

**ORDINANCE NO. 10-24 N.S.**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RICHMOND  
AMENDING SPECIFIED SECTIONS OF RICHMOND MUNICIPAL CODE CHAPTER  
6.43 RELATING TO INDUSTRIAL SAFETY AT TANK TERMINALS**

---

**WHEREAS**, on December 18, 2001, the City of Richmond (“City”) adopted an ordinance on Industrial Safety codified as Richmond Municipal Code (RMC) Chapter 6.43; and

**WHEREAS**, Section VII of Article XI of the California Constitution provides that a City may make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general laws; and

**WHEREAS**, this ordinance amends specified sections of RMC Chapter 6.43 to impose additional measures to improve industrial safety. This ordinance updates the name change of Contra Costa Health Services to Contra Costa Health, adds section 6.43.095 concerning tank terminal safety requirements, adds new and amends certain existing definitions to section 6.43.050 to apply to tank terminals, amends multiple sections to expand their application to tank terminals, and makes other clarifying, administrative or non-substantive changes; and

**WHEREAS**, on October 15, 2019, an 8.7-million-gallon storage tank containing a small quantity of ethanol exploded at a petroleum tank terminal in the Crockett area of unincorporated Contra Costa County. The tank was one of 23 tanks at the facility, with a collective capacity of more than 3 million barrels. The roof of the tank that exploded blew off and landed on a second tank, which also exploded. A fire erupted at both tanks, and a vegetation fire ignited after the explosions spread over the property, resulting in a large column of smoke that could be seen for miles. Offsite impacts included the closure of Interstate 80, the shelter-in-place of the nearby community, and concerns about air quality in the surrounding area; and

**WHEREAS**, this incident, like other high-profile incidents at tank terminals in other states, highlight the risks associated with storage and transfer operations involving ignitable materials, and the importance of emergency response planning. Similarly, these incidents highlight the need for effective safety programs to identify hazards, assess and manage risks, and establish safety protocols to prevent accidents and protect the environment and the surrounding communities. Tank terminals within Richmond are not currently subject to the California Accidental Release Prevention Program, the U.S. Environmental Protection Agency’s risk management regulations, or Chapter 6.43 of the RMC because tank terminals, and the types of activities that take place there, do not fit the relevant criteria. The lack of adequate safety regulation applicable to tank terminals poses a threat to public health and safety and compel the adoption of the amendments to Chapter 6.43 set forth in this ordinance; and

**WHEREAS**, the City and Contra Costa Health’s Hazardous Materials Program (County) have worked together to utilize of the County’s expertise and qualified staff in the area of industrial safety to develop the proposed amendments; and

**WHEREAS**, the City and County staff worked together in a public process to develop the proposed amendments to the City’s and County’s Industrial Safety Ordinances; and

**WHEREAS**, the City Council finds and determines the adoption of this Ordinance is exempt from the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines section 15061(b)(3) because it can be seen with certainty that there is no possibility that this activity could have a significant effect on the environment.

**NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF RICHMOND DOES  
ORDAIN AS FOLLOWS:**

**SECTION 1:** The above recitals are true and correct and are incorporated herein.

**SECTION 2:** Chapter 6.43 entitled “Industrial Safety” Ordinance of the Richmond Municipal Code is hereby amended as follows:

## **Chapter 6.43 - INDUSTRIAL SAFETY**

### **6.43.010 - Summary.**

This chapter imposes regulations which supplement the requirements of California Health and Safety Code, Article 2 (commencing with Section 25531) of Chapter 6.95 concerning hazardous materials management by enacting measures to prevent and reduce the probability of accidental releases of regulated substances that have the potential to cause significant harm to the public health and increase participation by industry and the public to improve accident prevention. These measures include submission of a safety plan to the City, stringent requirements for the contents of a safety plan and safety program, public review of the safety plan, authorization for the City to require changes in the safety plan or safety program, an expansion of the list of regulated substances beyond those covered by the Federal and State Accidental Release Prevention Program regulations and authorization for the City to expand audits and inspections to all units within the stationary source. Pursuant to this chapter, root cause analysis shall be required for all major chemical accidents or releases and a public outreach and information program shall be established.

### **6.43.020 - Background and findings.**

The City Council of the City of Richmond finds as follows:

- (a) Recent incidents at industrial chemical, petrochemical and oil industry facilities have prompted the consideration of reviews, inspections and audits that supplement existing Federal and State safety programs and the imposition of additional safety measures to protect public health and safety from accidental releases.
- (b) Section 112(r)(7) of the Clean Air Act (42 U.S.C.A. Section 7412(4)) required the United States Environmental Protection Agency ("EPA") to promulgate the rule known as the "Risk Management Program," which is intended to prevent accidental releases of regulated substances, as defined in the Federal program, and reduce the severity of those releases that do occur. All facilities subject to this Federal regulation must prepare a risk management plan (RMP), based on a risk management program established at the facility, that includes a hazard assessment of the facility, an accidental release prevention program and an emergency response program (40 CFR Section 68). The facility must submit the Federal RMP to the EPA by June 21, 1999 (40 CFR Section 68.150-68.185). The Federal RMP will be available to State and local government and the public.
- (c) The California Health and Safety Code, Article 2 (Section 25531 et seq.) of Chapter 6.95 was amended effective January 1, 1997, to implement the Federal EPA's risk management program rule with certain State-specific amendments. The State's risk management program is known as the California Accidental Release Prevention (CalARP) Program.
- (d) The City recognizes that regulatory requirements alone will not guarantee public health and safety, and that the public is a key stakeholder in chemical accident prevention, preparedness and response at the local level. Preventing accidental releases of regulated substances is the shared responsibility of industry, government and the public. The first steps toward accident prevention are identifying the hazards and assessing the risks. Once information about chemical hazards in the community is openly shared, industry, government and the community can work together towards reducing the risk to public health and safety.
- (e) The success of a safety program is dependent upon the cooperation of industrial chemical, petrochemical, and oil refining facilities within the City of Richmond. The public must be assured that measures necessary to prevent incidents are being implemented, including changes or actions required by the County of Contra Costa or the stationary source that are necessary to comply with this chapter.

### **6.43.030 - Purpose and goals.**

The purpose of this chapter is to impose regulations which improve industrial safety by the following:

- (a) Requiring the conduct of process hazard analyses for covered processes handling hazardous materials not covered by the Federal or State accidental release prevention programs;
- (b) Requiring the review of action items resulting from process hazard analyses and requiring completion of those action items selected by the stationary source for implementation, within a reasonable time frame;
- (c) Requiring the review of accidental release prevention efforts of stationary sources and providing for the conduct of investigations and analyses for the determination of the root cause for certain incidents;
- (d) Providing review, inspection, auditing and safety requirements that are more stringent than those required in existing laws and regulations;
- (e) Providing for public input into the safety plan and safety program and public review of any inspection and audit results;
- (f) Facilitating cooperation among industry, the City of Richmond, the County of Contra Costa, local fire departments, Cal/OSHA, EPA, other agencies that have oversight of stationary sources or tank terminals, and the public in the prevention and reduction of incidents at these facilities;
- (g) Expanding the application of certain provisions of the Federal and State accidental release prevention programs to processes not covered by the Federal or State accidental release prevention programs;
- (h) Verifying that an approved security and vulnerability study is performed, and that the recommendations are addressed within a reasonable time frame;
- (i) Requiring the development and implementation of a written human factors program; and
- (j) Preventing and reducing the number, frequency and severity of accidental releases in the City to the greatest extent feasible.

**6.43.040 - Authority.**

The ordinance codified in this chapter is adopted by the City pursuant to its police power for the purposes of protecting public health and safety by prevention of accidental releases of hazardous materials and to assure protection of the environment.

**6.43.050 - Definitions.**

For the purpose of this chapter, the definitions set forth in this section shall apply. Words used in this chapter not defined in this section shall have the meanings ascribed to them in the Clean Air Act Regulations (40 CFR 68.3) and in California Health and Safety Code Article 2 (Section 25531 et seq.) of Chapter 6.95 of Division 20, unless the context indicates otherwise.

- (a) "Contra Costa Health " means Contra Costa County Health Services Director and any Director-authorized deputies.
- (b) "Covered process" means any process at a stationary source.
- (c) "Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.
- (d) "Hazard Category A materials" are substances which meet the Hazard Category A material definition as set forth in- Section 6.43.190(c)(1).
- (e) "Hazard Category B materials" are substances which meet the Hazard Category B Material definition as set forth in- Section 6.43.190(c)(2).
- (f) "Industry codes, standards and guidelines" means the edition of the codes, standards and guidelines in effect at the time of original design or construction for the design, construction, alteration, maintenance or repair of process units, industrial equipment or other industrial facilities, structures or buildings published by, but not limited to, the American Petroleum Institute (API), the American Chemistry Council (ACC), the American Society of Mechanical Engineers (ASME) or the American National Standards Institute (ANSI), and meets recognized and generally accepted good engineering practices (RAGAGEP).

- (g) "Inherently safer systems" means "inherently safer design strategies" as discussed in the latest edition of the Center for Chemical Process Safety Publication "Inherently Safer Chemical Processes" and means feasible alternative equipment, processes, materials, lay-outs and procedures meant to eliminate, minimize or reduce the risk of a major chemical accident or release by modifying a process rather than adding external layers of protection. Examples include, but are not limited to, substitution of materials with lower vapor pressure, lower flammability or lower toxicity; isolation of hazardous processes; and use of processes which operate at lower temperatures and/or pressures.
- (h) "Major chemical accident or release" means an incident that meets the definition of a Level 3 or Level 2 Incident in the Community Warning System incident level classification system as defined in the Hazardous Materials Incident Notification Policy, as determined by Contra Costa Health; or results in a release of a regulated substance and meets one or more of the following criteria:
- (1) Results in one or more fatalities;
  - (2) Results in at least twenty-four hours of hospital treatment of each of at least three persons;
  - (3) Causes on- and/or off-site property damage (including clean-up and restoration activities) initially estimated at five hundred thousand dollars or more. (On-site estimates shall be performed by the stationary source. Off-site estimates shall be performed by appropriate agencies and compiled by Contra Costa Health); or
  - (4) Results in a vapor cloud of flammables and/or combustibles that is more than five thousand pounds.
- (i) "Regulated substance" means:
- (1) Any chemical substance which satisfies the provisions of California Health and Safety Code Section 25532(i), as amended from time to time; or
  - (2) A substance which satisfies the provisions of Hazard Categories A or B in Section 6.43.190. Mixtures containing less than one- percent of a regulated substance shall not be considered in the determination of the presence of a regulated material.
- (j) "Risk management program" means the documentation, development, implementation and integration of management systems by the facility to comply with the regulations set forth in- 40- CFR Part 68 and the California Health and Safety Code, Article 2, of Chapter 6.95 of Division 20.
- (k) "RMP" means the risk management plan required to be submitted pursuant to the requirements of the- 40- CFR 68.150—68.185 and the California Health and Safety Code, Article 2 (Section 25531 et seq.) of Chapter 6.95 of Division 20.
- (l) "Root cause" means prime reasons, such as failures of some management systems, that allow faulty design, inadequate training or improper changes, which lead to an unsafe act or condition, and result in an incident. If root causes were removed, the particular incident would not have occurred.
- (m) "Safety plan" means the safety plan required to be submitted to Contra Costa Health pursuant to the requirements of- Section 6.43.090, or Section 6.43.095, of this chapter.
- (n) "Safety program" means the documentation, development, implementation and integration of management systems by a stationary source or tank terminal to comply with the applicable safety requirements set forth in- Section 6.43.090 or Section 6.43.095.
- (o) "Stationary source" or "source" means a facility which includes at least one process as defined in- 40- CFR Section 68.10 that is subject to Federal risk management program level 3 requirements and whose primary North American Industry Classification System code (NAICS) is 324 (Petroleum and Coal Products Manufacturing) or 325 (Chemical Manufacturing), or the owner or operator thereof. As used in Section 6.43.100, stationary source will be interpreted to also mean a tank terminal.
- (p) "California accidental release prevention program" means the documentation, development, implementation, and integration of management systems by a facility to comply with the regulations set forth in California Code of Regulations, Title 19, Division 5, Chapter 2.

