CHAPTER 2: APPLICABILITY OF PROGRAM LEVELS

2.1 WHAT ARE PROGRAM LEVELS?

Once you have decided that you have one or more processes subject to the CalARP regulation (See Chapter 1), you need to identify what actions you must take to comply. The CalARP regulation imposes different requirements on processes based on the potential for public impacts and the level of effort needed to prevent accidents. The CalARP regulation has set three levels of requirements that apply to covered processes:

- Program 1: Processes with no public receptors within the distance to the endpoint from a worst-case release and with no accidents with specific offsite consequences within the past five years are eligible for Program 1, which imposes minimal requirements on the process.
- Program 2: Processes not eligible for Program 1 or subject to Program 3 are placed in Program 2, which imposes a streamlined prevention program.
- Program 3: Processes not eligible for Program 1 and either subject to OSHA's PSM standard under federal or California OSHA programs or described by one of the ten specified NAICS codes are placed in Program 3, which imposes a prevention program very similar to the federal OSHA PSM program.

2.1.1 KEY POINTS TO REMEMBER

In determining program levels for your process(es), keep in mind the following:

- The program levels apply to individual processes and generally indicate the
 accidental release prevention measures necessary to comply with this
 regulation for the process, not the stationary source as a whole. The eligibility
 of one process for a program level does not influence the eligibility of other
 covered processes for other program levels.
- Any process can be eligible for Program 1, even if it is subject to federal or Cal/OSHA PSM or is in one of the NAICS codes.
- Program 2 is the default program level. There are no "standard criteria" for Program 2. Any process that does not meet the eligibility criteria for either Program 1 or 3 is subject to the requirements for Program 2.
- Only one program level can apply to a process. If a process consists of multiple production or operating units and storage vessels, the highest

program level that applies to any segment of the process applies to all the parts.

Q and A

- Q. My covered process includes a series of interconnected units, as well as several vessels that are co-located. Several of the sections of the process could qualify as Program 1. Can I divide my covered process into sections for the purpose of assigning program levels?
- A. No, the highest program level that applies to any section of a covered process is the program level for the whole process. If the entire process is not eligible for Program 1, the entire process must be assigned to Program 2 or 3. If any part of the process is subject to OSHA PSM or is in one of the listed NAICS codes, the entire process is assigned to Program 3 (if not eligible for Program 1).

2.2 PROGRAM 1

2.2.1 WHAT ARE THE ELIGIBILITY REQUIREMENTS?

Your process is eligible for Program 1 if:

- There are no public receptors within a distance to an endpoint from a worstcase release; and,
- The process has not had a release of a regulated substance in the past five
 years where exposure to the substance, its reaction products, overpressures
 generated by explosion involving the substance, or radiant heat from a fire
 involving the substance resulted in offsite deaths, injuries, or response or
 restoration activities for exposure of an environmental receptor, and
- You have coordinated your emergency response activities with the local responders. (This requirement applies to any covered process regardless of program level.)

WHAT IS A PUBLIC RECEPTOR?

The CalARP program regulation defines public as "any person except an employee or contractor of the stationary source." Consequently, employees of other facilities that may share your site are considered members of the public even if they share the same physical location. Being "the public," however, is not the same as being a public receptor.

Public receptors include "offsite residences, institutions (e.g., schools and hospitals), industrial, commercial, and office buildings, parks, or recreational areas inhabited or occupied by the public at any time without restriction by the stationary source where members of the public could be exposed to toxic concentrations, radiant heat, or overpressure, as a result of an accidental release." Offsite means areas beyond your property boundary and "areas within the property boundary to which the public has routine and unrestricted access during or outside business hours."

The first step in identifying public receptors is determining what is "offsite." For most facilities, that determination will be straightforward. If you restrict access to all of your property all of the time, "offsite" is anything beyond your property boundaries. Ways of restricting access include fully fencing the property, placing security guards at a reception area or using ID badges to permit entry.

If you do not restrict access to a section of your property and the public has routine and unrestricted access to it during or after business hours, that section would be "offsite." For example, if your operations are fenced but the public has unrestricted access to your parking lot during or after business hours, the parking lot is "offsite." In the case of facilities such as hospitals, schools, and hotels that shelter members of the public as part of their function or business, the parts of the facility that are used to shelter the public would be "offsite."

Not all areas offsite are potential public receptors. The point of identifying public receptors is to locate those places where there are likely to be, at least some of the time, members of the public whose health could be harmed by short-term exposure to an accidental release at your site. The basic test for identifying a public receptor is thus whether an area is a place where it is reasonable to expect that members of the public will routinely gather at least some of the time.

