

CHAPTER 1: GENERAL APPLICABILITY

1.1 INTRODUCTION

The purpose of this chapter is to help you determine if you are subject to Part 68, the risk management program rule. Part 68 covers you if you are:

- g The owner or operator of a stationary source (facility)
- g That has more than a threshold quantity
- g Of a regulated substance
- g In a process.

The goal of this chapter is to make it easy for you to identify processes that are covered by this rule so you can focus on them.

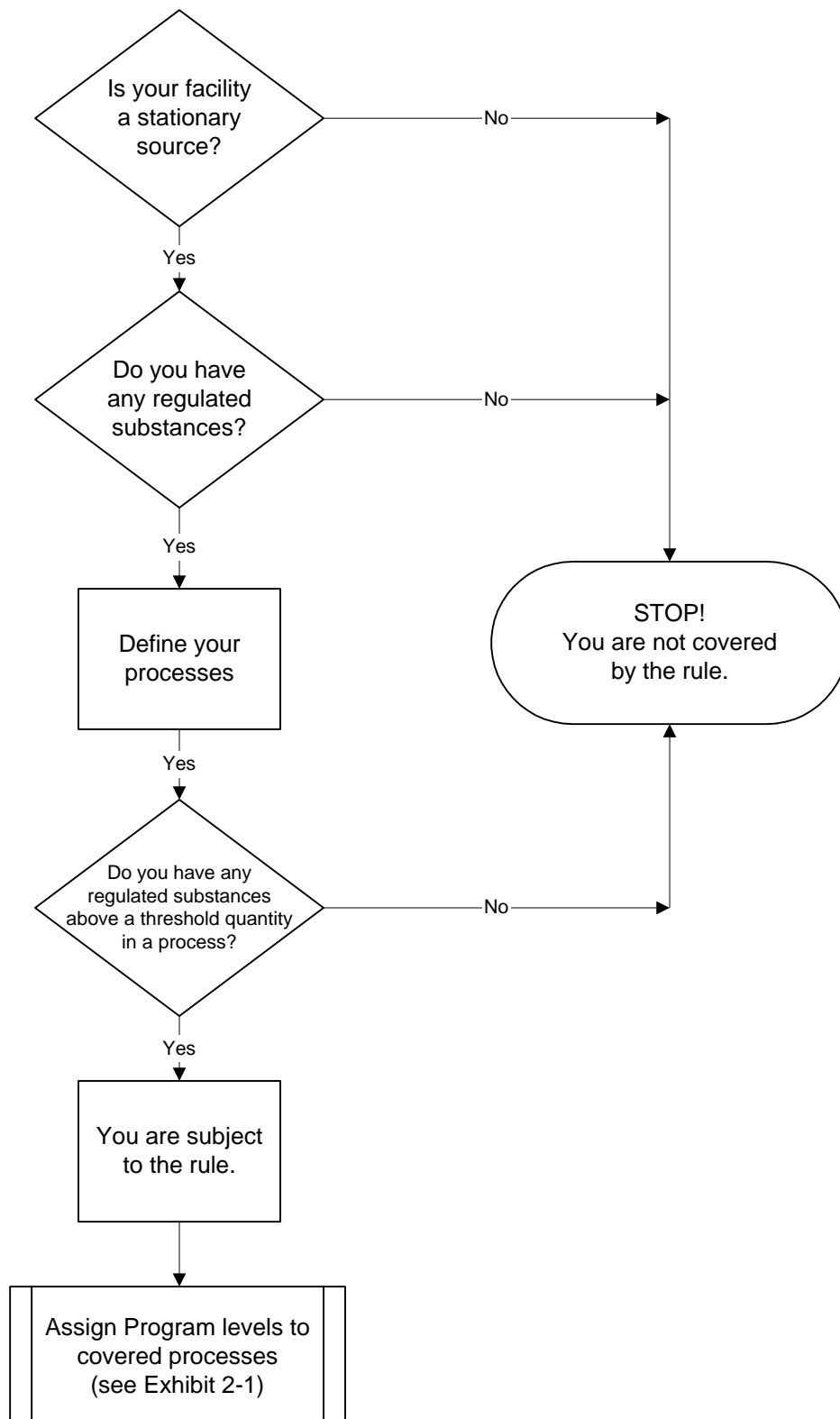
This chapter walks you through the key decision points (rather than the definition items above), starting with those provisions that may tell you that you are not subject to the rule. We first outline the general applicability provisions and the few exemptions and exclusions, then discuss which chemicals are "regulated substances." If you do not have a "regulated substance" at your site, you are not covered by this rule. The exemptions may exclude you from the rule or simply exclude certain activities from consideration. (Throughout this document, when we say "rule" we mean the regulations in part 68.)