- (q) "Catastrophic release" means a major uncontrolled emission, fire, or explosion, involving one or more highly hazardous chemicals, that presents serious danger to employees in the workplace and/or the public. As used in this section, "highly hazardous chemical" has the meaning ascribed to it in 29- CFR 1910.119(b) as of May 21, 2003.
- (r) "Human factors" means a discipline concerned with designing machines, operations, and work environments so that they match human capabilities, limitations, and needs. "Human factors" can be further referred to as environmental, organizational, and job factors, and human and individual characteristics that influence behavior at work in a way that can affect health and safety.
- (s) "Human systems" means the systems, such as written and unwritten policies, procedures, and practices, in effect to minimize the existence/persistence of latent conditions at the stationary source. It also includes the broad area of safety culture of a stationary source to the extent that it influences the actions of individuals or groups of individuals.
- (t) "Layer of protection analysis" (LOPA) means a semi-quantitative analysis of the risk of process hazards and the adequacy of safeguards against those hazards.
- (u) "Process hazard analysis" (PHA) means a qualitative, semi-quantitative or quantitative analysis of a process, involving the identification of individual hazards of a process, determination of the mechanisms by which hazards could give rise to undesired events, and evaluation of the consequences of these events on health, property, and the environment.
- (v) "Process safety performance indicators" are measurements of a stationary source's activities and other events that are used to evaluate the performance of process safety systems.
- (w) "Petroleum refinery" means a stationary source whose primary North American Industry Classification System Code (NAICS) is 32411 (petroleum refining) and is an establishment primarily engaged in petroleum refining as defined in NAICS code 32411 and used for the following:
  - (1) Producing transportation fuels (such as gasoline, diesel fuels, and jet fuels), heating fuels (such as kerosene, fuel gas distillate, and fuel oils), or lubricants;
  - (2) Separating petroleum; or
  - (3) Separating, cracking, reacting, or reforming intermediate petroleum streams.
- (x) "Combustible liquid" means a liquid having a closed cup flash point at or above 100° F (38° C).
- (y) "Flammable liquid" means a liquid having a closed cup flash point below 100° F (38° C).
- (z) "Ignitable liquid" means a flammable liquid or combustible liquid.
- (aa) "Field erected tank" means an aboveground container constructed and/or erected on the site where it will be utilized.
- (bb) "Tank terminal" means at least one field erected tank with a minimum shell capacity of 50,000 gallons that contains a minimum of 10,000 pounds of flammable liquid, or the owner or operator thereof, on one or more contiguous properties.
- (cc) "Tank terminal activities" mean any activity at a tank terminal involving an ignitable liquid, including but not limited to using, storing, blending, producing, gathering, refining, transferring, distributing, consuming, handling or moving an ignitable liquid.
- (dd) "Tank terminal equipment" means equipment that is at a tank terminal and involved in tank terminal activities, and such equipment is under the control of the tank terminal owner or operator. This equipment includes, but is not limited to, tanks, pumps, piping, valves, and ancillary equipment.

#### **6.43.060 - Administration.**

Contra Costa Health is charged with the responsibility of administering and enforcing this chapter.

#### **6.43.070 - Applicability.**

- (a) This chapter shall apply to all stationary sources and tank terminals except as set forth in subsection (b).
- (b) To the extent that the following are stationary sources, they are exempt from the provisions of this chapter, except for Sections 6.43.090(c) and (e) and 6.43.100(f) and (g):
  - (1) Storage tanks containing a non-regulated substance, except for storage tanks that contain a material that has a flashpoint above 140 °F and below 200 ° F in accordance with the combustible liquid definition of 49 CFR Section 173.120(b);
  - (2) Drum storage of: (A) a non-regulated substance; (B) less than 10,000 pounds of a Hazard Category B material located such that the drums could reasonably be expected to be involved in a single release; and (C) a Hazard Category A material, located such that the drums could reasonably be expected to be involved in a single release, at less than the quantity specified as the threshold planning quantity on the Extremely Hazardous Substances list (Appendix A to- 40- CFR Chapter I, Subchapter J, Part 355, as amended from time to time) or 500 pounds, whichever is less;
  - (3) Activities in process plant laboratories or laboratories that are under the supervision of a technically qualified individual as defined in Section 720.3(ee) of- 40- CFR. This exemption does not apply to specialty chemical production; manufacture, processing or use of substances in pilot plant scale operations; and activities conducted outside the laboratory;
  - (4) Utilities, except for fuel gas and natural gas systems to the battery limits of a process unit; and
  - (5) Any waste tanks, containers or other devices subject to the Federal and State hazardous waste laws, including the Resource Conservation and Recovery Act (RCRA), -40- CFR Chapter I, Subchapter I, commencing with Part 260, the California Hazardous Waste Control Law, California Health and Safety Code, commencing with Section 25100 and the California Code of Regulations, Title 22, Division 4.5, Environmental Health Standards for the Management of Hazardous Waste.

#### **6.43.080 - Inspection.**

- (a) Contra Costa Health shall be allowed reasonable access to any part of a stationary source or tank terminal as necessary to carry out the purposes, requirements and duties of this chapter, including reasonable access to review supporting documentation retained by the stationary source or tank terminal for the purpose of determining compliance with this chapter.
- (b) Petroleum refineries shall fund the costs of a full-time qualified expert in refinery safety for each petroleum refinery (a full-time "accidental release prevention engineer"). The expert shall be selected and retained by Contra Costa Health at Contra Costa Health's discretion, to review, inspect, and audit the safety program at that refinery, and shall have access to the refinery's documentation and facilities as set forth in subsection (a). Petroleum refineries shall provide to Contra Costa Health the level of funding required to hire a full-time accidental release prevention engineer on a contract basis or as a Contra Costa Health employee at an amount comparable to engineer salaries in the refinery industry.

#### **6.43.090 - Stationary source safety requirements.**

The stationary source shall submit a safety plan to Contra Costa Health within one year of the effective date of the ordinance codified in this chapter or within three years of the date a facility becomes a stationary source. The safety plan shall comply with the provisions of this section and includes the safety elements listed in subsection (a) of this section. In addition, the stationary source shall comply with the safety requirements set forth in subsections (a) through (e), (i) and (j) of this section and shall include a description of the manner of compliance with these subsections in the safety plan. A new covered process at an existing stationary source shall comply with subsections (a) through (e), (i) and (j) of this section prior to initial startup.

- (a) Safety Program Elements. All covered processes shall be subject to the safety program elements listed below. The safety plan shall include a description of the manner in which these safety program elements listed below shall be applied to those covered processes. These safety program elements shall be implemented in conformance with

the California Accidental Release Prevention Program and the safety plan shall follow Chapters 5, 7, 8- and- 9- of the Contra Costa Health's CalARP Program Guidance Document. The safety program elements shall include the following:

(1) Process Safety Information:

- (A) The stationary source shall complete a compilation of written process safety information before conducting any process hazard analysis as required by this chapter. The compilation of written process safety information is to enable the stationary source and the employees involved in operating the covered process to identify and understand the hazards posed by the covered process. This process safety information shall include information pertaining to the hazards of the regulated substances used or produced by the process, information pertaining to the technology of the process, information pertaining to the equipment in the process, and information pertaining to the hazards of the regulated substances in the process.
  - (i) This information shall consist of at least the following: toxicity information; permissible exposure limits; physical data; reactivity data; corrosivity data; thermal and chemical stability data; and hazardous effects of inadvertent mixing of different materials that could foreseeably occur.
  - (ii) Safety data sheets meeting the requirements of Section 5194, Title 8 of California Code of Regulations may be used to comply with this requirement to the extent they contain the information required by this subsection.
  - (iii) Information pertaining to the technology of the process shall include at least the following: a block flow diagram or simplified process flow diagram; process chemistry; maximum intended inventory; safe upper and lower limits for such items as temperatures, pressures, flows or compositions; and an evaluation of the consequences of deviations. Where the original technical information no longer exists, such information may be developed in conjunction with the process hazard analysis in sufficient detail to support the analysis.
  - (iv) Information pertaining to the equipment in the process shall include: materials of construction; piping and instrument diagrams (P&IDs); electrical classification; relief system design and design basis; ventilation system design; design codes and standards employed; material and energy balances for processes built after the compliance date of this chapter; and safety systems (e.g., interlocks, detection or suppression systems).
- (B) The stationary source shall document that equipment complies with recognized and generally accepted good engineering practices.
- (C) For existing equipment designed and constructed in accordance with codes, standards, or practices that are no longer in general use, the stationary source shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

(2) Operating Procedures:

- (A) The stationary source shall develop and implement written operating procedures that provide clear instructions for safely conducting activities involved in each covered process consistent with the process safety information and shall address at least the following elements:
  - (i) Steps for each operating phase: initial startup; normal operations; temporary operations; emergency shutdown, including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner; emergency operations; normal shutdown; and, startup following a turnaround, or after an emergency shutdown.
  - (ii) Operating Limits: consequences of deviation; and steps required to correct or avoid deviation.