The definition of "public receptor" itself specifies the types of areas where members of the public may routinely gather at least some of the time: residences, institutions such as hospitals and schools, buildings in general, parks and recreational areas. There should be little difficulty in identifying residences, institutions and businesses as such, and virtually any residence, institution and business will qualify as a public receptor, even when the property is used only seasonally (as in a vacation home). Notably, a residence includes its yard, if any, and an institution or business includes its grounds to the extent that employees or other members of the public are likely to routinely gather there at least some of the time for business or other purposes (see discussion of recreational areas below). The only circumstances that would justify not considering such a property a public receptor would be where your facility owns or controls the property and restricts access to it, or no member of the public inhabits or occupies it at any time. Where a hospital, school, hotel or other entity that provides public shelter is

itself subject to the CalARP program regulations (e.g., because of on-site propane storage tanks), it will be its own public receptor except for those areas where members of the public are not allowed to go at any time.

Buildings other than residences, institutions or businesses are also highly likely to qualify as public receptors since the function of most buildings is at least in part to shelter people. Accordingly, toll booth plazas, transit stations, and airport terminals would qualify as public receptors. For a building not to qualify as a public receptor, one of the circumstances mentioned above would have to apply.

Every designated park or recreational area, or at least some portion thereof, is apt to be a public gathering place by virtue of facilities made available to the public (e.g., visitors' center, playground, golf course, camping or picnic area, marina or ball field) or attributes that members of the public routinely seek to use (e.g., beach). It does not matter whether use of such facilities is seasonal; routine use for at least part of the year would qualify the area as a public receptor.

At the same time, some portion of a designated park or recreational area may not be a public receptor. For instance, a large state or national park may include relatively inaccessible tracts of land that do not contain public facilities or receive routine use. Occasional hiking, camping or hunting in such areas would not qualify the areas as public receptors.

An area need not be designated a recreational area to be one in fact. If an area is routinely used for recreational purposes, even if only seasonally, it is a recreational area for purposes of the part 68 rule. For example, a marina may not bill itself as a "recreational area," but if a marina houses recreational boats, it qualifies as a public receptor. Further, if your facility or a neighboring property owner allows the public to make routine recreational use of some portion of land (e.g., a ball field or fishing pond), that portion of land would qualify as a public receptor.

Roads and parking lots are not included as such in the definition of "public receptor." Neither are places where people typically gather; instead they are used to travel from one place to another or to park a vehicle while attending an activity elsewhere. However, if a parking lot is predictably and routinely used as a place of business (e.g., a farmer's market) or for a recreational purpose (e.g., a county fair), it would qualify as a public receptor.

In general, farm land would not be considered a public receptor. However, if farm land, or a portion thereof, is predictably and routinely occupied by farm workers or other members of public, even if only on a seasonal basis, that portion of the land would be a public receptor.

If you are in doubt about whether to consider certain areas around your facility as public receptors, you should consult with CCCHSD.

Q and A

- **Q.** My processes are fenced, but my offices and parking lot for customers are not restricted. What is considered offsite?
- **A**. The unrestricted areas would be considered potential public receptors.
- **O**. What is considered a recreational area?
- **A.** Recreational areas include land designed, constructed, or used for recreational activities. Examples are national, state, county and city parks, other outdoor recreational such as golf courses or swimming pools and bodies of waters (oceans, lakes, rivers, and streams) because they are used for fishing, swimming, or boating. Areas that are predictably used by hunters, fishermen, bird watchers, children, bike riders, or hikers would be considered recreational areas. Areas where there are places for public to gather (e.g., ball fields, picnic tables, jungle gyms, hiking paths, and campsites) would be considered recreational areas. Other public or private undeveloped or agricultural land, such as woodlands, crop lands, pasture lands and wetlands, may or may not be considered recreational areas---it depends on whether the public is likely of occupy the area for recreational activity. Even if an area is only used during certain parts of the year for recreation, it may still be considered a recreational area. CCCHSD recognizes that some judgment is involved in determining whether an area should be considered a public receptor. You are expected to make a reasonable judgement. If you have doubts about whether an area can be legitimately excluded from consideration as a public receptor, you are encouraged to consult with CCCHSD to reach an agreement on an area's status.

WHAT IS A DISTANCE TO AN ENDPOINT FROM A WORST-CASE RELEASE?