We then describe what is considered a "process," which is critical because you are subject to the rule *only* if you have more than a threshold quantity in a process. The chapter next describes how to determine whether you have more than a threshold quantity.

Finally, we discuss how you define your overall stationary source and when you must comply. These questions are important once you have decided that you are covered. For most ammonia refrigeration facilities covered by this rule, the stationary source is basically all covered processes at your site. If your facility is part of a site with other divisions of your company or other companies, the discussion of stationary source will help you understand what you are responsible for in your compliance and reporting. Exhibit 1-1 presents the decision process for determining applicability.

EXHIBIT 1-1

EVALUATE FACILITY TO IDENTIFY COVERED PROCESSES



STATE PROGRAMS

This guidance applies to only 40 CFR part 68. You should check with your state government to determine if the state has its own accidental release prevention rules or has obtained delegation from EPA to implement and enforce part 68 in your state. State rules may be more stringent than EPA's rules. Unless your state has been granted delegation, you must comply with part 68 as described in this document even if your state has different rules under state law. See Chapter 9 for a discussion of state implementation of part 68.

1.2 GENERAL PROVISIONS

The CAA applies this rule to any person who owns or operates a stationary source. "Person" is defined to include

"An individual, corporation, partnership, association, State, municipality, political subdivision of a state, and any agency, department, or instrumentality of the United States and any officer, agency, or employee thereof."

The rule, therefore, applies to all levels of government as well as private businesses.

CAA section 112(r)(2)(c) defines "stationary sources" as:

"Any buildings, structures, equipment, installations, or substance emitting stationary activities

- g** Which belong to the same industrial group,
- g** Which are located on one or more contiguous properties,
- g** Which are under the control of the same person (or persons under common control), and
- g** From which an accidental release may occur."

EPA has added some language in the rule to clarify issues related to transportation (see below).

FARMS (§ 68.125)

The rule has only one exemption: for ammonia when held by a farmer for use as an agricultural nutrient on a farm. This exemption applies to ammonia only when used as a fertilizer by a farmer. It does not apply to agricultural suppliers or the fertilizer manufacturer, or the use of ammonia as a refrigerant. It does not apply to farm cooperatives or to groups of farmers who buy, use, and sell ammonia.

Qs & As
STATIONARY SOURCE

Q. What does “same industrial group” mean?

A. Operations at a site that belong to the same three-digit North American Industry Classification System (NAICS) code (which has replaced the old two-digit SIC codes) belong to the “same industrial group. In addition, where one or more operations at the site serve primarily as support facilities for the main operation at the site, the supporting operations are part of the “same industrial group” as the main operation. For example, if you process poultry (NAICS 311) and operate a waste treatment facility (NAICS 562) that handles primarily wastes from your poultry operations, the waste treatment is considered a support operation.

Q. What does “contiguous property” mean?

A. Property that is adjoining. Public rights-of-way (e.g., railroads, highways) do not prevent property from being considered contiguous. Property connected only by rights-of-way are not considered contiguous (e.g., two plants with a connecting pipeline).

Q. What does “control of the same person” mean?

A. Control of the same person refers to corporate control, not site management. If two divisions of a corporation operate at the same site, even if each operation is managed separately, they will count as one source provided the other criteria are met because they are under control of the same company.

TRANSPORTATION ACTIVITIES

The rule applies only to stationary sources. Pipelines covered by DOT or under a state natural gas or hazardous liquid program for which the state has in effect a certification to DOT under 49 U.S.C. 6010.5 are not covered. Piping at your source, however, is covered.