- (B) Safety and Health Considerations: properties of, and hazards presented by, the chemicals used in the process; precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment; control measures to be taken if physical contact or airborne exposure occurs; quality control for raw materials and control of hazardous chemical inventory levels and any special or unique hazards.
  - (C) Safety systems and their functions.
  - (D) Operating procedures shall be readily accessible to employees who work in or maintain a process.
  - (E) The operating procedures shall be reviewed as often as necessary to assure that they reflect current operating practice, including changes that result from changes in process chemicals, technology and equipment, and changes to stationary sources. The stationary source shall certify annually that these operating procedures are current and accurate.
  - (F) The stationary source shall develop and implement safe work practices to provide for the control of hazards during operations such as lockout/tagout; confined space entry; opening process equipment or piping; and control over entrance into a stationary source by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.
- (3) Employee Participation:
- (A) The stationary source shall develop a written plan of action regarding the implementation of the employee participation required by this chapter.
  - (B) The stationary source shall consult with employees and their representatives on the conduct and development of process hazards analyses and on the development of the other elements of the safety program in this chapter.
  - (C) The stationary source shall provide to employees and their representatives access to process hazard analyses and to all other information required to be developed under this chapter.
- (4) Training. For each employee in such covered process:
- (A) Initial Training. Each employee presently involved in operating a covered process, and each employee before being involved in operating a newly assigned covered process, shall be trained in an overview of the process and in the operating procedures as specified in subsection (a)(2)(A) of this section. The training shall include emphasis on the specific safety and health hazards, emergency operations including shutdown and safe work practices applicable to the employee's job tasks. In lieu of initial training for those employees already involved in operating a process, an owner or operator may certify in writing that the employee has the required knowledge, skills and abilities to safely carry out the duties and responsibilities as specified in the operating procedures.
  - (B) Refresher Training. Refresher training shall be provided at least every three years, and more often if necessary, to each employee involved in operating a covered process to assure that the employee understands and adheres to the current operating procedures of the covered process. The stationary source, in consultation with the employees involved in operating the process, shall determine the appropriate frequency of refresher training.
  - (C) Training Documentation. The stationary source shall ascertain that each employee involved in operating a process has received and understood the training required by this section. The stationary source shall prepare a record which contains the identity of the employee, the date of training, and the means used to verify that the employee understood the training.
- (5) Mechanical Integrity, Including the Use of Industry codes, standards, and guidelines.
- (A) Application. Paragraphs (B) through (F) of this subsection apply to the following process equipment: pressure vessels and storage tanks; piping

systems (including piping components such as valves); relief and vent systems and devices; emergency shutdown systems; controls (including monitoring devices and sensors, alarms and interlocks) and pumps.

- (B) Written Procedures. The stationary source shall establish and implement written procedures to maintain the on-going integrity of process equipment.
  - (C) Training for Process Maintenance Activities. The stationary source shall train each employee involved in maintaining the on-going integrity of process equipment in an overview of that process and its hazards and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.
  - (D) Inspection and Testing.
    - (i) Inspections and tests shall be performed on process equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of process equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. The stationary source shall document each inspection and test that has been performed on process equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.
  - (E) Equipment Deficiencies. The stationary source shall correct deficiencies in equipment that are outside acceptable limits (defined by the process safety information in subsection (a)(1) of this section) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.
  - (F) Quality Assurance. In the construction of new plants and equipment, the stationary source shall assure that equipment as it is fabricated is suitable for the process application for which they will be used. Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. The stationary source shall assure that maintenance materials, spare parts and equipment are suitable for the process application for which they will be used.
- (6) Management of Change:
- (A) The stationary source shall establish and implement written procedures to manage changes (except for "replacements in kind") to process chemicals, technology, equipment and procedures; and changes to stationary sources that affect a covered process.
  - (B) The procedures shall assure that the following considerations are addressed prior to any change: the technical basis for the proposed change; impact of change on safety and health; modifications to operating procedures; necessary time period for the change; and authorization requirements for the proposed change. The procedures shall also require identification and analysis of inherently safer systems as required by subsection (i) of this section.
  - (C) Employees involved in operating a process and maintenance and contract employees whose job tasks will be affected by a change in the process shall be informed of, and trained in, the change prior to start-up of the process or affected part of the process.
  - (D) If a change covered by this section results in a change in the process safety information required by subsection (a)(1) of this section, such information shall be updated accordingly.
  - (E) If a change covered by this section results in a change in the operating procedures or practices required by subsection (a)(2) of this section, such procedures or practices shall be updated accordingly.

- (7) Pre-startup Reviews:
- (A) The stationary source shall perform a pre-startup safety review for new stationary sources and for modified stationary sources when the modification is significant enough to require a change in the process safety information.
  - (B) The pre-startup safety review shall confirm that prior to the introduction of regulated substances to a covered process: construction and equipment is in accordance with design specifications; safety, operating, maintenance and emergency procedures are in place and are adequate; for new covered processes, a process hazard analysis has been performed and recommendations have been resolved or implemented before startup; and modified covered processes meet the requirements contained in management of change, subsection (a)(6) of this section; and training of each employee involved in operating a process has been completed.
- (8) Compliance Audits:
- (A) The stationary source shall certify that they have evaluated compliance with the provisions of this section at least every three years to verify that the procedures and practices developed under this chapter are adequate and are being followed.
  - (B) The compliance audit shall be conducted by at least one person knowledgeable in the process.
  - (C) A report of the findings of the audit shall be developed.
  - (D) The stationary source shall promptly determine and document an appropriate response to each of the findings of the compliance audit, and document that deficiencies have been corrected.
  - (E) The stationary source shall retain the two most recent compliance audit reports.
- (9) Incident Investigation:
- (A) The stationary source shall investigate each incident which resulted in or could reasonably have resulted in a catastrophic release of a regulated substance.
  - (B) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.
  - (C) An incident investigation team shall be established and consist of at least one person knowledgeable in the covered process involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.
  - (D) A report shall be prepared at the conclusion of the investigation which includes at a minimum: date of incident; date investigation began; a description of the incident; the factors that contributed to the incident; and recommendations resulting from the investigation. The written summary shall indicate whether the cause of the incident and/or recommendations resulting from the investigation are specific only to the process or equipment involved in the incident, or are applicable to other processes or equipment at the stationary source. The incident investigation report shall be made available to Contra Costa Health upon request.
  - (E) The stationary source shall establish a system to promptly address and resolve the incident report findings and recommendations. As part of this system, inherently safer systems shall be identified and analyzed as required by subsection (i) of this section. Resolutions and corrective actions shall be documented.
  - (F) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings, including contract employees where applicable.
  - (G) Incident investigation reports shall be retained for five years.

- (10) Hot Work:
- (A) The stationary source shall issue a hot work permit for hot work operations conducted on or near a covered process.
  - (B) The permit shall document that the fire prevention and protection requirements in Section 5189 of Title 8 of California Code of Regulations have been implemented prior to beginning the hot work operations; it shall indicate the date(s) authorized for hot work; and identify the object on which hot work is to be performed. The permit shall be kept on file until completion of the hot work operations.
- (11) Contractors:
- (A) Application. This section applies to contractors performing maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a covered process. It does not apply to contractors providing incidental services which do not influence process safety, such as janitorial work, food and drink services, laundry, delivery or other supply services.
  - (B) Stationary Source Responsibilities:
    - (i) The stationary source, when selecting a contractor, shall obtain and evaluate information regarding the contract owner or operator's safety performance and programs.
    - (ii) The stationary source shall inform contract owner or operator of the known potential fire, explosion, or toxic release hazards related to the contractor's work and the process.
    - (iii) The stationary source shall explain to the contract owner or operator the applicable provisions of the emergency response program subsection (a)(12) of this section.
    - (iv) The stationary source shall develop and implement safe work practices consistent with subsection (a)(2) of this section, to control the entrance, presence, and exit of the contract owner or operator and contract employees in covered process areas.
    - (v) The stationary source shall periodically evaluate the performance of the contract owner or operator in fulfilling their obligations as specified in subsection (a)(11)(C) of this section.
  - (C) Contract owner or operator responsibilities:
    - (i) The contract owner or operator shall assure that each contract employee is trained in the work practices necessary to safely perform his/her job.
    - (ii) The contract owner or operator shall assure that each contract employee is instructed in the known potential fire, explosion or toxic release hazards related to his/her job and the process, and the applicable provisions of the emergency action plan.
    - (iii) The contract owner or operator shall document that each contract employee has received and understood the training required by this section. The contract owner or operator shall prepare a record which contains the identity of the contract employee, the date of training, and the means used to verify that the employee understood the training.
    - (iv) The contract owner or operator shall assure that each contract employee follows the safety rules of the stationary source including the safe work practices required by subsection (a)(2) of this section.
    - (v) The contract owner or operator shall advise the stationary source of any unique hazards presented by the contract owner or operator's work, or of any hazards found by the contract owner or operator's work.
- (12) Emergency Response Program:

- (A) The stationary source shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:
    - (i) An emergency response plan, which shall be maintained at the stationary source and contain at least the following elements: procedures for informing the public and local emergency response agencies about accidental releases, emergency planning, and emergency response; documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and procedures and measures for emergency response after an accidental release of a regulated substance;
    - (ii) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance, including documentation of inspection, testing, and maintenance;
    - (iii) Training for all employees in relevant procedures and the incident command system; and
    - (iv) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the stationary source and ensure that employees are informed of changes.
  - (B) A written plan that complies with other Federal contingency plan regulations or is consistent with the approach in the National Response Team's Integrated Contingency Plan Guidance ("One Plan") and that, among other matters, includes the elements provided in subsection (a)(12)(A) of this section, shall satisfy the requirements of this section if the stationary source also complies with subsection (a)(12)(C) of this section.
  - (C) The emergency response plan developed under this section shall be coordinated with the community emergency response plan developed under Section 11003 of Title 42 of the United States Code (U.S.C.). Upon request of the local emergency planning committee or emergency response officials, the stationary source shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.
  - (D) The stationary source whose employees will not respond to accidental releases of regulated substances need not comply with subsections (a)(12)(A) through (a)(12)(C) of this section provided that they meet the following:
    - (i) For stationary sources with any regulated toxic substance held in a process above the threshold quantity, the stationary source is included in the community emergency response plan developed under Section 11003 of Title 42 of the United States Code (U.S.C.); or
    - (ii) For stationary sources with only regulated flammable substances held in a process above the threshold quantity, the stationary source has coordinated response actions with the local fire department; and
    - (iii) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.
- (13) Safety Program Management:
- (A) The owner or operator of a stationary source subject to this chapter shall develop a management system to oversee the implementation of the safety program elements.
  - (B) The owner or operator shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the safety program elements.
  - (C) When responsibility for implementing individual requirements of this chapter is assigned to persons other than the person identified under subsection (a)(13)(b) of this section, the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

(D) Process Safety Performance Indicators:

- (i) No later than September 30, 2014, Contra Costa Health shall develop a list of stationary source activities and other events to be measured by each stationary source in order to evaluate the performance of process safety systems. This list is the "event list." Each stationary source shall measure these activities and other events and document the measurements. These documented measurements are "common process safety performance indicators." No later than September 30 of each year after 2014, each stationary source will report to Contra Costa Health the common process safety performance indicators recorded by the stationary source in the prior calendar year. Contra Costa Health will include these common process safety performance indicators in the annual performance review and evaluation report required by Section 6.43.160 of this chapter.
- (ii) Contra Costa Health shall review the event list at least once every three years to determine if it should be revised. If Contra Costa Health determines that a new activity or other event will be added to the event list, stationary sources shall report to Contra Costa Health the new common process safety performance indicator(s) by September 30 of the next year following the revision of the event list.
- (iii) No later than September 30, 2014, each stationary source shall develop a list of site-specific activities and other events that it will measure in order to evaluate the performance of its process safety systems. Each stationary source shall document these site-specific process safety performance indicators and make this documentation available to Contra Costa Health during an audit or inspection and upon request.