The CalARP regulation includes endpoints for regulated substances and defines a worst-case release scenario (see Chapter 4 or the *USEPA RMP Offsite Consequence Analysis Guidance* for more information). You will have to define a worst-case release (usually the loss of the total contents of your largest vessel) and either use EPA's guidance or conduct modeling on your own to determine the distance to the endpoint. Beyond that point, the effects on people are not considered to be severe enough to merit the need for additional action under the CalARP regulation.

To define the area of potential impact from the worst-case release, draw a circle on a map, using the process as the center and the distance to the endpoint as the radius. If there are any public receptors within that area, your process is not eligible for Program 1.

ACCIDENT HISTORY

To be eligible for Program 1, no release of the regulated substance from the process can have resulted in offsite deaths, injuries, or response or restoration activities at an environmental receptor during the five years prior to submission of your RMP. A release of the regulated substance from another process has no bearing on whether the first process is eligible for Program 1.

WHAT IS AN INJURY?

An injury is defined as any effect on a human that results from direct exposure to toxic concentrations, radiant heat, or overpressures from accidental releases or from the direct consequences of a vapor cloud explosion (such as flying glass, debris, and other projectiles) from an accidental release. The effect must require medical treatment or hospitalization. This definition is taken from the Cal/OSHA regulations for the keeping of the employee injury and illness logs and should be familiar to most employers. Medical treatment is further defined as treatment, other that first aid, administered by a physician or registered professional personnel under standing orders from a physician. The definition of medical treatment will likely capture most instances of hospitalization. If someone goes to the hospital following direct exposure to a release and is kept overnight for observation (even if no specific injury or illness is found), that would qualify as hospitalization.

WHAT IS AN ENVIRONMENTAL RECEPTOR?

The environmental receptors you need to consider are limited to natural areas such as national or state parks, forests, or monuments; officially designated wildlife sanctuaries, preserves, refuges, or areas; and federal wilderness areas. All of these areas can be identified on local U.S. Geological Survey maps.

WHAT ARE RESTORATION AND RESPONSE ACTIVITIES?

The type of restoration and response activity conducted to address the impact of an accidental release will depend on the type of release (volatilized spill, vapor cloud, fire, or explosion), but may include such activities as:

- Collection and disposal of dead animals and contaminated plant life;
- Collection, treatment, and disposal of soil;
- Shutoff of drinking water;
- Replacement of damaged vegetation; or
- Isolation of a natural area due to contamination associated with an accidental release.

If an impact occurs, such as damaged vegetation, and no steps are required to replace the vegetation, the process remains eligible for Program 1.

.

Q and A

- Q. Do environmental receptors include areas that are not federal Class I areas under the CAA?
- A. Yes. The list of environmental receptors in the CalARP regulation is not related to the federal Class I areas under CAA section 162. Under the CalARP regulation, national parks, monuments, and wilderness areas are not limited by size criteria. In addition, other areas are covered; for example, national forests and state parks, monuments, and forests are environmental receptors.

2.2.2 DOCUMENTING PROGRAM 1 ELIGIBILITY

As part of your accidental release prevention program, you must keep records of your compliance with this requirement. For each Program 1 process, your records should include the following:

- The worst-case release scenario, which shall include a description of the vessel or pipeline and substance selected as worst case, assumptions and parameters used, and the rationale for selection;
- Assumptions shall include use of any administrative controls and any passive mitigation that were assumed to limit the quantity that could be released;
- Documentation of estimated quantity released, release rate, and duration of release;
- The methodology used to determine distance to endpoints; and
- Data used to determine that no public receptor would be affected.

Q and A

- **Q.** What is the relationship between the accident history for Program 1 and the five-year accident history? If my process is eligible for Program 1, do I still need to do a five-year accident history.
- **A.** Although both cover the previous five years, the accidental release criteria for Program 1 and the general accident history for the source are different. The five-year accident history is an information collection requirement that is designed to provide data on all serious accidents from a covered process involving a regulated substance or other extremely hazardous substance. In contrast, the Program 1 criteria focus on whether the process in question has the potential to experience a release of a regulated substance that results in harm to the public based on past events. Onsite effects, sheltering-in-place, and evacuations are not relevant. Therefore, it is possible that a process eligible for Program 1 may still have experienced a release that must be reported in the accident history for the source.
- **Q.** A process with more than a threshold quantity of a regulated substance had an accident with offsite consequences three years ago. After the accident, we altered the process to reduce the quantity stored on site. Now the worst-case release scenario indicates that there are no public receptors within the distance to an endpoint. Can this process qualify for Program 1?
- **A.** No, the process cannot qualify for Program 1 until five years have passed since any accident with the specified consequences.
- **Q.** A process involving a regulated substance had an accidental release with offsite consequences two years ago. The process has been shutdown. Do I have to report anyway?
- **A.** No. The release does not have to be included in your accident history. Your risk management plan only needs to address processes that have more than a threshold quantity of a regulated substance on the date you file your RMP