Transportation containers used for storage not incident to transportation and transportation containers connected to equipment at a stationary source are considered part of the stationary source. Transportation containers that have been unhooked from the motive power that delivered them to the site (e.g., truck or locomotive) and left on your site for short-term or long-term storage are part of your stationary source. For example, if you have railcars on a private siding that you use as storage tanks until you are ready to hook them to your process, these railcars should be considered to be part of your source. If a tank truck is being unloaded **and** the motive power is still attached, the truck and its contents are considered to be in transportation and not covered by the rule. You should count only the substances in the piping or hosing as well as the quantity unloaded. Some issues related to transportation are still under discussion with DOT.

RELATIONSHIP TO OSHA PROCESS SAFETY MANAGEMENT STANDARD EXEMPTIONS

The OSHA Process Safety Management (PSM) standard (29 CFR 1910.119) exempts retail facilities and unoccupied, remotely located facilities (other OSHA exemptions are not relevant to ammonia refrigeration systems). Your processes are not exempt from the Risk Management Program simply because they qualify for one of the OSHA exemptions.

1.3 REGULATED SUBSTANCES AND THRESHOLDS (§ 68.130)

The list of substances regulated under § 68.130 is in Appendix A. The threshold quantity for anhydrous ammonia is 10,000 pounds. If you do not have ammonia or any of other regulated substances (either as pure substances or in mixtures above 1 percent concentration) or do not have them above their listed threshold quantities, you do not need to read any further.

1.4 WHAT IS A PROCESS

The concept of "process" is key to whether you are subject to this rule. Process is defined in 40 CFR 68.3 as:

"Any activity involving a regulated substance, including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process."

"Vessel" in § 68.3 means any reactor, tank, drum, barrel, cylinder, vat, kettle, boiler, pipe, hose, or other container.

EPA's definition of process is identical to the definition of process under the OSHA PSM standard. Understanding the definition of process is important in determining whether you have a threshold quantity of a regulated substance and what level of requirements you must meet if the process is covered.

What does this mean to you?

- g** If you store a regulated substance in a single vessel in quantities above the threshold quantity, you are covered.
- g** If you have interconnected vessels that altogether hold more than a threshold quantity, you are covered. The connections need not be permanent. If two or more vessels are connected occasionally, they are considered a single process for the purposes of determining whether a threshold quantity is present.
- g** If you have multiple unconnected vessels, containing the same substance, you will have to determine whether they need to be considered together as co-located.

A process can be as simple as a single storage vessel or a group of drums or cylinders in one location or as complicated as a system of interconnected reactor vessels, distillation columns, receivers, pumps, piping, and storage vessels.

SINGLE VESSELS

If you have only a single vessel containing regulated substances, you need not worry about the other possibilities for defining a process and can skip to section 1.5. For the purposes of defining a threshold quantity, you need only consider the quantity in this vessel.

INTERCONNECTED VESSELS

In general, if you have two or more vessels containing a regulated substance that are connected through piping or hoses for the transfer of the regulated substance, you must consider the total quantity of a regulated substance in all the connected vessels and piping when determining if you have a threshold quantity in a process. If the vessels are connected for transfer of the substance using hoses that are sometimes disconnected, you still have to consider the contents of the vessels as one process, because if one vessel were to rupture while the hose was attached or the hose were to break during the transfer, both tanks could be affected. Therefore, you must count the quantities in both tanks and in any connecting piping or hoses. You cannot consider the presence of automatic shutoff valves or other devices that can limit flow, because these are assumed to fail for the purpose of determining the total quantity in a process.

Once you have determined that a process is covered (the quantity of a regulated substance exceeds its threshold), you must also consider equipment, piping, hoses, or other interconnections that do not carry or contain the regulated substance, but that are important for accidental release prevention. Equipment or connections which contain utility services, process cooling water, steam, electricity, or other non-regulated substances may be considered part of a process if such equipment could cause a regulated substance release or interfere with mitigating the consequences of an accidental release. Your prevention program for this process (e.g., PSM program) will need to cover such equipment. If, based on your analysis, it is determined that interconnected equipment or connections not containing the regulated substance cannot cause a regulated substance release or interfere with mitigation of the consequences of such a release, then such equipment or connections could safely be considered outside the limits or boundaries of the covered process.