(b) Human Factors Program.

- (1) Stationary sources shall develop a written human factors program that follows the Contra Costa County Safety Program Guidance Document (which is adopted herein by this reference). The program shall be developed within one year following the issuance of the county guidance documents, the effective date of the ordinance codified in this section, or as otherwise allowed by this chapter, whichever is later. The human factors program shall address:
  - (A) The inclusion of human factors in the process hazards analysis process;
  - (B) The consideration of human systems as causal factors in the incident investigation process for major chemical accidents or releases or for an incident that could reasonably have resulted in a major chemical accident or release;
  - (C) The training of employees in the human factors program;
  - (D) Operating procedures;
  - (E) Maintenance safe work practice procedures and maintenance procedures for specialized equipment, piping, and instruments, no later than February 1, 2015, unless a compelling case can be made by the stationary source that compliance by that date is significantly impracticable, in which case the Richmond City Manager or designee may extend the deadline up to one year, subject to appeal to the Richmond City Council; and
  - (F) The requirement to conduct a management of change prior to staffing changes or changes in permanent staffing levels/reorganization in operations, maintenance, health and safety, or emergency response. This requirement shall also apply to stationary sources using contractors in permanent positions in operations and maintenance. Prior to conducting the management of change, the stationary source shall ensure that the job function descriptions are current and accurate for the positions under consideration. Staffing changes that last longer than 90 days are considered permanent. Temporary changes associated with strike preparations shall also be subject to this requirement. Employees and their representatives shall be consulted in the management of change.
- (2) Employees and their representatives shall participate in the development of the written human factors program.

- (3) The program shall include, but not be limited to, issues such as staffing, shiftwork and overtime.
  - (4) A description of the human factors program subsections (b)(1) through (b)(3) above shall be included in the safety plan prepared by the stationary source.
- (c) Root Cause Analysis and Incident Investigation.
- (1) Stationary sources shall conduct a root cause analysis for each major chemical accident or release which occurs after the effective date of the ordinance codified in this chapter. Stationary sources shall periodically update Contra Costa Health of facts related to the release or incident, and the status of a root cause analysis conducted pursuant to this section, at meetings scheduled by Contra Costa Health in cooperation with the stationary source. To the maximum extent feasible, Contra Costa Health and the stationary source shall coordinate these meetings with other agencies with jurisdiction over the stationary source. Within thirty days of completing a root cause analysis performed pursuant to this section, the stationary source shall submit to Contra Costa Health a final report containing that analysis, including recommendations to be implemented to mitigate against the release or incident reoccurring, if any, and a schedule for completion of resulting recommendations. The stationary source shall also comply with subsection (i)(1)(E) of this section, if applicable. Contra Costa Health may require the stationary source to submit written, periodic update reports at a frequency not to exceed every thirty days until the final report is submitted. The methodology of the root cause analysis shall be one of the methodologies recognized by the Center for Chemical Process Safety or shall be reviewed by Contra Costa Health to determine substantial equivalency.
  - (2) Contra Costa Health may elect to do its own independent root cause analysis or incident investigation for a major chemical accident or release. If Contra Costa Health elects to conduct a root cause analysis or incident investigation, the stationary source shall cooperate with Contra Costa Health by providing the following access and information in a manner consistent with the safety of Building Official and stationary source personnel and without placing undue burdens on the operation of the stationary source:
    - (A) Allow Contra Costa Health to investigate the accident site and directly related facilities such as control rooms, physical evidence and where practicable the external and internal inspection of equipment;
    - (B) Provide Contra Costa Health with pertinent documentation; and
    - (C) Allow Contra Costa Health to conduct independent interviews of stationary source employees, subject to all rights of the stationary source and employees to be represented by legal counsel and/or management and union representatives during such interviews. If in the course of Contra Costa Health's root cause analysis or incident investigation access is required to areas of the stationary source which in the judgment of the stationary source require personnel entering the area to use protective equipment and/or have specialized training, Contra Costa Health shall provide its personnel with such equipment and training. To the maximum extent feasible Contra Costa Health shall coordinate any root cause analysis or incident investigation it conducts with investigations conducted by other agencies with jurisdiction over the stationary source to minimize the adverse impacts on the stationary source and/or its employees.
  - (3) No part of the conclusions, findings or recommendations of the root cause analysis conducted by Contra Costa Health or stationary source, or incident investigation conducted by Contra Costa Health, relating to any major chemical accident or release or the investigation thereof shall be admitted as evidence or used in any action or suit for damages arising out of any matter mentioned in such report.
  - (4) If Contra Costa Health issues a root cause analysis report, the stationary source shall comply with subsection (i)(1)(E) of this section if applicable.
- (d) Process Hazard Analysis/Action Items.

- (1) Process hazard analyses will be conducted for each of the covered processes according to one of the following methods: What-if, Checklist, What-If/Checklist, Hazard and Operability Study (HAZOP), Failure Mode and Effects Analysis (FMEA), Fault Tree Analysis or an appropriate equivalent methodology approved by Contra Costa Health prior to conducting the process hazard analysis. The PHA shall be appropriate to the complexity of the covered process and shall identify, evaluate, and control the hazards involved in the covered process. The PHA shall address: the hazards of the process; the identification of any previous incident which had a likely potential for catastrophic consequences; engineering and administrative controls applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases (acceptable detection methods might include process monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors); consequences of failure of engineering and administrative controls; covered process and stationary source siting; human factors and a qualitative evaluation of a range of the possible safety and health effects of failure of controls. Process hazard analyses should also include consideration of external events for seismic analyses, which are only required when criteria listed in Section 6.43.09(d)(2) are satisfied. All process hazard analyses shall be performed by a team with expertise in engineering and process operations, and the team shall include at least one employee who has experience and knowledge specific to the process being evaluated. Also, one member of the team must be knowledgeable in the specific PHA methodology being used.
  - (2) The process hazard analyses shall be conducted within one year of the effective date of the ordinance codified in this chapter and no later than the submittal date of the safety plan. Previously completed process hazard analyses that comply with the California Code of Regulations, Title 8, Section 5189, and/or the California Code of Regulations, Title 19, Section 5100.2 are acceptable for the purposes of this chapter. Process hazard analyses shall be updated and revalidated at least once every 5 years after completion of the initial process hazard analysis. Updated and revalidated process hazard analyses completed to comply with the California Code of Regulations, Title 8, Section 5189, and/or the California Code of Regulations, Title 19, Section 5100 are acceptable for meeting the update and revalidation requirement. External events, including seismic events, shall be considered for processes containing a substance defined in the California Code of Regulations, Title 19, Chapter 2, Section 5130.6, if the distance to the nearest public receptor for a worst case release scenario specified by the California Code of Regulations, Title 19, Chapter 2, Section 5080.3 is within the distance to a toxic or flammable endpoint as defined in California Code of Regulations, Title 19, Chapter 2, Section 5080.2(a).
  - (3) For all covered processes, the stationary source shall document the decision made to implement or not implement all PHA recommended action items and the results of recommendations for additional study. The stationary source shall complete recommended actions from the initial PHA and from PHA revalidations, identified by the process hazard analysis and selected for implementation by the stationary source as follows: all actions not requiring a process shutdown shall be completed within one year after the completion of the PHA; all actions requiring a process shutdown shall be completed during the first regularly scheduled turnaround of the applicable process subsequent to one year after the completion of the PHA unless the stationary source demonstrates to the satisfaction of Contra Costa Health that such a schedule is infeasible. For recommended actions not selected for implementation, the stationary source shall include the justification for not implementing the recommended action. For all covered processes, the stationary source shall retain documentation of closure, and any associated justifications, of actions identified by the PHA. The stationary source shall communicate the actions to operating, maintenance, and other employees whose work assignments are in the process and who may be affected by the recommendations or actions.
- (e) Accident History.
- (1) The stationary source shall include an accident history in the safety plan of all major chemical accidents or releases from June 1, 1992, through the date of safety

plan submittal to Contra Costa Health. For each major chemical accident or release the stationary source shall report the following information, to the extent known:

Date, time and approximate duration of the release;

Chemicals released;

Estimated quantity released in pounds;

Type of release event and its source;

Weather conditions at the time of the release;

On-site impacts;

Known off-site impacts;

Initiating event and contributing factors;

Root cause(s);

Whether off-site responders were notified; and

Operational or process changes that resulted from the investigation of the release.

- (2) The stationary source shall annually submit a report of the accident history to Contra Costa Health. The first report shall be due two years after the effective date of the ordinance codified in this chapter, and subsequent reports shall be due by September 30 of each year.
- (f) Certification. The owner or operator shall submit in the safety plan a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.
- (g) Security and Vulnerability Assessment. Each stationary source shall perform and document a security and vulnerability assessment as defined in the Contra Costa County CalARP program guidance document, within one year of the effective date of the ordinance codified in this chapter, and at least once every five years after the initial assessment, or as prescribed by Federal regulation. The stationary source shall document its process for assuring that recommendations are addressed.
- (h) Safety Culture Assessment. The stationary source shall conduct a safety culture assessment. The assessment shall be based upon a method listed in the Contra Costa County ISO Safety Program guidance document or shall be reviewed by Contra Costa Health to determine substantial equivalency. The initial assessment shall be performed by one year following the revisions to the Industrial Safety Ordinance guidance document that addresses the safety culture assessment, and at least once every five years thereafter. The safety culture assessment will be reviewed during the audit and inspection of the stationary source. Contra Costa Health may perform its own safety culture assessment after a major chemical accident or release or the occurrence of any incident that could reasonably have led to a major chemical accident or release, or based on Contra Costa Health audit results of the stationary source.
- (i) Inherently Safer Systems Analysis.
  - (1) A stationary source shall conduct an inherently safer systems analysis (ISAA) for each covered process as follows:
    - (A) The stationary source shall conduct an ISAA on existing covered processes every five years.
    - (B) The stationary source shall conduct an ISSA in the development and analysis of recommended action items identified in a PHA.
    - (C) Effective September 30, 2014, whenever a major change is proposed at a facility that could reasonably result in a major chemical accident or release, the stationary source shall conduct an ISAA as part of a management of change review required by subsection (a)(6)(B) of this section.
    - (D) If an incident occurs on or after September 30, 2014, an investigation of the incident is conducted pursuant to subsection (a)(9)(A) of this section and the

incident investigation report recommends a major change that could reasonably result in a major chemical accident or release, the stationary source shall commence and complete an ISSA of the recommended major change as soon as administratively practicable after completion of the incident investigation report.