2.3 QUICK RULES FOR DETERMINING PROGRAM 1 ELIGIBILITY

You generally will not be able to predict with certainty that the worst-case analysis for a particular process will be eligible for Program 1. Processes containing certain substances, however, may be more likely than others to be eligible for Program 1, and processes containing certain other substances may be very unlikely to be eligible for Program 1 because of the toxicity and physical properties of the substances. The information presented below may be useful in helping you to decide whether to carry out analyses of processes to determine Program 1 eligibility.

2.3.1 TOXIC GASES

If you have a process containing more than a threshold quantity of any regulated toxic gas that is not liquefied by refrigeration alone (i.e., you hold it as a gas or liquefied under pressure), the distance to the endpoint estimated using the CalARP regulation required worst-case assumptions is unlikely to be less than the distance to public receptors, unless your site is very remote. In some cases, however, toxic gases in processes in enclosed areas may be eligible for Program 1.

2.3.2 REFRIGERATED TOXIC GASES

If you have a process containing anhydrous ammonia liquefied by refrigeration alone (atmospheric storage), and your worst-case release would be contained in a diked area, the chances are good that the process may be eligible for Program 1, unless there are public receptors very close to the process. If you have a process containing ethylene oxide, anhydrous hydrogen fluoride, or methyl chloride liquefied by refrigeration alone, and the release would take place in a diked area, the process may be eligible for Program 1. Program 1 eligibility depends, of course, on the size of the diked area, the quantity of the regulated substance, and the location of public receptors.

The worst-case analysis for a process containing chlorine liquefied by refrigeration is unlikely to show eligibility for Program 1, unless your site is extremely remote from the public or the release would occur within an enclosure.

2.2.3 TOXIC LIQUIDS

The distance to the endpoint from the worst-case analysis for toxic liquids kept under ambient conditions may be smaller than the distance to public receptors in a number of cases. If public receptors are not found very close to the process (within ½ mile), such processes may be eligible for Program 1. Small-sized stationary sources in developed areas are highly unlikely to meet this criterion; it will be more relevant to remotely located stationary sources or processes found near the center of large (acreage) sites. Substances that are potential candidates to be in processes that are eligible for Program 1 are noted below. Generally, processes that contain toxic liquids at elevated temperatures, including the toxic liquids listed below, would be less likely to be eligible for Program 1 than those at ambient temperature, and processes in diked areas are more likely to be eligible for Program 1 than those in undiked areas.

For processes containing toluene diisocyanate (including toluene 2,4-diisocyanate, toluene 2,6-diisocyanate, and unspecified isomers) or ethylenediamine, the analysis of a spill of more than a threshold quantity into an

undiked area under ambient conditions is likely to demonstrate eligibility for Program 1. If the area of the spill is diked, processes containing very large quantities of these substances may be eligible for Program 1. In addition, processes containing the following toxic liquids under ambient conditions are likely to be eligible for Program 1 if a spill would take place in a diked area and public receptors are not close to the process:

- Chloroform;
- Cyclohexylamine;
- Hydrazine;
- Isobutyronitrile;
- Isopropyl chloroformate;
- Propylene oxide;
- Titanium tetrachloride; and,
- Vinyl acetate monomer.

2.3.4 WATER SOLUTIONS OF TOXIC SUBSTANCES

The list of regulated substances includes several common water solutions of toxic substances. Processes containing such solutions at ambient temperatures may be eligible for Program 1 (depending in some cases on the concentration of the solution), if spills would be contained in diked areas and public receptors are not located close to the process (within ½ mile). As noted above, small-sized stationary sources in developed areas are highly unlikely to meet this criterion; it will be more relevant to remotely located stationary sources or processes found near the center of large (acreage) sites. Processes containing the following water solutions may be eligible for Program 1, assuming diked areas that would contain the spill and ambient temperatures:

- Ammonia in solution;
- Formaldehyde (commercial concentrations);
- Hydrofluoric acid (concentration 50 to 70 percent); and,
- Nitric acid (commercial concentrations).

