

SECTION B - CHAPTER 8: EMPLOYEE PARTICIPATION

Section 450-8.016(b)(2) of County Ordinance Code Chapter 450-8, as amended by Ordinance 2006-22¹, requires Stationary Sources to ensure that employees and their representatives participate in the development of the written human factors program. This chapter identifies steps that Stationary Sources must take to ensure that employees are provided an opportunity to participate in the development of the written human factors program. The chapter summarizes opportunities (explicitly identified in Section B: Chapters 3 through 7 of the Safety Program Guidance) for employees and their representatives to participate in implementation of the written human factors program. A majority of the participation outlined below is already specified in existing regulation/legislation. It is not the intent of this chapter to reiterate those existing requirements (e.g., to address Section 450-8.016(a)(3)), but rather to discuss inclusion of the human factors program into the existing employee participation structure. Stationary Sources electing to adopt an alternative method to the one presented in this chapter must consult with Contra Costa Hazardous Materials Programs (CCHMP) representatives.

8.1 DEVELOPMENT OF THE WRITTEN HUMAN FACTORS PROGRAM

Employees and their representatives must participate in the development of the written human factors program for the Stationary Source. This does not necessarily mean that employees and their representatives are responsible for actually writing the programs, but that, in general, the following occurs:

- Employees and their representatives must be provided the opportunity to submit input into the initial development of the program (e.g., the process for customization of latent conditions checklist, if desired; brainstorming sessions on how operating procedures should be reviewed to ensure that latent conditions are addressed)
- Employees and their representatives must be provided the opportunity to review the program and submit comments within a reasonable time frame
- Stationary Source representatives must address all written comments submitted either by accepting the comment and offering a revision, or denying the comment and providing justification for the denial within a reasonable time frame.

The Human Factors Program, Chapters 3 through 8 strongly advocate the use of checklists (Attachments A and B) to assist Stationary Source representatives in identifying and resolving existing latent conditions as part of a PHA, in written procedures, associated with an organizational change, or in response to an incident. These checklists should be customized for each Stationary Source and even then should only be considered as guidance. Employees and their representatives must participate in the customization of the checklists if the checklists are customized for the different applications.

8.2 IMPLEMENTATION OF THE WRITTEN HUMAN FACTORS PROGRAM

Once the written human factors program is developed, employees and their representatives must be involved in the implementation and continuous improvement of the program. Sections 8.2.1 through 8.2.5 summarize specific opportunities for employee participation in the implementation of the various human factors program elements. This list should not be considered an exhaustive list (i.e., Stationary Sources should expand upon this list and identify site-specific programs). In addition to the specific opportunities for employee involvement described in Sections 8.2.1 through 8.2.5, Stationary Sources must ensure that, in general, the following occurs:

- Employees and their representatives review the written human factors program at an established frequency and ensure that any necessary revisions are incorporated
- Employees and their representatives understand, and participate as appropriate, in finalizing the written human factors program following the review
- Employees and their representatives participate in maintaining the written human factors program current and accurate (i.e., the Stationary Source may identify certain types of changes that would require that the program be updated as soon as possible as opposed to waiting until the usual review)

8.2.1 CHAPTER 3: EVALUATION AND MINIMIZATION OF LATENT CONDITIONS

Chapter 3 advocates the use of a “Latent Conditions Checklist” to assist employees in identifying existing latent conditions at their source that could contribute to or exacerbate an active failure. If the Stationary Source customizes the latent conditions checklists (LCCs) provided in this guidance to reflect their situation, employees must participate with the customization. Chapters 4 through 7 then advocate application of the checklist as appropriate.

8.2.2 CHAPTER 4: PROCESS HAZARD ANALYSIS

Chapter 4 discusses various approaches for including human factors in process hazard analyses (PHAs). Regardless of the approach used, employees must participate in conducting PHAs and in evaluating the existence of latent conditions and consequences of active failures.

8.2.3 CHAPTER 5: INCIDENT INVESTIGATION

Chapter 5 discusses the consideration of human factors in incident investigations. Employees and their representatives should be included in the incident investigation team as described in Chapter 5 and must be involved in the evaluation for latent conditions.

8.2.4 CHAPTER 6: PROCEDURES

Chapter 6 advocates objectively reviewing existing procedures to identify existing latent conditions that may cause an active failure. This chapter also discusses developing, reviewing, finalizing, and maintaining procedures. Appropriate employees must participate in all of these phases, including identification of latent conditions existing within the procedures that could cause or exacerbate an active failure.

8.2.5 CHAPTER 7: MANAGEMENT OF CHANGE FOR ORGANIZATIONAL CHANGES

Employees and their representatives shall be consulted in the management of change for organizational changes. Chapter 7 specifically discusses the formulation of a “change team” or “MOOC team” made up of employees, as appropriate, from engineering, maintenance, operations, and safety and health. This chapter also advocates the use of checklists to augment brainstorming sessions of the “change team” or “MOOC team” during the review to account for all the duties and responsibilities of the position(s) being evaluated.

Stationary Sources may find it beneficial to create a human factors committee to assist in the initial development and in the continuous implementation and improvement of the human factors program. Considerations in creating a human factors committee include, but are not limited to:

- Team composition;
- Preparation/participation time for employees and their representatives;
- Meeting schedules to accommodate each committee member’s needs (particularly important for shift workers); and
- Training for committee members (See Chapter 9).

Regardless of whether a human factors committee is maintained to oversee the human factors program, continuous improvement of the human factors program should be documented and may include, but is not limited to the following activities: periodic review of completed latent conditions checklists (LCC) for accuracy and appropriateness; periodic review of the various LCC questions or customized checklists for adequacy of use; field evaluations/spot checks on human factors issues; verification of human factors issues and assurance that subsequent recommendations were properly addressed; human factors training needs assessment for employees; and periodic review of the Stationary Source’s written human factors program.

Comments received on the human factors program must be addressed in a manner consistent with Section 8.1.

In conclusion, Stationary Sources must ensure that employees and their representatives participate in the development and in the continuous implementation of the written human factors program. Stationary Sources should ensure that employees and their representatives participate in reviewing, updating, implementing, and maintaining the human factors program. Stationary Sources may elect to revise the established structure for employee participation to ensure that it includes the human factors program.

¹ Modifications were made to the Contra Costa County's Industrial Safety Ordinance (ISO) in 2006. Major changes made to the human factors program requirements included: requiring changes to maintenance and emergency response staffing to undergo a Management of Organizational Change evaluation; and requiring human factors evaluations of maintenance safe work practice procedures and maintenance procedures for specialized equipment, piping, and instruments. Since the corresponding City of Richmond's Industrial Safety Ordinance has not been amended, Stationary Sources subject to the City of Richmond's ISO are encouraged to comply with the County ISO amendments.