. Such training shall address the use of personal protective equipment and emergency response equipment.

(v) conduct a minimum of one drill per year to evaluate the effectiveness of the emergency response plan, and prepare a written assessment of the emergency response plan following each drill and when the emergency response plan is actually implemented. Such written assessments shall be kept on the premises for a three-year period and shall be readily available for inspection.

(vi) procedures for reporting fires and other emergencies to emergency response agencies, including back-up reporting procedures;

(vii) emergency evacuation procedures including;

(A) routes and protective actions for employees that are not given response duties in the emergency response plan;

(B) on site notification procedures to identify evacuation areas.

(C) maps of primary and alternate evacuation routes.

(D) designation of primary and alternate assembly areas.

(E) a list of all personnel and procedures to account for all personnel after emergency evacuation has been completed.

(F) procedures for determining a safe distance from the facility and, if needed, a primary and alternate place of refuge.

(G) site security and control.

(viii) installation of an audible employee alarm system that complies with 29 CFR §1910.165.

(ix) procedures for the administration of first aid and other emergency medical treatment necessary to treat human exposure to each EHS and regulated toxic substance located at the facility.

- (x) procedures for medical surveillance of emergency responders at the facility if any exists.
- (xi) decontamination procedures for employees.
- (xii) a training program designated to train a sufficient number of persons to assist in a safe and orderly emergency evacuation of employees.
- (xiii) the emergency response plan shall be updated annually and within thirty days of the following occurrences:
 - (A) When a reported quantity of an EHS or regulated toxic substance is increased by 25% or more.
 - (B) A previously unreported EHS or regulated toxic substance is added to a facility's inventory.
 - (C) A significant change is made to the operation of a facility, which increases the potential for a release of an EHS or regulated toxic substance.
 - (D) When the results of a emergency response drill, conducted in compliance with subdivision (b)(5)(v) of this section, demonstrates that, in the interest of facility safety or public safety, a change in the emergency response plan is warranted..
- (xiv) the responsible party shall maintain a copy of the emergency response plan at the facility at all times, and shall include the names and regular job titles, and business and home telephone numbers of persons, including those of the emergency response coordinator and deputy emergency response coordinator or departments who can be contacted for further information or explanation of duties under the plan, and all facility Material Safety Data Sheets (MSDS) required pursuant to law. The emergency response plan and the names and 24-hour telephone numbers of the suppliers of the facilities EHS and regulated toxic substances shall be kept m a Fire Department key box at a location designated by the Fire Department.

§41-13 [Compliance with OSHA]. To comply with any section of this chapter, a facility may submit any documents prepared to comply with the United States Occupational Safety and Health Administration's (OSHA) regulations regarding the Process Safety Management of highly hazardous chemicals as contained in 29 CFR 1910.119 et seq. which have been approved by OSHA.

§41-14 Penalties. (a) Any person who knowingly or recklessly makes any false statement, representation, or certification on a facility inventory form, risk management plan or any other document filed with the Department pursuant to this rule shall, upon conviction, be subject to a fine of not more than one thousand dollars, or imprisonment of up to one year, or both.
(b) Any person who fails to file a facility inventory form or risk management plan or who fails to amend a risk management plan, which has been submitted to the Department within the time prescribed by the Commissioner, or who violated the requirements of §24-711 of the New York City Administrative Code shall be liable for a civil penalty as follows:

- (1) for a first violation, in an amount of not less than two hundred fifty; nor more than two thousand five hundred dollars;
- (2) for a second violation, in an amount of not less than one thousand seven hundred fifty nor more than five thousand dollars;

(3) for each subsequent violation, in an amount of not less than three thousand seven hundred fifty nor more than ten thousand dollars.

(4) for the purposes of this section, the second and any subsequent violation shall only be issued after notice of the first violation has been properly served and an opportunity to cure, not to exceed thirty days, has been provided.