In some cases, determining the boundaries of a process for purposes of the RMP rule may be complicated. In the preamble to the June 20, 1996 rule (61 FR 31668), EPA clearly stated its intent to be consistent with OSHA's interpretation of "process" as that term is used in OSHA's PSM rule. Therefore, if your facility is subject to the PSM rule, the limits of your process(es) for purposes of OSHA PSM will be the limits of your process(es) for purposes of RMP (except in cases involving atmospheric storage tanks containing flammable regulated substances, which are exempt from PSM but not RMP). If your facility is not covered by OSHA PSM and

is complicated from an engineering perspective, you should consider contacting your implementing agency for advice on determining process boundaries.

Co-LOCATION

The third possibility you must consider is whether you have separate vessels that contain the same regulated substance that are located such that they could be involved in a single release. If so, you must add together the total quantity in all such vessels to determine if you have more than a threshold quantity. This possibility will be particularly important if you have two separate ammonia refrigeration systems that are in a single building. For these cases, you should ask yourself:

- g** Could a release from one of the systems lead to a release from the other? For example, would the ammonia released from one system be confined to that system and burn, and/or would the fire spread to the other system?
- g** Could an event external to the containers, such as a fire or explosion or collapse or collision (e.g., a vehicle collides with several stored containers), have the potential to release the regulated substance from multiple containers?

You must determine whether there is a credible scenario that could lead to a release of a threshold quantity.

For flammables, you should consider the distance between vessels. If a fire could spread from one vessel to others or an explosion could rupture multiple vessels, you must count all of them. For ammonia, a release from a single vessel will not normally lead to a release from others unless the vessel fails catastrophically and explodes, sending metal fragments into other vessels. Co-located vessels containing ammonia, however, may well be involved in a release caused by a fire or explosion that occurs from another source. The definition of process is predicated on the assumption that explosion will take place.

If the vessels are separated by fire walls or barricades that will contain the blast waves from explosions of the substances, you will not need to count the separated vessels, but you would count any that are in the same room.

You may not dismiss the possibility of a fire spreading based on an assumption that your fire brigade will be able to prevent any spread. You should ask yourself how far the fire would spread if the worst happens — the fire brigade is slow to arrive, the water supply fails, or the local fire department decides it is safer to let the fire burn itself out. If you have separate vessels containing a regulated substance that could be affected by the same accident, you should count them as a single process.

PROCESSES WITH MULTIPLE CHEMICALS

When you are determining whether you have a covered process, you should not limit your consideration to vessels that have the same regulated substance. A covered

process includes any vessels that altogether hold more than a threshold quantity of regulated substances and that are interconnected or co-located. Therefore, if you have four storage or reactor vessels holding four different regulated substances above their individual thresholds and they are located close enough to be involved in a single event, they are considered a single process. One implication of this approach is that if you have two ammonia refrigeration systems, each containing slightly less than a threshold quantity of ammonia and located a considerable distance apart, and you have other storage or process vessels in between with other regulated substances above their thresholds, the two ammonia systems may be considered to be part of a larger process involving the other intervening vessels and other regulated substances, based on co-location.

Exhibit 1-2 provides illustrations of what may be defined as a process.

QS & AS PROCESS

Q. Do I have to do my hazard review, process hazard analysis, or other prevention activity on the whole process or can I break it into separate units?

A. Once you have determined that you have a covered process, you can divide the covered process any way you want to implement the prevention program. If you have multiple interconnected storage and reactor vessels in your process, you may want to treat them separately when you conduct the hazard review or process hazard analysis, if only to make the analyses easier to manage. Storage and reactor vessels may require separate maintenance programs. You should do what makes sense for you.

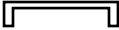
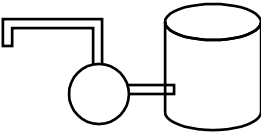
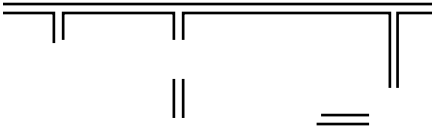
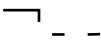
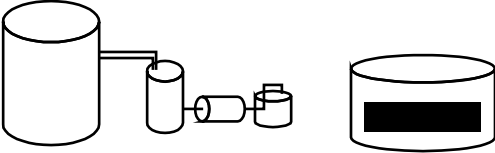
Q. How far apart do separate vessels have to be to be considered different processes?