- (E) If an incident occurs on or after September 30, 2014, a root cause analysis of the incident is conducted as required by subsections (c)(1) or (c)(2) of this section, and the root cause analysis report or an associated incident investigation report recommends a major change that could reasonably result in a major chemical accident or release, the stationary source shall commence an ISSA of recommended major change as soon as administratively practicable after completion of the root cause analysis report.
  - (F) The stationary source shall conduct an ISSA during the design of new processes, process units and facilities. Immediately upon completion of the ISSA report referred to in subsection (i)(2) of this section, the stationary source shall advise Contra Costa Health of the availability of the ISSA report.
  - (2) The stationary source shall prepare a written report documenting each ISSA within thirty days of completion of the ISSA and make the report available to Contra Costa Health during an audit or inspection and upon request. The ISSA report must contain, at a minimum, the following information:
    - (A) Identification and a description of the inherently safer system(s) analyzed in the ISSA;
    - (B) A description of the methodology used to analyze the inherently safer system(s);
    - (C) The conclusions of the analysis;
    - (D) The rationale for the conclusions; and
    - (E) An action plan, including a timeline to implement the inherently safer system(s) recommended in the ISSA.
  - (3) The stationary source shall select and implement each inherently safer system identified in an ISSA report to the greatest extent feasible and as soon as administratively practicable. If a stationary source concludes that implementation of an inherently safer system is not feasible, the stationary source shall document the basis for this conclusion in meaningful detail. The documentation shall include sufficient evidence to demonstrate to Contra Costa Health's satisfaction that implementing the inherently safer system is not feasible and the reasons for this conclusion. A claim that implementation of an inherently safer system is not feasible shall not be based solely on evidence of reduced profits or increased costs.
- (j) Safeguard Protection Analysis.
- (1) Effective September 30, 2014, a stationary source shall conduct a Layer of Protection Analysis or an alternative type of analysis approved by Contra Costa Health that uses a quantitative, qualitative or equivalent semi-quantitative method to determine the effectiveness of existing safeguards and safeguards recommended in a PHA to reduce the probability and/or severity of a catastrophic release. The safeguard protection analysis may be a standalone analysis or incorporated within a PHA.
  - (2) The stationary source shall complete the safeguard protection analysis no later than June 30, 2019. A safeguard protection analysis that was completed by a stationary source within five years prior to June 30, 2019, in accordance with the standards set forth in subsection (j)(1) of this section, will be deemed to comply with this requirement. The stationary source shall update and revalidate the safeguard protection analysis at least once every five years.
  - (3) All safeguard protection analyses shall be performed by a team with expertise in engineering and process operations. The team shall include at least one employee who has experience and knowledge specific to the safeguards and one member who is knowledgeable about the specific safeguard protection analysis method used.

- (4) The stationary source shall prepare a written report that documents the safeguard protection analysis in accordance with the standard of practice applicable to the type of analysis conducted. The stationary source will complete the report within thirty days after the completion of the safeguard protection analysis and make the report available to Contra Costa Health during an audit or inspection and upon request.

#### **6.43.095 Tank terminal safety requirements.**

The tank terminal shall submit to Contra Costa Health a safety plan that includes the safety elements listed in subsection (a), within one and a half years after the effective date of the ordinance adding Section 6.43.095 to this chapter, within one and a half years after Contra Costa Health first issues a safety program guidance document for tank terminals, or within one and a half years after a tank terminal becomes subject to this section, whichever is later. In addition, the tank terminal shall comply with the safety requirements set forth in subsections (a) through (c) and shall include a description of the manner of compliance with the safety program elements in subsection (a) in the safety plan. Any new tank terminal equipment at an existing tank terminal shall comply with subsections (a) through (c) prior to introduction of an ignitable liquid into that equipment.

(a) Safety Program Elements. All tank terminal activities and tank terminal equipment shall be subject to the safety program elements listed below. The safety plan shall include a description of the manner in which these safety program elements listed shall be applied to the tank terminal. These safety program elements shall be implemented in conformance with Contra Costa Health's safety program guidance document for tank terminals.

##### (1) Safety Information.

(A) The tank terminal shall complete a compilation of written safety information before conducting any hazard review as required by this chapter. The compilation of written safety information enables the tank terminal and the employees involved in tank terminal activities to identify and understand the hazards posed by these activities. This safety information shall include information pertaining to the hazards of the tank terminal activities and information pertaining to the hazards of the ignitable liquids contained in tank terminal equipment.

(i) The safety information required under subsection (a)(1)(A) shall consist of at least the following: Toxicity information; permissible exposure limits; physical data; reactivity data; corrosivity data; thermal and chemical stability data; and hazardous effects of inadvertent mixing of different materials that could foreseeably occur. Safety data sheets meeting the requirements of Section 5194, Title 8 of California Code of Regulations may be used to comply with this requirement to the extent they contain the information required by this subsection.

(ii) Information pertaining to the tank terminal activities shall include at least the following: A block flow diagram or simplified process flow diagram; maximum intended inventory; safe upper and lower limits for such items as temperatures, pressures, flows, levels or compositions; and an evaluation of the consequences of deviations. Where the original technical information no longer exists, such information may be developed in conjunction with the hazard review in sufficient detail to support the analysis.

(iii) Information pertaining to the tank terminal equipment shall include materials of construction; P&ID's; electrical classification; relief system design and design basis; design codes and standards employed; and safety systems (e.g., interlocks, detection or suppression systems).

(B) The tank terminal shall document that tank terminal equipment complies with recognized and generally accepted good engineering practices.

(C) For existing tank terminal equipment designed and constructed in accordance with codes, standards, or practices that is no longer in general use, the tank terminal shall determine and document that the equipment is designed, maintained, inspected, tested, and operating in a safe manner.

(2) Operating Procedures.

(A) The tank terminal shall develop and implement written operating procedures that provide clear instructions for safely conducting tank terminal activities consistent with the safety information and shall address at least the following elements:

(i) Steps for each operating phase: Initial startup; normal operations; temporary operations; emergency shutdown, including the conditions under which emergency shutdown is required, and the assignment of shutdown responsibility to qualified operators to ensure that emergency shutdown is executed in a safe and timely manner; emergency operations; normal shutdown; and startup following a maintenance outage or after an emergency shutdown.

(ii) Operating limits: Consequences of deviation; and steps required to correct or avoid deviation.

(B) Safety and Health Considerations. Properties of, and hazards presented by, the ignitable liquids contained in tank terminal equipment; precautions necessary to prevent exposure, including engineering controls, administrative controls, and personal protective equipment; control measures to be taken if physical contact or airborne exposure occurs; quality control for raw materials and control of hazardous inventory levels; and, any special or unique hazard.

(C) Operating procedures shall be readily accessible to employees who operate or maintain tank terminal equipment.

(D) Operating procedures shall be reviewed and revised as often as necessary to assure that they reflect current operating practice, including changes that result from changes in ignitable liquids, tank terminal activities or tank terminal equipment, or changes to the tank terminal. The tank terminal shall certify annually that these operating procedures are current and accurate.

(E) The tank terminal shall develop and implement safe work practices to provide for the control of hazards during operations such as hot work; lockout/tagout; confined space entry; opening tank terminal equipment; and control over access to a tank terminal by maintenance, contractor, laboratory, or other support personnel. These safe work practices shall apply to employees and contractor employees.

(F) Training on Operating Procedures. The tank terminal shall provide initial and refresher training to each employee involved in implementing the written operating procedures for safely conducting tank terminal activities. Initial training shall be provided to each employee before being involved in newly assigned tank terminal activities. Refresher training shall be provided at least every three years to each employee involved in tank terminal activities to assure that the employee understands and adheres to the current operating procedures. All training shall be documented.

(3) Mechanical Integrity, Including the Use of Industry codes, standards, and guidelines.

(A) Application. Subsections (a)(3)(B) through (a)(3)(F) apply to the following tank terminal equipment: Pressure vessels and storage tanks; piping subsystems (including piping components such as valves); relief and vent systems and devices; emergency shutdown systems; controls (including monitoring devices and sensors, alarms, and interlocks) and pumps.

(B) Written Procedures. The tank terminal shall establish and implement written procedures to maintain the ongoing integrity of tank terminal equipment.

(C) Training for Tank Terminal Equipment Maintenance Activities. The tank terminal shall train each employee involved in maintaining the ongoing integrity of tank terminal equipment in hazards of the tank terminal equipment and of the ignitable liquid contained in the equipment, and in the procedures applicable to the employee's job tasks to assure that the employee can perform the job tasks in a safe manner.

(D) Inspection and Testing. Inspections and tests shall be performed on tank terminal equipment. Inspection and testing procedures shall follow recognized and generally accepted good engineering practices. The frequency of inspections and tests of tank terminal equipment shall be consistent with applicable manufacturers' recommendations and good engineering practices, and more frequently if determined to be necessary by prior operating experience. The tank terminal shall document each inspection and test that has been performed on tank terminal equipment. The documentation shall identify the date of the inspection or test, the name of the person who performed the inspection or test, the serial number or other identifier of the equipment on which the inspection or test was performed, a description of the inspection or test performed, and the results of the inspection or test.

(E) Equipment Deficiencies. The tank terminal shall correct deficiencies in equipment that are outside acceptable limits (defined by the safety information in subsection (a)(1)) before further use or in a safe and timely manner when necessary means are taken to assure safe operation.

(F) Quality Assurance. In the construction of new equipment, the tank terminal shall assure that equipment as it is fabricated is suitable for the tank terminal activities for which they will be used. Appropriate checks and inspections shall be performed to assure that equipment is installed properly and consistent with design specifications and the manufacturer's instructions. The tank terminal shall assure that maintenance materials, spare parts and equipment are suitable for the tank terminal activity in which they will be used.

(4) Management of Change, including compliance with applicable building and fire codes then in effect.

(A) The tank terminal shall establish and implement written procedures to manage changes (except for "replacements in kind") to ignitable liquids, tank terminal activities, tank terminal equipment, and procedures.

(B) The procedures shall assure that the following considerations are addressed prior to any change: The technical basis for the proposed change; impact of change on safety and health; modifications to operating procedures; necessary time period for the change; and authorization requirements for the proposed change.

(C) Employees involved in operating a tank terminal and maintenance and contract employees whose job tasks will be affected by a change shall be informed of, and trained in, the change prior to operating the tank terminal equipment.

(D) If a change covered by this section results in a change in the safety information required by subsection (a)(1), such information shall be updated accordingly.

(E) If a change covered by this section results in a change in the operating procedures or practices required by subsection (a)(2), or results in a change in written procedures to maintain the ongoing integrity of tank terminal equipment required by subsection (a)(3), such procedures or practices shall be updated accordingly.

(F) Prior to construction of new tank terminal equipment or a structure, or alteration to the construction or use of existing tank terminal equipment or an existing structure, the tank terminal owner or operator shall consult with the local agency having authority to enforce the California Building Standards Code regarding any required building permits that must be obtained prior to construction or alteration.