2.3.5 FLAMMABLE SUBSTANCES

Many processes containing regulated flammable substances are likely to be eligible for Program 1, unless there are public receptors within a very short distance. If you have a process containing up to about 20,000 pounds (twice the threshold quantity) of a regulated flammable substance (other than hydrogen), your process is likely to be eligible for Program 1 if you have no public receptors within about 400 yards (1,200 feet) of the process. If you have up to 100,000 pounds in a process (ten times the threshold quantity), the process may be eligible for Program 1 if there are no public receptors within about 700 yards (2,000 feet)

2.4 PROGRAM 3

Any covered process that is not eligible for Program 1 and meets one of the two criteria specified below is covered by Program 3 requirements. Program 3 sets accidental release prevention measures similar to the PSM Standard.

2.4.1 What Are The Eligibility Criteria For Program 3?

Your process qualifies for Program 3 if your process does not meet the eligibility requirements for Program 1, and

• Your process is subject to OSHA PSM (federal or California);

or

• Your process is in one of ten NAICS codes specified in Section 2.4.2.

or

• In accordance with Section 2735.4(e)(3) of the CalARP regulations, CCCHSD determines that the accident risk posed by your covered process justifies classifying the process as a Program 3.

What is the OSHA PSM Standard?

The federal OSHA or Cal/OSHA Process Safety Management standards (codified at 29CFR§1910.118 and Title 8 CCR§5189 respectively) are a formal set of procedures in thirteen management areas designed to protect worker health and safety from accidental releases. As with the CalARP regulation, they apply to a range of stationary sources that have more than a threshold quantity of a listed substance in a process. All processes subject to the CalARP regulation and the PSM standard (federal or state) and not eligible for Program 1 are assigned to Program 3. If you are already complying with OSHA PSM for a process, you probably will not need to take any additional steps or develop any additional

documentation to meet the requirements of the Program 3 prevention elements. EPA placed all covered OSHA PSM processes in Program 3 to eliminate the possibility of imposing overlapping, inconsistent requirements on the same process

2.4.2 WHAT ARE THE TEN NAICS CODES?

The U.S. government, in cooperation with the Canadian and Mexican governments, has adopted the North American Industrial Classification System (NAICS) to replace SIC codes. Program 3 requirements are applicable to a covered process if the process involves an activity in one of ten industrial NAICS codes. These NAICS codes were selected based on an analysis of accidental release data and represent activities for which a high proportion of sources reported releases. The following are the NAICS codes and the associated activity:

NAISC Code Industry

32211	Pulp Mills
32411	Petroleum Refineries
32511	Petrochemical Manufacturing
325181	Alkalies and Chlorine Manufacturing
325188	All Other Basic Inorganic Chemical Manufacturing"
325192	Cyclic Crude and Intermediate Manufacturing
325199	All Other Basic Organic Chemical Manufacturing
325211	Plastics Materials and Resin Manufacturing
325311	Nitrogenous Fertilizer Manufacturing
32532	Pesticide and Other Agricultural Chemical Manufacturing

Check EPA's webpage (www.epa.gov/swercepp/) for up to date information on revisions relating to NAICS codes. Appendix D is list of NAICS codes.

2.4.3 How Do I Define an NAICS Code for a Process?

Because the term "process" applies to a discrete section of your stationary source, when you determine the boundaries for a covered process, that process will normally consist of one industrial function and, therefore, one NAICS code. If you determine that a covered process consists of individual process units with different NAICS codes, that covered process should be broken down into separate process units with individual NAICS codes. When determining the boundary of an individual process unit, focus primarily on the physical properties and operations involved within that process unit and then determine what NAICS code pertains to that particular process function. For example, if you manufacture

hydrochloric acid, then use it to produce sanitation goods, the production of the sanitation goods would be assigned to NAICS code 325612. The manufacture of hydrochloric acid is considered NAICS code 325188. Because part of the covered process is in a listed NAICS code, the entire process is assigned to Program 3. Even if a process is considered a support activity for your main production (e.g., your warehouse or wastewater treatment system), you must assign it a separate, appropriate code (e.g., 562219 for waste treatment). This assignment does not affect your ability to consider such support processes as part of the same industrial group for purposes of defining your stationary source; the two decisions are separate.

2.4.4 NAICS CODES FOR A PROCESS VS. PRIMARY STATIONARY SOURCE NAICS CODE

For purposes of determining Program levels, you must identify an NAICS code for each individual process. Unless you have only one process, there may not be a relationship between a process NAICS code and your stationary source's primary NAICS code. Your primary NAICS code may be similar to the NAICS codes that you determine for several if not all of your processes, but the primary NAICS code should not be used as a default value or to identify an NAICS code for a single process. The primary NAICS code is assigned based on the activity that contributes the largest percentage of your revenue and is the code you use when you complete Census forms.

