



San Bernardino County Fire Department CUPA

HAZARDOUS MATERIALS DIVISION • CALIFORNIA ACCIDENTAL RELEASE PREVENTION PROGRAM
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San Bernardino County CUPA CalARP Submission Process

COORDINATION WITH THE FEDERAL PROGRAM

The purpose of the California Accidental Release Prevention Program (CalARP) is to reduce risks of regulated substances through the evaluation of hazards and consequences and the development of Risk Management Plans (RMPs) and Prevention Programs. The CalARP regulations were written to preserve certain features of the previous California Risk Management and Prevention ("RMPP") law but were otherwise written to mirror the federal Clean Air Act 112 (r) – US EPA's Chemical Accident Prevention Program. Since one of the distinctions of the California program is a regulated substance list with additional chemicals and lower thresholds, some facilities filing a Risk Management Plan (RMP) in California will not need to file a RMP with USEPA. The San Bernardino CUPA CalARP requirements will not conflict with federal submission requirements for those who must file their Risk Management Plans (RMPs) with US EPA, but CalARP does impose additional requirements.

Unlike the federal Accident Prevention Program, the CalARP regulations require the owner or operator of a stationary source to work closely with the administering agency in several areas of RMP preparation. They also require the administering agency to assist, evaluate, review, inspect, and audit to a much greater degree than under the USEPA regulations. Since this coordination includes many details, including methods and documentation used in underlying technical studies, this involvement must begin as soon in the preparation of a RMP as possible.

Federal EPA and affected industries have developed extensive guidance documents, automated tools, and other forms of technical assistance to help stationary source owners and operators meet Accident Prevention requirements. Accordingly, the San Bernardino County CUPA CalARP program uses federal EPA resources wherever applicable, even in the development of Risk Management Plans and Prevention Programs for facilities not subject to US EPA requirements. The overall result is a blending of California regulations, EPA guidance and tools, and local requirements.

COORDINATION WITH THE SAN BERNARDINO COUNTY CUPA

The following information is specific guidance for development of a Prevention Program and submission of a Risk Management Plan to the San Bernardino County CUPA. Please refer to the statutes (Government Code, Public Resources Code, and Health and Safety Code) and regulations (California Code of Regulations Title 19 and 27) for minimum requirements. San Bernardino County Fire Department, as the administering agency for the California Accidental Release Prevention Program, is required to determine if a Risk Management Plan (RMP) is required whenever a regulated substance is handled in quantities exceeding the thresholds listed in CCR Title 19. The San Bernardino County CUPA determined that all stationary sources handling a regulated substances in a covered process (that is above the threshold quantity) are required to prepare a RMP. The determination is automatic by statute if the substance exceeds thresholds established by the Clean Air Act 112(r).

New or modified facilities are required to submit the RMP prior to occupancy and to implement the Prevention Program prior to operation. It is also required that new and modified facilities coordinate with local planning and building officials for land use approval and conditions of operation and with the local fire prevention bureau for fire code implications during the development of the prevention program. The Hazardous Materials Division may require documentation from the local land use authority that the covered process has been approved as an appropriate land use, and that the local fire authority has approved the building for the proposed storage and handling of the regulated substance.

An owner or operator of a stationary source is required to submit a Risk Management Program based on the quantity of regulated substances in a covered process. In quantities above the Table 1 or 2 thresholds (from the Clean Air Act 112 (r), the RMP is submitted to the administering agency and US EPA. The deadline for compliance for such facilities was June 21, 1999 or prior to operation for processes established after that deadline. In quantities above the Table 3 thresholds, the RMP is submitted to the administering agency only. The timeframes for submission and the program level for table 3 RMP requests can be affected by the administering agency. The San Bernardino County CUPA originally established a deadline of March 1, 2004 for all existing stationary sources with Table 3 quantities to submit Risk Management Plans and implement Prevention Programs. In November of 2003 that deadline was extended to September 1, 2004.

A stationary source can have multiple processes each having a regulated substance below the threshold quantity. Such a facility may not have a covered process for purposes of CalARP. If the overall amount of the regulated substance at a facility is above the threshold quantity, the owner or operator of the stationary source must demonstrate to the administering agency how much is in each process. This is the purpose of San Bernardino County CUPA's CalARP Registration form – to define all the processes involving a regulated substance whose maximum quantity on site at any one time exceeds the threshold quantity. (This is separate from the RMP Registration defined by specific data elements in the CalARP regulations.) Where multiple processes exist, the owner or operator of the stationary source must document that the processes are neither co-located nor interconnected in order to treat them as separate processes.

RMP SUBMISSION PROCESS

The basic process for coordination with the CUPA and submission of documents is as follows:

1. *Prior to final approval of a development project or issuance of a building permit:* (For new or modified facilities) The owner/operator of the stationary source notifies the San Bernardino County CUPA in writing of the proposed location, chemical identity, process quantities, process description, and planned mitigation for the process that will be using regulated substances. This also allows the CUPA to issue a notice to comply to the owner or operator of the stationary source (required by Government Code). The letter should also indicate the anticipated startup schedule, and should describe any special circumstances, issues, or requests.