(G) If a change covered by this section will result in a change in the type of material stored in any field erected tank, the tank terminal owner or operator shall consult with the local agency having land use authority regarding any required land use permits or other approvals that must be obtained prior to the change.

(5) Pre-Startup Reviews.

(A) The tank terminal shall perform a pre-startup safety review for new tank terminal equipment and for modified tank terminal equipment when a modification is significant enough to require a change in the safety information.

(B) The pre-startup safety review shall confirm, separate and in addition to any management of change review, that prior to the introduction of ignitable liquids to tank terminal equipment: Construction and equipment is in accordance with design specifications; safety, operating, maintenance, and emergency procedures are in place and are adequate; modified tank terminal equipment meets the requirements contained in management of change, subsection (a)(4); and training of each employee involved in operating tank terminal equipment has been completed.

(6) Incident Investigation.

(A) The tank terminal shall investigate each incident that resulted in or could reasonably have resulted in a major chemical accident or release (MCAR), uncontrolled ignition of an ignitable liquid, or a threatened release (as defined in Health and Safety Code section 25501(t)) of one or more ignitable liquids.

(B) An incident investigation shall be initiated as promptly as possible, but not later than 48 hours following the incident.

(C) An incident investigation team shall be established and consist of at least one person knowledgeable in the tank terminal activities involved, including a contract employee if the incident involved work of the contractor, and other persons with appropriate knowledge and experience to thoroughly investigate and analyze the incident.

(D) A report shall be prepared at the conclusion of the investigation which includes at a minimum: Date of incident; date investigation began; a description of the incident; the factors that contributed to the incident; and recommendations resulting from the investigation. The written summary shall indicate whether the cause of the incident and/or recommendations resulting from the investigation are specific only to the tank terminal activities or tank terminal equipment involved in the incident or are applicable to other tank terminal activities or tank terminal equipment at the tank terminal. The incident investigation report shall be made available to Contra Costa Health upon request.

(E) The tank terminal shall establish a system to promptly address and resolve the incident report findings and recommendations. Resolutions and corrective actions shall be documented with completion date(s).

(F) The report shall be reviewed with all affected personnel whose job tasks are relevant to the incident findings, including contract employees where applicable.

(G) Incident investigation reports shall be retained for five years.

(7) Emergency Response.

(A) The tank terminal shall develop and implement an emergency response program for the purpose of protecting public health and the environment. Such program shall include the following elements:

(i) An emergency response plan, which shall be maintained at the tank terminal and contain at least the following elements: Procedures for informing the public and local emergency response agencies about accidental releases, emergency planning, and emergency response; documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and procedures and measures for emergency response after an accidental release of an ignitable liquid.

(ii) Procedures for the use of emergency response equipment and for its inspection, testing, and maintenance, including documentation of inspection, testing, and maintenance.

(iii) Training for all employees in relevant procedures and the incident command system;  
and

(iv) Procedures to review and update, as appropriate, the emergency response plan to reflect changes at the tank terminal and ensure that employees are informed of changes.

(B) A written plan that complies with other federal contingency plan regulations or is consistent with the approach in the national response team's integrated contingency plan guidance ("One Plan") and that, among other matters, includes the elements provided in subsection (a)(7)(A), shall satisfy the requirements of this section if the tank terminal also complies with subsection (a)(7)(C).

(C) The emergency response plan developed under this section shall be coordinated with the community emergency response plan developed under 42 U.S.C. Section 11003. Upon request of the local emergency planning committee or emergency response officials, the tank terminal shall promptly provide to the local emergency response officials information necessary for developing and implementing the community emergency response plan.

(D) The tank terminal whose employees will not respond to an accidental release of an ignitable liquid need not comply with subsections (a)(7)(A) through (a)(7)(C) provided that they meet the following:

(i) The tank terminal has coordinated response actions with the local fire department at least once every-three years; and

(ii) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response.

(8) Safety Program Management.

(A) The tank terminal shall develop a management system to oversee the implementation of the safety program elements.

(B) The tank terminal shall assign a qualified person or position that has the overall responsibility for the development, implementation, and integration of the safety program elements.

(C) When responsibility for implementing individual safety program elements is assigned to persons other than the person identified under subsection (a)(8)(B), the names or positions of these people shall be documented and the lines of authority defined through an organization chart or similar document.

(D) Safety Performance Indicators.

(i) No later than September 30, 2024, Contra Costa Health shall develop a list of tank terminal activities and other events to be measured by each tank terminal in order to evaluate the performance of safety systems. This list is the "event list." Each tank terminal shall measure these activities and other events and document the measurements. These documented measurements are "common safety performance indicators." No later than September 30 of each year after the effective date of the ordinance adding Section 6.43.095 to this chapter, each tank terminal will report to Contra Costa Health the common safety performance indicators recorded by the tank terminal in the prior calendar year. Contra Costa Health will include these common safety performance indicators in the annual performance review and evaluation report required by Section 6.43.160.

(ii) Contra Costa Health shall review the event list at least once every three years to determine if the event list should be revised. If Contra Costa Health determines that a new activity or other event will need to be added to the event list, each tank terminal shall report to Contra Costa Health the new common safety performance indicator(s) by September 30 of the next year following the revision of the event list.

(iii) No later than September 30, 2024, each tank terminal shall develop a list of site-specific activities and other events that it will measure in order to evaluate the performance of its safety systems. Each shall document these site-specific safety performance indicators and make this documentation available to Contra Costa Health during an audit or inspection and upon request.

(b) Hazard Review/Action Items.

(1) A hazard review (HR) will be conducted on each tank terminal activity according to one of the following methods: What-if, checklist, what-if/checklist, HAZOP, failure mode and effects analysis (FMEA), fault tree analysis, or an appropriate equivalent methodology approved by Contra Costa Health prior to conducting the hazard review. The HA shall be appropriate to the complexity of the tank terminal activity and shall identify, evaluate, and control the hazards involved in the tank terminal activity. The HR shall address: The hazards of the tank terminal activity; the identification of any previous incident which had a likely potential for catastrophic consequences; engineering and administrative control applicable to the hazards and their interrelationships such as appropriate application of detection methodologies to provide early warning of releases (acceptable detection methods might include monitoring and control instrumentation with alarms, and detection hardware such as hydrocarbon sensors); consequences of failure of engineering and administrative controls; tank terminal equipment and tank terminal siting; human factors; and a qualitative evaluation of a range of the possible safety and health effects of failure of controls. Hazard reviews should also include consideration of external events. All hazard reviews shall be performed by a team with expertise in engineering and tank terminal activities, and the team shall include at least one operating employee who has experience and knowledge specific to the activity being evaluated. Also, one member of the team must be knowledgeable in the specific HR methodology being used.

(2) The hazard review shall be conducted within one year of the effective date of the ordinance adding 6.43.095 to this chapter and no later than the submittal date of the safety plan. Hazard reviews shall be updated and revalidated at least once every five years after completion of the initial hazard review. As part of the HR, a tank terminal shall complete a seismic assessment in accordance with good engineering practices as set forth in American Petroleum Institute Standard 650, 13th edition, Appendix A, and a security and vulnerability assessment (SVA) within one year after the effective date of the ordinance adding Section 6.43.095 to this chapter or within one year after Contra Costa Health first issues a safety program guidance document for tank terminals, whichever is later, and at least once every five years after the initial assessment. A tank terminal that demonstrates its compliance with Department of Homeland Security or U.S. Coast Guard SVA requirements to the Contra Costa Health is exempt from the requirement to complete an SVA under this subsection. The tank terminal shall document its process for assuring that recommended action items in the HR are addressed.

(3) For all tank terminal activities, the tank terminal shall document the decision made to implement or not implement all HR recommended action items and the results of recommendations for additional study. The tank terminal shall complete recommended actions from the initial HR and from HR revalidations, identified by the hazard review and selected for implementation by the tank terminal within one year after the completion of the HR unless the tank terminal demonstrates to the satisfaction of Contra Costa Health that such a schedule is infeasible and obtains a written extension from Contra Costa Health, in which case the tank terminal shall complete the recommended actions in accordance with the extension. For recommended actions not selected for implementation, the tank terminal shall include the justification for not implementing the recommended action. For all tank terminal activities, the tank terminal shall retain documentation of closure, and any associated justifications, of actions identified by the HR. The tank terminal shall communicate the actions to operating, maintenance, and other employees whose work assignments relate to tank terminal activities and who may be affected by the recommendations or actions.

(c) Root Cause Analysis and Incident Investigation.

(1) Tank terminals shall conduct a root cause analysis for each major chemical accident or release which occurs after the effective date of the ordinance adding Section 6.43.095 to this chapter. Tank terminals shall periodically update Contra Costa Health on facts related to the release or incident, and the status of a root cause analysis conducted pursuant to this section, at

meetings scheduled by Contra Costa Health in cooperation with the tank terminal. To the maximum extent feasible, Contra Costa Health and the tank terminal shall coordinate these meetings with other agencies with jurisdiction over the tank terminal. Within thirty days of completing a root cause analysis performed pursuant to this section, the tank terminal shall submit to Contra Costa Health a final report containing that analysis, including recommendations to be implemented to mitigate against the release or incident reoccurring, if any, and a schedule for completion of resulting recommendations. Contra Costa Health may require the tank terminal to submit written, periodic update reports at a frequency not to exceed every thirty days until the final report is submitted. The methodology of the root cause analysis shall be one of the methodologies recognized by the Center for Chemical Process Safety or shall be reviewed by Contra Costa Health to determine substantial equivalency.

(2) Contra Costa Health may elect to do its own independent root cause analysis or incident investigation for a major chemical accident or release. If Contra Costa Health elects to conduct a root cause analysis or incident investigation, the tank terminal shall cooperate with Contra Costa Health by providing the following access and information in a manner consistent with the safety of Contra Costa Health and tank terminal personnel and without placing undue burdens on the operation of the tank terminal:

(A) Allow Contra Costa Health to investigate the accident site and directly related facilities such as control rooms, physical evidence and where practicable the external and internal inspection of equipment.

(B) Provide Contra Costa Health with pertinent documentation; and

(C) Allow Contra Costa Health to conduct independent interviews of tank terminal employees, subject to all rights of the tank terminal and employees to be represented by legal counsel and/or management and union representatives during such interviews. If, in the course of the Contra Costa Health's root cause analysis or incident investigation, access is required to areas of the tank terminal which in the judgment of the tank terminal requires personnel entering the area to use protective equipment and/or have specialized training Contra Costa Health shall provide its personnel with such equipment and training. To the maximum extent feasible, Contra Costa Health shall coordinate any root cause analysis or incident investigation it conducts with investigations conducted by other agencies with jurisdiction over the tank terminal to minimize the adverse impacts on the tank terminal and its employees.

(3) No part of the conclusions, findings or recommendations of the root cause analysis conducted by Contra Costa Health or tank terminal, or incident investigation conducted by Contra Costa Health, relating to any major chemical accident or release or the investigation thereof, shall be admitted as evidence or used in any action or suit for damages arising out of any matter mentioned in such report.