2.5 PROGRAM 2

Program 2 is considered a default program level because any covered process that is not eligible for Program 1 and Program 3 requirements is, by default, covered by Program 2 requirements. Program 2 sets accidental release prevention measures, including a streamlined accident prevention program, for an eligible covered process.

2.5.1 WHAT ARE THE ELIGIBILITY CRITERIA FOR PROGRAM 2?

Your process is eligible for Program 2 if:

- Your process does not meet the eligibility requirements for Program 1;
- Your process is not eligible for Program 3 according to Section 2.4.1

When determining what program level is appropriate for your covered process, keep in mind that if it does not meet the Program 1 criteria, if it is not covered by PSM, and it is not in the NAICS codes listed above, the process automatically is subject to Program 2 requirements.

Q and A

- **Q.** California administers the OSHA program under a formal delegation from federal OSHA, does that mean that my processes subject to OSHA PSM under California rules are in Program 3?
- **A.** Yes (as long as the process does not qualify for Program 1). Any process for which a stationary source is complying with PSM, under federal or state rules, is considered to be in Program 3.

2.6 DEALING WITH PROGRAM LEVELS

2.6.1 WHAT IF I HAVE MULTIPLE PROGRAM LEVELS?

If you have more than one covered process, you may be dealing with multiple program levels in your accidental release prevention program.

If your stationary source has multiple processes subject to different program requirements, the CalARP regulations allow you to treat each group of processes in the same program level (and potentially each process) separately from the other processes and program level requirements. Nevertheless, you must submit a single RMP for all covered processes. Another option, if you prefer, is that you may choose to adopt the most stringent applicable program level requirements for all covered processes:

For example, you have three covered processes: one eligible for Program 1 and two subject to Program 3. You may find it more cost effective and efficient to follow the Program 3 requirements for all three covered processes. Remember that this is only an option. You must also make it clear in your RMP the program level of each individual process for compliance requirements e.g., if Program 3 requirements are being applied to a Program 1 process, you want to make it clear in the RMP that the process is Program 1 to avoid Program 3 compliance requirements. CCCHSD will inspect and enforce Program 1 or 2 processes for compliance with the minimal Program 1 or 2 requirements even if you apply a higher-level prevention program to them. If you assign a process to Program 2 or 3 when it would qualify for a lower level program, CCCHSD will inspect or enforce for compliance with all the requirements of the higher program level.

2.6.2 CAN THE PROGRAM LEVEL FOR A PROCESS CHANGE?

If a covered process meets the requirements for a new program level, you must reevaluate the requirements for the process. If you are switching to another program level, this change must be reflected in an updated RMP that must be submitted within six months of the change that altered the program level for the covered process. If the process no longer qualifies as a covered process (e.g., as a result of a change in the quantity of the regulated substance in the process), then you will need to "deregister" the process; see Chapter 9 for more information. Typical examples of switching program levels include:

MOVING UP

Program 1 to Program 2. You have a covered process subject to Program 1 requirements. A new development results in public receptors being located within the distance to the endpoint for a worst-case release. The process is no longer eligible for Program 1 and must be evaluated to determine whether Program 2 or Program 3 applies. You must submit a revised RMP within six months of the program level change, indicating and documenting that your process is now in compliance with the new program level requirements.

Not Covered to Program 1, 2, or 3. You have a process that was not covered by the CalARP regulation, but, due to an expansion in production, the amount of regulated substance now exceeds the threshold quantity. You must determine which program level applies and come into compliance with the CalARP regulation by June 21, 1999, or after that time, by the time you exceed the threshold quantity.

Program 2 to Program 3. You have a process that involves a regulated substance above the threshold that is not in one of the ten NAICS codes or been subject to PSM. However, due to one of the following OSHA regulatory changes, the process is now subject to the OSHA PSM standard:

OSHA's exemption applicable to your process has been eliminated, or The regulated substance has been added to OSHA's list of highly hazardous substances.

Therefore, the process is now subject to Program 3 requirements and you must submit a revised RMP to EPA and CCCHSD, indicating and documenting that your process is now in compliance with the Program 3 requirements. You must submit a revised RMP within six months of the program level change, indicating and documenting that your process is now in compliance with the new program level requirements.

SWITCHING DOWN

Program 2 or 3 to Program 1. You have a covered process subject to Program 2 or 3 requirements that experienced an accidental release of a regulated substance with offsite impacts four years ago. Subsequent process changes have made such an event unlikely (as demonstrated by the worst-case release analysis). One year after you submit your RMP, the applicability of the accident has now expired and the process is eligible for Program 1. If you elect to qualify the process for Program 1, you must submit a revised RMP within six months of the program level change, indicating and documenting that the process is now in compliance with the new program level requirements.