CA Health and Safety Code Section 25534.2 and Government Code 65850.2 requires the owner or operator of a stationary source handling regulated substances to obtain from the administering agency, a notice of requirement to comply with, or determination of exemption from, the requirement for a RMP prior to the approval of a development project or issuance of a building permit.

2. *Prior to initiating CalARP technical studies:* The owner/operator of the stationary source files Basic RMP Work Plan and CalARP registration form to give brief information about the stationary source, process, consultant, and technical studies. The administering agency will not discuss site-specific details of a project with a consultant until the owner or operator of the stationary source has filed a work plan naming that consultant. The CUPA must agree to the Work Plan prior to the stationary source/consultant performing the hazard evaluation. On an extensive project, a meeting may be required between representatives of the stationary source, the consultant, the CUPA, and the local fire protection district.

Note for Program 1 processes: If a covered process may qualify for Program 1, the person preparing the worst-case scenario should contact the CUPA regarding acceptable assumptions, methodologies, and the application of these to site circumstances. Since determination of program level is dependent on the outcome of the worst-case scenario, documentation of the worst-case scenario may be required with the work plan for Program level 1 candidates. Any passive mitigation considered for worst-case scenarios must be present for the entire process including delivery of the chemical.

3. At least one week prior to Hazard Evaluation/Process Hazards Analysis (required for Programs 2 & 3): The owner/operator of the stationary source or consultant notifies CUPA of date, time, and location of Hazard Evaluation and provides to the CUPA any advance materials being provided to the Hazard Evaluation team. Representatives of the CUPA may attend this technical study. The San Bernardino County CUPA requires that these studies be performed by qualified personnel in accordance with recognized EPA methodologies and that they follow generally accepted scientific and engineering standards for the industry.

An external events analysis to include seismic events is required as part of the hazard evaluation. The hazard evaluation methodology should consider the multiple failures possible during a seismic event. A seismic walk-thru is required to verify the existence and condition of required process and structural components (anchors, supports, etc.). The hazard evaluation must also include the multiple failures associated with loss of power and must evaluate the entire process from receipt of the regulated substance through its ultimate disposition. Typically a Hazard and Operability Study is required and may be used in conjunction with a What-If Analysis to cover all possible hazards and scenarios.

Note for Program 1 processes: Program 1 process requires certification that “No additional measures are necessary to prevent offsite impact from accidental releases.” While Program 1 processes do not require a process hazards analysis, a seismic walkthrough is required.

4. As technical studies and prevention program documents are completed: The owner/operator of the stationary source may file drafts of technical studies (HazOp/What-If, Offsite Consequence Analysis, Seismic Walk-thru) and major prevention program elements as they are completed to expedite review. This is particularly advisable for new or modified facilities on short time-frames for start-up.

5. Prior to Initial Public Notice: The owner or operator of the stationary source submits all final RMP-related documents (see below). These include RMP data elements and summary information, final technical studies, and prevention program documentation. Once all documentation is received, the CUPA will publish the Initial Notice in a local newspaper of general circulation stating the CUPA has initiated the process for government and public review.

A. The Risk Management Plan – Executive Summary, Data Elements, Certification,

The owner/operator of the stationary source files with the CUPA a paper copy of the executive summary and all the data elements included in EPA’s filing software, RMP*Submit 2004.

(<http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/ap-rmsb.htm>) Complete RMP*Submit 2004, run the automatic error check, and send a printout with a signed certification letter to the CUPA. The owner/operator of the stationary source files the diskette and certification statement with U.S. EPA ONLY if it is subject to CAA 112(r). Since the CUPA does not accept electronic submissions, a certified RMP using the paper RMP alternative is acceptable for submitting these basic data elements to the CUPA. The paper alternative or manual corrections may be necessary if the software won’t accept the data for specific California-only processes.

B. Finalized technical studies are submitted with the RMP.

The final technical studies should be logically organized at must at minimum include:

- The worst-case scenario and alternative scenarios including all assumptions, modeling inputs, and results. This includes a map showing the footprint of the facility, vulnerable zones with a radius equal to the distance to the toxic or flammable endpoint for the worst case and alternative scenarios, the location of the nearest public receptor, the location of any public or private school within the zones established by the air dispersion modeling, and the location of identified environmental receptors.

- The hazard evaluation including worksheets or summaries describing in detail the team that performed the evaluation, all methods, checklists, questions, tools, parameters, deviations, mitigations, consequences, and recommendations as appropriate to the methodology used. This includes a table of regulated substance risk mitigations with implementation schedule and a table of detection and monitoring devices and methods including their sensitivities and the resulting actions (visual or audible alarm, remote alert, shutdown, etc.)
- The external events analysis is expected to explicitly address power, site security, and automated system failures. It is also expected to address predictable simultaneous failures for credible natural or technological disasters scenarios.
- The completion of a seismic walk-down, which verifies the existence and condition of features designed to secure or mitigate process hazards due to seismic activity.