A. There is no hard and fast rule for how great this distance should be before you do not need to consider the vessels as part of one process. Two vessels at opposite ends of a large warehouse room might have to be considered as one process if the entire warehouse or room could be engulfed in a fire. Two vessels separated by the same distance out of doors might be far enough apart that a fire affecting one would be unlikely to spread to the other. You may want to consult with your local fire department. You should then use your best professional judgment. Ask yourself how much of the regulated substance could be released if the worst happens (you have a major fire, an explosion, a natural disaster).

1.5 THRESHOLD QUANTITY IN A PROCESS

The threshold quantity for anhydrous ammonia is 10,000 pounds. You should determine whether the maximum quantity of ammonia in a process is greater than 10,000 pounds. If it is, you must comply with this rule for that process. Even if you are not covered by this rule, you may still be subject to reporting requirements under the Emergency Planning and Community Right to Know Act (EPCRA) which covers ammonia when you have more than 500 pounds on site.

EXHIBIT 1-2: PROCESS

Schematic Representation	Description	Interpretation
	1 vessel 1 regulated substance above TQ	1 process
	2 or more connected vessels same regulated substance above TQ	1 process
	2 or more connected vessels different regulated substances each above TQ	1 process
	pipeline feeding multiple vessels total above TQ	1 process
	2 or more vessels co-located same substance total above TQ	1 process
	2 or more vessels co-located different substances each above TQ	1 process
	2 vessels, located so they won't be involved in a single release same or different substances each above TQ	2 processes
	2 locations with regulated substances each above TQ	1 or 2 processes depending on distance
	1 series of interconnected vessels same or different substances above TQs plus a co-located storage vessel containing flammables	1 process

QUANTITY IN A VESSEL

To determine if you have the threshold quantity of ammonia in a vessel involved in a single process, you need to consider the maximum quantity in that vessel at any one time. You do not need to consider the vessel's maximum capacity if you never fill it to that level. Base your decision on the actual maximum quantity that you may have in the vessel. Your maximum quantity may be more than your normal operating maximum quantity; for example, if you may use a vessel for emergency storage, the maximum quantity should be based on the quantity that might be stored.

"At any one time" means you need to consider the largest quantity that you ever have in the vessel. If you fill a tank with 50,000 pounds and immediately begin using the substance and depleting the contents, your maximum is 50,000 pounds.

If you fill the vessel four times a year, your maximum is still 50,000 pounds. Throughput is not considered because the rule is concerned about the maximum quantity you could release in a single event.

QUANTITY IN A PIPELINE

The maximum quantity in a pipeline will generally be the capacity of the pipeline (volume). In most cases, pipeline quantity will be calculated and added to the interconnected vessels.

INTERCONNECTED/CO-LOCATED VESSELS

If your process consists of two or more interconnected vessels, you must determine the maximum quantity for each vessel and the connecting pipes or hoses. The maximum for each individual vessel and pipe is added together to determine the maximum for the process.

If you have determined that you must consider co-located vessels as one process, you must determine the maximum quantity for each vessel and sum up the quantities of all such vessels.

EXCLUSIONS (§ 68.115)

The rule has a number of exclusions that allow you to ignore certain items that contain a regulated substance when you determine whether a threshold quantity is present. Note that these same exclusions apply to EPCRA section 313; you may be familiar with them if you comply with that provision.

ARTICLES (§ 68.115(b)(4))

You do not need to include in your threshold calculations any manufactured item defined at § 68.3 (as defined under 29 CFR 1910.1200(b)) that:

- g** Is formed to a specific shape or design during manufacture,

- g Has end use functions dependent in whole or in part upon the shape or design during end use, and
- g Does not release or otherwise result in exposure to a regulated substance under normal conditions of processing and use.

This exclusion will generally not apply to ammonia refrigeration systems.

USES (§ 68.115(b)(5))

You also do not need to include regulated substances in your calculation when in use for the following purposes:

- g Use as a structural component of the stationary source;
- g Use of products for routine janitorial maintenance;
- g Use by employees of foods, drugs, cosmetics, or other personal items containing the regulated substances; and
- g Use of regulated substances present in process water or non-contact cooling water as drawn from the environment or municipal sources, or use of regulated substances present in air used either as compressed air or as part of combustion.

ACTIVITIES IN LABORATORIES

If a regulated substance is manufactured, processed, or used in a laboratory at a stationary source under the supervision of a technically qualified individual (as defined by § 720.3 (ee) of 40 CFR), the quantity of the substance need not be considered in determining whether a threshold quantity is present. This exclusion does not extend to:

- g Specialty chemical production;
- g Manufacture, processing, or use of substances in pilot plant scale operations; and
- g Activities conducted outside the laboratory.