Program 2 or 3 to Not Covered. You have a covered process that is subject to Program 2 or 3 requirements, but, due to a reduction in production, the amount of regulated substance no longer exceeds the threshold. Therefore, the process is no longer a covered process. You must submit a revised RMP within six months indicating that your process is no longer subject to any program level requirements

2.7 SUMMARY OF PROGRAM REQUIREMENTS

Regardless of the program levels you assign to your processes, you must complete a fiveyear accident history for each process (see Chapter 3) and submit an RMP that covers all processes (see Chapter 9).

2.7.1 **PROGRAM 1**

For each Program 1 process, you must also conduct and document a worst-case release analysis. You must coordinate your emergency response activities with local responders and sign the Program 1 certification as part of your RMP submission.

2.7.2 **PROGRAMS 2 AND 3**

For all Program 2 and 3 processes, you must also conduct and document at least one worst-case release analysis to cover all toxic substances and one to cover all flammable substance. You must also conduct one alternative release scenario analysis for each toxic substance and one representing all flammable substances. See Chapter 4 or the *RMP Offsite Consequence Analysis Guidance* for specific requirements. You must coordinate your emergency response activities with local responders and, if you use your own employees to respond to releases, you must develop and implement an emergency response program. See Chapter 8 for more details.

For each Program 2 process, you must implement all of the elements of the Program 2 prevention program: safety information, hazard review, operating procedures, training, maintenance, compliance audits, and incident investigations. See Chapter 6 for more details.

For each Program 3 process, you must implement all of the elements of the Program 3 prevention program: process safety information, process hazard analysis, operating procedures, training, mechanical integrity, compliance audits, incident investigations, management of change, pre-startup reviews, contractors, employee participation, and hot work permits. See Chapter 7 for more details.

2.8 CCCHSD AUTHORITY TO CHANGE PROGRAM LEVELS

CCCHSD has the authority under Section 25534 of the Health and Safety Code and Section 2735.4(e)(3) of the CalARP regulations to reclassify state-only covered process program levels. CCCHSD may not reclassify a process subject to federal RMP regulations nor may CCCHSD reclassify a state-only process at a stationary source with multiple covered processes that must submit an RMP to the federal EPA for any process. CCCHSD may reclassify as follows at stationary sources with state-only processes:

- If CCCHSD determines that is a significant likelihood of a regulated substances accidental release:
 - -CCCHSD may reclassify a covered process from Program 2 to Program 3.
- If CCCHSD determines there is not a significant likelihood of a regulated accidental release:
 - -CCCHSD may reclassify a covered process from Program 3 to Program 2, or Program 2 to Program 1.
 - -CCCHSD may decide to not require that an RMP be submitted

2.9 EXAMPLE SOURCES

The six sources described in this section will be used in this document to highlight important stages in developing an accidental release prevention program.

Source A

A ceramics manufacturer uses no regulated substances above the thresholds in its manufacturing processes. The stationary source, however, has an interruptible gas contract with its local utility and has a propane storage tank on site as a backup source of power. The maximum quantity in the tank exceeds 10,000 pounds; the tank, therefore, is a covered process.

The tank is located 300 yards inside the fence line and the nearest public receptor (another industrial stationary source is 100 yards from the fence line. The distance to the overpressure endpoint for a worst-case release is approximately 0.2 miles or 352 yards. There is no public receptor within the distance to an endpoint from a worst-case release and the process has no history of an accidental release of the regulated substance with specific offsite impacts in the last five years. The process is classified in Program 1.

Source B

A propane retailer located in a commercial area has a single 18,000-gallon propane tank. The retailer repackages propane into cylinders for industrial and residential customers and refills small propane tanks for grills. The propane tank is a covered process with a regulated substance above the threshold.

Members of the public can park directly in front of the stationary source, which is also bordered by several small businesses. An evaluation of the worst-case release indicates that the small businesses are public receptors that will be potentially impacted by a worst-case release from the propane tank. The process is not subject to the OSHA PSM Standard, nor is it categorized in one of the ten listed NAICS codes. The process is classified in Program 2.

Source C

An agricultural retailer has a 200-ton tank of ammonia and an 18,000-gallon propane tank. The retailer downloads both ammonia and propane from these bulk tanks into smaller tanks that are then transported to farms. The public can park in front of the office/store part of the stationary source, and customers can drive up to the tanks. The stationary source is not fenced. The stationary source is within a 0.15-mile of residences and the business center of the small town.