(d) Accident History.

(1) The tank terminal shall include an accident history in the safety plan of all major chemical accidents or releases from January 1, 2018, through the date of safety plan submittal to Contra Costa Health. For each major chemical accident or release the tank terminal shall report the following information, to the extent known:

Date, time and approximate duration of the release;

Chemicals released;

Estimated quantity released in pounds;

Type of release event and its source;

Weather conditions at the time of the release;

On-site impacts;

Known off-site impacts;

Initiating event and contributing factors;

Root cause(s);

Whether off-site responders were notified; and

Operational or tank terminal equipment changes that resulted from the investigation of the release.

(2) The tank terminal shall annually submit a report of the accident history to Contra Costa Health. The first report shall be due two years after the effective date of the ordinance adding Section 6.43.095 to this chapter, and subsequent reports shall be due September 30 of each year.

(e) Certification. The tank terminal shall submit in the safety plan a single certification that, to the best of the signer's knowledge, information, and belief formed after reasonable inquiry, the information submitted is true, accurate, and complete.

#### **6.43.100 - Review, audit and inspection.**

- (a) Upon submission of a safety plan under Section 6.43.090 or Section 6.43.095, Contra Costa Health shall review the safety plan to determine if all the required elements are included and complete. Contra Costa Health shall provide to the stationary source a written notice of deficiencies, if any. The stationary source shall have 60 calendar days from receipt of the notice of deficiencies to make any corrections. The stationary source may request, in writing, a one-time 30-day calendar day extension to correct deficiencies. By the end of the 60 calendar days or any extension period, the stationary source shall resubmit the revised safety plan to Contra Costa Health. After Contra Costa Health determines that the safety plan is complete, Contra Costa Health shall schedule a public meeting on the stationary source's safety plan to explain its contents to the public and take public comments. Public comments on the safety plan shall be taken by Contra Costa Health for a period of 45 days after the safety plan is made available to the public. Contra Costa Health shall schedule a public meeting on the stationary source's safety plan during the 45-day comment period. The public meetings shall be held in the affected community on evenings or weekends. Contra Costa Health shall respond in writing to all written comments received during the 45-day comment period and to all oral comments received and not addressed at the public meeting. Contra Costa Health shall make portions of the safety plan, which are not protected trade secret information, available to the public for the public meeting.
- (b) Contra Costa Health shall, within one year of the submission of the stationary source's safety plan, conduct an initial audit and inspection of the safety program to determine compliance with this Chapter; as follows:
- (1) Based upon Contra Costa Health's review of the safety plan and the audit and inspection of the stationary source, Contra Costa Health may require modifications or additions to the safety plan submitted by the stationary source, or safety program limited to bring the safety plan or safety program into compliance with the requirements of this chapter. Any determination that modifications or additions to the safety plan or safety program are required shall be in writing, collectively referred to as the "preliminary determination." The preliminary determination shall explain the basis for the modifications or additions required to bring the safety plan or safety program into compliance with the requirements of this chapter. The preliminary determination shall be provided to the stationary source.
  - (2) The stationary source shall respond in writing to the preliminary determination issued by Contra Costa Health. The response shall state that the stationary source will incorporate into the safety plan or safety program the revisions contained in the preliminary determination or shall state that the stationary source rejects the revisions, in whole or in part. For each rejected revision, the stationary source shall explain the basis for rejecting such revision. Such explanation may include substitute revisions.

- (3) The stationary source's written response to Contra Costa Health's preliminary determination shall be received by Contra Costa Health within 90 days of the issuance of the preliminary determination or such shorter time as Contra Costa Health specifies in the preliminary determination as being necessary to protect public health and safety. Prior to the written response being due and upon written request from the stationary source, Contra Costa Health may provide, in writing, additional time for the response to be received.
  - (4) After receiving the written response from the stationary source, Contra Costa Health shall issue a public notice pursuant to their public participation policy and make portions of the safety plan, the preliminary determination and the stationary source's responses, which are not protected trade secret information, available for public review. Public comments on the safety plan shall be taken by Contra Costa Health for a period of 45 days after the safety plan, the preliminary determination and the stationary source's responses are made available to the public. Contra Costa Health shall schedule a public meeting on the stationary source's safety plan during the 45-day comment period. The public meetings shall be held in the affected community on evenings or weekends. Contra Costa Health shall respond in writing to all written comments received during the 45-day comment period and to all oral comments received and not addressed at the public meeting.
- (c) Based upon Contra Costa Health's preliminary determination, review of the stationary source's responses, and review of public comments on the safety plan, the preliminary determination and the stationary source's responses, Contra Costa Health may require modifications or additions to the safety plan submitted by the stationary source or safety program limited to bring the safety plan or safety program into compliance with the requirements of this chapter. Any determination that modifications or additions to the safety plan or safety program are required, and any determination that no modifications or additions to the safety plan or safety program are required, shall be in writing (collectively referred to as "final determination"), shall be provided to the stationary source and shall be made available to the public. A copy of the final determination report will be sent to Cal/OSHA, EPA, and the Richmond Fire Department. Contra Costa Health may not include in a final determination any requirements to a safety plan or safety program which would cause a violation of, or conflict with, any State or Federal law or regulation or a violation of any permit or order issued by any State or Federal agency.
  - (d) Within thirty days of Contra Costa Health's final determination, the stationary source and/or any interested person may appeal the final determination to the City Council of the City of Richmond by a verified written notice of appeal filed with the City Clerk and payment of the applicable appeal fee. The appeal shall be limited to issues raised during the public comment period. The notice shall state the grounds for any such appeal, including:
    - (1) The reasoning that the appeal is necessary because the stationary source is in compliance with this chapter; or
    - (2) The reasoning that the appeal is necessary to bring the stationary source into compliance with this chapter.
  - (e) In acting on the appeal, the City Council shall receive and consider the recommendation from Contra Costa County Health Services Director concerning the appeal and shall have the same authority over the final determination as Contra Costa Health. The City Council may require modifications or additions to the safety plan or safety program limited to bring the safety plan or safety program into compliance with the requirements of this chapter. The City Council may not include in its decision on the final determination any requirements to a safety plan or safety program which would cause violation of, or conflict with, any State or Federal law or regulation or a violation of any permit or order issued by any State or Federal agency. The decision of the City Council shall be final with respect to the final determination.
  - (f) The safety plan shall be valid for a period of three years from the date of receipt by Contra Costa Health and shall be reviewed and updated by the stationary source every three years pursuant to the requirements of this chapter. Any revisions to the safety plan as a result of the review and update shall be submitted to Contra Costa Health and shall be subject to the provisions of this section.
  - (g) Contra Costa Health may, within 30 days of a major chemical accident or release, initiate a safety inspection to review and audit the stationary source's compliance with the provisions

of Section 6.43.090 or Section 6.43.095, whichever is applicable. Contra Costa Health shall review and audit the stationary source's compliance with the above provisions at least once every three years. Contra Costa Health may audit the stationary source based upon any of the following criteria: accident history of the stationary source; accident history of other stationary sources in the same industry; quantity of regulated substances present at the stationary source; location of the stationary source and its proximity to the public and environmental receptors; the presence of specific regulated substances; the hazards identified in the safety plan; a plan for providing neutral and random oversight or a complaint from the stationary source's employee(s) or their representative. Subject to the provisions and limitations of Section 6.43.090 or Section 6.43.095, the stationary source shall allow Contra Costa Health to conduct these inspections and audits. Contra Costa Health, at its option, may select an outside consultant to assist in conducting said inspection.

- (h) Within thirty days of a major chemical accident or release, Contra Costa Health may commence an incident safety inspection with respect to the process involved in the incident pursuant to the provisions of Section 6.43.090(c) or Section 6.43.095(c).
- (i) Based upon Contra Costa Health's audit, safety inspection or an incident inspection, Contra Costa Health may require modifications or additions to the safety plan submitted by the stationary source or safety program limited to bringing the safety plan or safety program into compliance with the requirements of this chapter.
  - (1) Any determination by Contra Costa Health shall be in writing and shall be provided to the stationary source (referred to as the "notice of findings"). The stationary source shall have sixty calendar days from receipt of the notice of findings to make any corrections. The stationary source may request, in writing, a one-time thirty-day calendar day extension to make corrections. Contra Costa Health may not include in its notice of findings requirements to a safety plan or safety program which would cause a violation of, or conflict with, any State or Federal law or regulation or a violation of any permit or order issued by any State or Federal agency. The notice of findings made by Contra Costa Health will be available to the public.
  - (2) Within thirty days of Contra Costa Health's notice of findings, the stationary source and/or any interested person may appeal the notice of findings to the City Council by a verified written notice of appeal filed with the City Clerk and payment of the applicable appeal fee. The appeal must state the grounds for any such appeal, including:
    - (A) The reasoning that the appeal is necessary because the stationary source is in compliance with this chapter; or
    - (B) The reasoning that the appeal is necessary to bring the stationary source into compliance with this chapter.
  - (3) In acting on the appeal, the City Council shall receive and consider the recommendation from the Contra Costa County Health Services Director concerning the appeal and shall have the same authority over the notice of findings as Contra Costa Health. The City Council may require modifications or additions to the safety plan or safety program limited to bring the safety plan or program into compliance with the requirements of this chapter. The City Council may not include in its decision on the notice of findings any requirements to a safety plan or safety program which would cause a violation of, or conflict with, any State or Federal law or regulation or a violation of any permit or order issued by any State or Federal agency. The decision of the City Council shall be final with respect to the notice of findings.
- (j) Nothing in this section shall preclude, limit or interfere in any way with the authority of the City to exercise its enforcement, investigatory and information gathering authorities under any other provision of law; nor shall anything in this chapter effect or diminish the rights of the stationary source to claim legal privileges such as attorney-client privilege and/or attorney work product with respect to information and/or documents required to be submitted to or reviewed by Contra Costa Health.

#### **6.43.110 - Trade secrets.**

The disclosure of any trade secret information required by this chapter shall be governed by California Health and Safety Code Section 25538, as amended from time to time, or as otherwise protected or required by law.

#### **6.43.120 - Industrial safety programs ombudsperson.**

The City of Richmond shall utilize the County of Contra Costa's Hazardous Materials Ombudsperson as its Industrial Safety Programs Ombudsperson. The Industrial Safety Programs Ombudsperson will serve as a single point of contact for people who live or work in Richmond regarding environmental health concerns, questions, and complaints about industrial safety programs. The Industrial Safety Programs Ombudsperson shall be empowered to identify and solve problems and make recommendations to Contra Costa Health. The Industrial Safety Programs Ombudsperson's role will be one of investigating concerns and complaints, facilitating their resolution and assisting people in gathering information about programs, procedures, or issues. The Industrial Safety Programs Ombudsperson may retain appropriate technical experts in order to fulfill technical assistance requests from members of the public. The cost of experts may be funded through programs established by the U.S. EPA or other appropriate entities.