C. Documentation of the Prevention Program

Owners and operators of stationary sources subject to program level 2 or program level 3 must demonstrate the development of a management system that ensures continued compliance with the documentation and maintenance requirements of CalARP. The specific requirements for process safety information, operating procedures, training documentation, maintenance, compliance audits, incident investigation, contractor safety, and other program requirements are listed in the CalARP regulations for each program level. The purpose of the submitted Prevention Program Document is to demonstrate that an effective management system has been established and that all the applicable written programs and plans specified in CalARP regulations have been developed and implemented.

The CUPA will review the Risk Management Plan, the Technical Studies, and the Prevention Program documentation for completeness. (The owner/operator of the stationary source must also maintain any supporting technical documentation and records specified by the CalARP regulations at the facility.) The CUPA may require an inspection in order to verify key information prior to making a completeness determination. If deficiencies are identified, corrections are required prior to acceptance as complete and within specified timeframes.

Note for Program 1 processes: Program 1 facilities are required to certify that “No additional measures are necessary to prevent offsite impact from accidental releases.” They are also subject to the General Duty Clause, which requires facilities to identify hazards which may result from releases using appropriate hazard assessment techniques, to design and maintain a safe facility taking such steps as are necessary to prevent releases, and to minimize the consequences of accidental releases which do occur. In place of Prevention Program documentation, Program 1 facilities submit a brief description of monitoring equipment, alarm systems, emergency shutdown devices, fail safe and interlock process controls, secondary containment, and any other passive or active mitigation.

6. Prior to RMP Acceptance, final certificate of occupancy, or handling of regulated

substance: The owner or operator of the stationary source files a CalARP Registration form and a Business Emergency/Contingency Plan.

7. Within 15 days after RMP Acceptance by Administering Agency: The owner or operator of the stationary source files notice in paper of formal 45 day public review period. Section 25535.2 of the California Health and Safety Code requires that a notice that the RMP is available for review be placed in a daily local newspaper within 15 days after the administering agency has determined that the RMP is complete. The CUPA will provide the language for the public notice. Per CUPA Policy, the owner or operator of the stationary source places the notice in the paper for 5 days and provides proof of publication to this Department within 30 days. The CUPA makes the RMP available at our San Bernardino office for public review and comment for 45 days. Public comments are considered in the final review of the RMP.

8: Upon completion of formal 45 day public review period: Any public comments received are reviewed by the CUPA. This may require the owner or operator of the stationary source to provide additional documentation or mitigation.

9. Prior to startup or any handling of regulated substance at stationary source (new or modified facilities only): The public review process must be complete and the owner or operator of the stationary source must implement all elements of the prevention program.

10. Ongoing: The owner/operator of stationary source implements the prevention program, maintains program documentation, performs audits, and ensures compliance with the General Duty Clause. Operating procedures must be reviewed and certified at least annually, audits must be performed at least every 3 years, and hazard evaluations must be updated every 5 years. RMPs must be updated and resubmitted every 5 years, sooner if the process is modified or if new accident history information is available. Modifications to the covered process require coordination with the administering agency and revision to the Risk Management Plan and supporting technical studies. Additional technical evaluation, inspections, and audits are performed by the CUPA which typically results in a request for additional documentation of program implementation.

Please note that the above steps are part of the coordination between the administering agency and the stationary source that is **required** by the CalARP regulations. The owner/operator of a new or modified stationary source should allow at 3-6 months from the date the work plan is submitted to complete the RMP review process.

CALARP ADMINISTRATION AND FEES

The San Bernardino CUPA CalARP program is entirely funded by fees paid by stationary sources. Since the program requires both routine activities and periodic client-specific services, CalARP fees are a combination of routine permit fees and fees for specific services. Services provided in making an initial consultation and RMP determination are covered by a \$558 RMP screening fee. The time it takes for the CUPA to oversee the development and submission of a Risk Management Plan and Prevention Program is highly variable. Therefore development, submission, and non-routine staff time is billed hourly at a rate of \$163/hr. Once a RMP is in place, routine inspection and evaluation services are covered by annual permit fees. These annual permit fees include a CUPA CalARP fee for the stationary source and then a separate fee for each covered process at the stationary source. Fees are subject to change during the annual budget process.

The CUPA also collects and sends to the State a CalARP surcharge for State oversight of the CalARP program. The amount of that fee is dictated by the California Environmental Protection Agency.

ADDITIONAL SOURCES OF INFORMATION

For General Guidance for preparing RMPs:
<http://yosemite.epa.gov/oswer/CeppoWeb.nsf/content/EPAguidance.htm>

For OES guidance documents including CalARP Regulations, CCR Ti 19: <http://www.oes.ca.gov/>. Click on Hazardous Materials on left side menu and follow links to CalARP.

For CCR Title 8 Process Safety Management PSM requirements: <http://www.dir.ca.gov/title8/5189.html>

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For San Bernardino County CUPA CalARP information, visit the CalARP section of our forms and guidelines page of our San Bernardino County Fire Hazardous Materials website at http://www.sbcfire.org/hazmat/forms_guidelines.asp. You may also contact your district inspector or Kristen Riegel (kriegel@sbcfire.org) at (909) 386-8401.