The stationary source has two covered processes with regulated substances above the threshold levels: the 200-ton tank of ammonia (Process 1) and the 18,000-gallon propane tank (Process 2). A worst-case release analysis finds that a worst-case release from both processes will potentially impact the residences and the business center of town. Neither processes are subject to OSHA PSM, nor are they categorized in one of the ten listed NAICS codes. As a result, both processes are covered by Program level 2.

Source D

A metal products manufacturer stores hydrochloric acid (37 percent solution) and uses it in its plating processes, which are connected to a storage tank that holds 50,000 pounds of acid. Hydrochloric acid is delivered in tank trucks and downloaded into the storage tank. The manufacturer also operates a wastewater treatment plant, that uses chlorine, supplied from five, interconnected one-ton tanks, which are stored in a rack. The stationary source is in an industrial area and borders directly on another industrial stationary source, whose workers park in the area close to the fence line. In addition, a river borders one side of the stationary source. Treated wastewater is discharged into the river under state permits. A state wildlife preserve is two miles downriver.

The stationary source has two covered processes with regulated substances above the threshold levels: the 50,000-pound tank of hydrochloric acid at 37 percent (Process 1) and the five interconnected one-ton tanks of chlorine in the wastewater treatment plant (Process 2). A worst-case release analysis finds that a worst-case release from both processes will potentially impact the bordering industrial stationary source and its workers. Process 2 is subject to the OSHA PSM standard, but Process 1 is not. Process 1 is also not categorized in one of the ten listed NAICS codes. Therefore, Process 2 is subject to Program 3 and Process 1 is subject to Program 2.

Source E

An inorganic chemical manufacturer uses hydrofluoric acid in solution to manufacture fluoroboric acid at a site that is approximately 500 yards square. It also has a water treatment plant using chlorine. The manufacturer stores 10 tons of 70 percent HF solution, which is piped to the reactor vessels. The wastewater treatment plant stores an average of ten one-ton tanks of chlorine on a rack. The plant is in an industrial area. The HF storage tank is 150 yards from the property boundary. The nearest neighboring building or workers are 300 yards away. The chlorine cylinders are stored by the treatment pond, which is 100 yards from a river. There are homes and commercial businesses on the other side of the river, approximately 500 yards away.

The stationary source has two covered processes with regulated substances above the threshold levels: the 10-ton tank of hydrofluoric acid at 70 percent (Process 1) and the ten one-ton tanks of chlorine in the wastewater treatment plant (Process 2). A worst-case release analysis finds that a worst-case release from both processes will potentially impact the neighboring buildings and workers. Process 2 is subject to the OSHA PSM standard, but Process 1 is not.. Both processes are subject to Program 3, process one due to being in NAICS code 325188, and process 2 due to be subject to PSM.

Source F

A large chemical manufacturer operates a site that is approximately a half mile wide and two miles long, with a major river and a four-lane road on its longer sides. There are industrial facilities on the other side of the road and river (a half-mile wide); neighboring facilities' fence lines abut the company's property boundary. The company maintains a 300-yard buffer zone on each end of the stationary source and 50-yard buffer between its processes and the road and river. The company manufacturer a variety of chemicals, including chloroform, chorine, epichlorohydrin, ethylene, HCl, hydrogen cyanide, TDI, methyl chloride, phosgene, and propylene, all of which are present above threshold quantities in process vessels and storage tanks. The TDI process and storage tanks are located at the center of the stationary source. The ethylene and propylene tanks are located 500 yards from the riverbank. A propane tank, used as a backup fuel source, is located just inside the buffer zone, 50 yards from the highway and 100 yards from the entrance of a facility across the highway.

Although the stationary source has a number of production and storage units, several of the units with regulated toxic substances are considered to be co-located and therefore one process, The propylene and ethelene tanks are for enough apart to be considered separate processes. A worst-case release analysis determines both these tanks have no public receptors within the distances to their endpoints. A worst-case release analysis determines that the TDI process's worst-case release would reach its endpoint within the fenceline; the TDI process is not co-located or interconnected to any covered process. None of these processes has experienced a release of a regulated substance during the past five years that resulted in any offsite consequences; each of these are, therefore, eligible for program 1. The propane tank also is not co-located with any other covered vessel. Because it is used as backup fuel for buildings on site, but not for any covered processes, it is not subject to OSHA PSM. Because it's worst-case release would impact public receptors, it is subject to Program 2. The other processes are subject to Program 3 because at least one of the production or storage units in each process is subject to OSHA PSM.