**6.43.130 - Public information bank.**

- (a) Contra Costa Health shall collect and provide ready access, including the use of electronic accessibility as reasonably available, to public documents which are relevant to the goals of this chapter, including at a minimum, business plan inventories and emergency response plans, risk management plans, safety plans, and incident reports. This section shall not apply to trade secret information or other information protected from disclosure under Federal or State law.
- (b) Copies of the records or information collected by Contra Costa Health pursuant to subsection (a) above, which pertain to stationary sources located within the City of Richmond, shall also be deposited with the Richmond Public Library and made available for review by the public.

**6.43.140 - Fees.**

Contra Costa Health may, upon a majority vote of the City Council, implement the agencies adopted fee schedule to be collected from each stationary source and tank terminal subject to the requirements of this chapter. Any review, inspection, audit fee schedule shall be set in an amount sufficient to pay only those costs reasonably necessary to carry out the requirements of this chapter, including allocable costs of staff and/or consultant time or public hearings and administrative overhead. The fee schedule shall include the cost of the Industrial Safety Programs Ombudsperson.

**6.43.150 - Penalties.**

- (a) Regardless of the availability of other civil or administrative remedies and procedures for enforcing this chapter, every act or condition prohibited or declared unlawful by this chapter, and every knowing or willful failure or omission to act as required herein, is a violation of this chapter and shall be punishable as a misdemeanor and subject to enforcement pursuant to the provisions of Section 1.04.100 through 1.04.160 of this Code.
- (b) The City Manager, City Attorney, and Contra Costa Health Director, and their designated subordinates, shall have and are hereby vested with the authority to arrest any person who violates any provision of this chapter.

**6.43.160 - Annual performance review and evaluation.**

- (a) Contra Costa Health shall annually:
  - (1) Review its activities to implement this chapter; and
  - (2) Evaluate the effectiveness of this chapter in achieving its purpose and goals pursuant to Section 6.43.030 of this chapter.
- (b) An annual performance review and evaluation report shall be prepared by Contra Costa Health based upon the previous fiscal year's activities and shall be submitted to the City Council on or before December 31 of each year thereafter. The report shall contain:
  - (1) A brief description of how Contra Costa Health is meeting the requirements of this chapter as follows:
    - (A) Effectiveness of Contra Costa Health's program to ensure stationary source compliance with this chapter;
    - (B) Effectiveness of the procedures for records management;

- (C) Number and type of audits and inspections conducted by Contra Costa Health pursuant to this chapter;
  - (D) Number of root cause analyses and/or incident investigations conducted by Contra Costa Health;
  - (E) Contra Costa Health's process for public participation;
  - (F) Effectiveness of the public information bank, including status of electronic accessibility;
  - (G) Effectiveness of the hazardous materials ombudsperson; and
  - (H) Other required program elements necessary to implement and manage this chapter;
- (2) A listing of all stationary sources covered by this chapter and, commencing on January 1, 2025, all tank terminals covered by this chapter, including for each:
- (A) The status of the safety plan and program of each stationary source and tank terminal;
  - (B) A summary of all safety plan updates and a listing of where the safety plans are publicly available;
  - (C) The annual accident history report submitted under Section 6.43.090(e)(2) or Section 6.43.095(d)(2) of this chapter;
  - (D) A summary, including the status, of any root cause analyses conducted or being conducted under this chapter by the stationary source or tank terminal, including the status of implementation of recommendations;
  - (E) A summary, including the status, of any audits, inspections, root cause analyses and/or incident investigations conducted or being conducted by Contra Costa Health pursuant to this chapter, including the status of implementation of recommendations;
  - (F) Description of inherently safer systems implemented by stationary sources;
  - (G) Legal enforcement actions initiated by Contra Costa Health, including administrative, civil, and criminal actions pursuant to this chapter;
  - (H) Process safety performance indicators reported by the stationary source as required under Section 6.43.090(a)(13)(D)(i) or safety performance indicator reported by the tank terminal as required under Section 6.43.095(a)(8)(D)(i) of this chapter;
- (3) Total penalties assessed as a result of enforcement of this chapter;
- (4) Total fees, service charges, and other assessments collected specifically for the support of this chapter;
- (5) Total personnel and personnel years utilized by the jurisdiction to directly implement or administer this chapter;
- (6) Comments from interested parties regarding the effectiveness of the local program that raise public safety issues;
- (7) The impact of this chapter in improving industrial safety.
- (c) Contra Costa Health shall provide a copy of the annual performance audit submission required by Title 19, Chapter 2, Section 5150.5 of the California Code of Regulations to the City Council on or before December 31 of each year.

**6.43.170 - Construction.**

Notwithstanding any other provision of this Code and for the purpose of this chapter, wherever it provides that Contra Costa Health shall act, such direction in all instances shall be deemed and is directory, discretionary and permissive and not mandatory. **6.43.180 - Conditional use permit.**

When any stationary source, as defined in Section 6.43.050(o), changes its process to include the use of a higher hazard category material than currently being used, the facility shall obtain a conditional use permit in accordance with the procedures set forth in Section 15.04.806 of the Richmond Municipal Code.

### 6.43.190 - Determination of hazard category.

The hazard category of a material or waste shall be determined pursuant to this section.

(a) Method of Determination.

- (1) The primary method of determining the material hazard category of a hazardous waste or material shall be reference to the Winter 1994 version of the U.S. Department of Transportation ("D.O.T.") Code of Federal Regulations, Title 49 ("49 CFR"), Section 172.101, "Hazardous Materials Table" (from columns (3) and (5), extract the "Hazardous Class or Division" and "Packing Group" information, then proceed to 49 CFR 173.2 to determine the material hazard category as either A, B or C). If a material is listed in 49 CFR 172.101 more than once, the rating that results in the highest hazard category shall be used. The hazard category of a mixture is determined according to its common name as defined in Title 49.
- (2) Where a hazardous material, waste, or mixture is not referenced in 49 CFR 172.101, and the hazard category cannot be determined using the primary method, refer to the manufacturer's MSDS for the D.O.T. "Hazard Class or Division," "Packing Group" and "Name of Class or Division." Proceed to subsection (c) of this section to determine the material hazard category as either A, B or C.
- (3) Where the preceding methods are not successful, Contra Costa Health or its designee shall be responsible for determining a material's hazard category.
- (4) Regardless of the hazard category obtained using the methods set forth above, materials with the word "poison" in column (6) of 49 CFR 172.101, methyl chloride, and the metals antimony, mercury, lead, arsenic, thallium and cadmium and their compounds, shall be Hazard Category A materials, and denatured alcohol and methanol shall be Hazard Category B materials for purposes of this chapter.

(b) Exclusions. Regardless of the hazard category obtained using the methods set forth in subsection (a), above, hot coke, hot coal briquettes, and materials not regulated by D.O.T. or which have no D.O.T. Hazard Class or Division are not regulated by this chapter.

(c) Hazard Categories.

- (1) Hazard Category A materials including the following:
  - (A) Forbidden materials, as referenced in 49 CFR 173.21 and 173.54;
  - (B) Explosives and blasting agents, Class 1, as defined in 49 CFR 173.50(b)(1) through 173.50(b)(6);
  - (C) Reactive materials, air reactive materials — Class 4, Division 4.2 as defined in 49 CFR 173.124(b)(1) and (2); Water reactive materials — Class 4, Division 4.3 as defined in 49 CFR 173.124(c); and Organic peroxides — Class 5, Division 5.2 as defined in 49 CFR 173.128;
  - (D) Radioactive materials, Class 7 as defined in 49 CFR 173.403(y);
  - (E) Oxidizers D.O.T. Packing Group I, Class 5, Division 5.1 as defined in 49 CFR 173.127(a) when Packing Group I is required per 49 CFR 173.127(b)(2)(I);
  - (F) Poisons, D.O.T., Poisons, Class 6, Division 6.1 as defined in 49 CFR 173.133 (applies to all hazard zones), Infectious substances, Class 6, Division 6.2 as defined in 49 CFR 13.134;
  - (G) Poison gas, Class 2, Division 2.3 as defined in 49 CFR 173.115(c).
- (2) Hazard Category B materials including the following:
  - (A) Flammable liquids, Class 3 Packing Groups I and II as defined in 49 CFR 173.120(a);
  - (B) Flammable solids, Class 4, Division 4.1 as defined in 49 CFR 173.124(a);
  - (C) Oxidizers, D.O.T. Packing Group II, Class 5, Division 5.1 as defined in 49 CFR 173.127(a) when Packing Group II is required per 49 CFR 173.127(b)(2)(ii);
  - (D) Flammable gases, Class 2, Division 2.1 as defined in 49 CFR 173.115(a);

- (E) Corrosives, D.O.T. Packing Group I or II, Class 8 Packing Groups I or II as defined in 49 CFR 173.136(a) and 173.137(a) and (b).
- (3) Hazard Category C materials include the following:
  - (A) Non-flammable compressed gases, Class 2, Division 2.2 as defined in 49 CFR 173.115(b);
  - (B) Combustible liquids, Class 3 Packing Group III as defined in 49 CFR 173.120(b);
  - (C) Miscellaneous hazardous materials, Class 9 as defined in 49 CFR 173.155;
  - (D) Oxidizers D.O.T. Packing Group III, Class 5, Division 5.1 as defined in 49 CFR 173.127(a) when Packing Group III is required per 49 CFR 173.127(b)(2)(iii); and
  - (E) Corrosives D.O.T. Packing Group III, Class 8 Packing Group III as defined in CFR 49 173.136(a) and 173.137(c).

**SECTION 3: Severability.**

If any section, subsection, paragraph, sentence, clause or phrase of this Ordinance is for any reason held by a court of competent jurisdiction to be unconstitutional or invalid, the remaining portions of this Ordinance shall remain in full force and effect. The City Council hereby declares that it would have passed each section, subsection, paragraph, sentence, clause, or phrase of this Ordinance irrespective of the unconstitutionality or invalidity of any section, subsection, paragraph, sentence, clause or phrase.

**SECTION 4: Effective Date.**

This Ordinance becomes effective thirty (30) days after its final passage and adoption.

First introduced at a regular meeting of the City Council of the City of Richmond held on October 15, 2024, and finally passed and adopted at a regular meeting held on October 22, 2024, by the following vote:

AYES: Councilmembers Bana, McLaughlin, Willis, Zepeda, and Vice Mayor Jimenez.  
NOES: None.  
ABSTENTIONS: None.  
ABSENT: Councilmember Robinson and Mayor Martinez.

PAMELA CHRISTIAN  
CLERK OF THE CITY OF RICHMOND  
(SEAL)

Approved:

EDUARDO MARTINEZ  
Mayor

Approved as to form:

DAVE ALESHIRE  
City Attorney

State of California            }  
County of Contra Costa        : ss.  
City of Richmond               }

I certify that the foregoing is a true copy of **Ordinance No. 10-24 N.S.**, passed and adopted by the City Council of the City of Richmond at a regular meeting held on October 22, 2024.

  
Pamela Christian, Clerk of the City of Richmond