This exclusion will generally not apply to ammonia refrigeration systems.

1.6 STATIONARY SOURCE

The rule applies to "stationary sources" and each stationary source with one or more covered processes must file an RMP that includes all covered processes.

SIMPLE SOURCES

For most facilities covered by this rule, determining what constitutes a “stationary source” is simple. If you own or lease a property, your processes are contained within the property boundary, and no other companies operate on the property, then your stationary source is defined by the property boundary and covers any process within the boundaries that has more than a threshold quantity of a regulated substance. You must comply with the rule and file a single RMP for all covered processes.

MULTIPLE OPERATIONS OWNED BY A SINGLE COMPANY

If the property is owned or leased by your company, but several separate operating divisions of the company have processes at the site, the divisions’ processes may be considered a single stationary source because they are controlled by a single company. Two factors will determine if the processes are to be considered a single source: Are the processes located on one or more contiguous properties? Are all of the operations in the same industrial group?

If your company does have multiple operations that are on the same property and are in the same industrial group, each operating division may develop its prevention program separately for its covered processes, but you must file a single RMP for all covered processes at the site. You should note that this is different from the requirements for filing under CAA Title V, and EPCRA section 313 (the annual toxic release inventory), where each division could file separately if your company chose to do so.

OTHER SOURCES

There are situations where two or more separate companies occupy the same site. The simplest of these cases is if multiple companies lease land at a site (e.g., an industrial park). Each company that has covered processes must file an RMP that includes information on its own covered processes at the site. You are responsible for filing an RMP for any operations that you own or operate.

Another possibility is that one company owns the land and operates there while leasing part of the site to a second company. If both companies have covered processes, each is considered a separate stationary source and must file separate RMPs even if they have contractual relationships, such as supplying product to each other or sharing emergency response functions.

If you and another company jointly own a site, but have separate operations at the site, you each must file separate RMPs for your covered processes. Ownership of the land is not relevant; a stationary source consists of covered processes located on the same property and controlled by a single owner.

JOINT VENTURES

You and another company may jointly own covered processes. In this case, the legal entity you have established to operate these processes should file the RMP. If you consider this entity a subsidiary, you should be listed as the parent company in the RMP.

MULTIPLE LOCATIONS

If you have multiple operations in the same area, but they are not on physically connected land, you must consider them separate stationary sources and file separate RMPs for each, even if the sites are connected by pipelines that move chemicals among the sites. Remember, the rule applies to covered processes at a single location.

Exhibit 1-3 provides examples of stationary source decisions.

1.7 WHEN YOU MUST COMPLY

If you had a covered process prior to June 21, 1999, you must comply with the requirements of part 68 no later than June 21, 1999. This means that whenever a process started prior to June 21, 1999, you had to be in compliance on June 21, 1999. You must have developed and implemented all of the elements of the rule that apply to each of your covered processes, and you must have submitted an RMP to EPA.

If the first time you have a covered process is after June 21, 1999, or you bring a new process on line after that date, you must comply with part 68 no later than the date on which you first have more than a threshold quantity of ammonia in a process.

**QS & AS
COMPLIANCE DATES**

Q. What happens if I bring a new covered process on line (e.g., install a second storage tank) after June 21, 1999?

A. For a new covered process added after the initial compliance date, you must be in compliance on the date you first have a regulated substance above the threshold quantity. There is no grace period. You must develop and implement all the applicable rule elements and update your RMP before you start operating the new process.

Q. What if I change a process by adding to the system?

A. Because increasing the size of the system is a major change to your process, you will have six months to come into compliance and update your RMP to reflect changes in your prevention program elements and report any other changes.

Q. What if the quantity in the process fluctuates? I may not have a threshold quantity on June 21, 1999, but I will before then and after then.

A. You do not need to comply with the rule and file an RMP until you have more than threshold quantity in a process; however, once you have more than threshold quantity in a process after June 21, 1999, you must be in compliance immediately. In this situation, with fluctuating quantities, it may be prudent to file by June 21, 1999, so you will be in compliance when your quantity exceeds the threshold.

